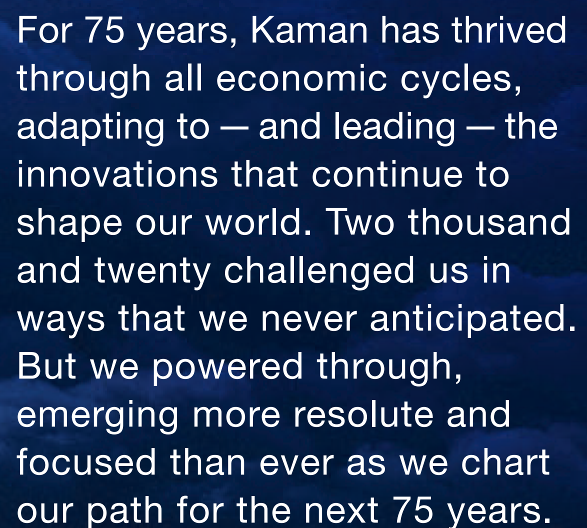
STEADFAST
RESILIENT
INNOVATIVE
RESOLUTE
STRONG
VERSATILE
DYNAMIC

FLEXIBLE
COMMITTED
POSITIVE
DETERMINED

YEARS
STRONG

KAMAN

Annual Report 2020



For 75 years, Kaman has thrived through all economic cycles, adapting to — and leading — the innovations that continue to shape our world. Two thousand and twenty challenged us in ways that we never anticipated. But we powered through, emerging more resolute and focused than ever as we chart our path for the next 75 years.

Powering through to new possibilities

The unprecedented challenges of 2020 put Kaman's long-term strategic plan to the test. Working globally as one team, we rose to the occasion.

The Power of People

Kaman's more than 3,000 employees are our most valuable asset, and this was never more evident than in 2020. The global pandemic forced many colleagues to work remotely and added a significant operational burden to those facilities that remained open to meet the critical needs of our global customer base. Our commitment to developing the next generation of Kaman leaders didn't stop during the pandemic. In 2020, we expanded the Early Career Rotational Program to include more sites and more candidates. And we launched a women's virtual leadership development program to continue our focus on supporting the advancement of women at Kaman.

The Power of Synergy

The Bal Seal acquisition was finalized in January 2020, and almost immediately teams from Bal Seal and Kaman began working together to create innovative new solutions for our customers. Our Kamatics team is working with Bal Seal engineers to patent a method of fastening bearings into the airframe utilizing canted-coil springs. This approach would eliminate the need for special tools and processes. Our GRW team is working with Bal Seal engineers to develop a patent on integrating a miniature, high-precision bearing with a dynamic, spring-energized seal through a unique mechanical latching mechanism. This design will improve functionality, cycle life, serviceability, and ease of assembly.

The Power of Diversification

Kaman serves a wide range of markets, including defense; commercial, business and general aviation; medical; and industrial. This diversification is the result of a long-standing strategy that allows us to withstand headwinds in any one market. In 2020, the impact of weakness in commercial aviation due to the global pandemic was cushioned by strength in other areas of our product portfolio. While our end markets are highly diversified, the solutions we offer to every customer share several important qualities: they are highly engineered products and services, created and delivered with ingenuity, backed by a relentless commitment to quality, and designed to meet their most critical needs.

The Power of Productivity

At Kaman, operating in a lean, efficient manner is critical to meeting our commitments to our customers and our shareholders. In 2020, we continued our focus on reducing costs and increasing efficiencies across our organization, including rethinking how we provide IT, accounting, human resources, and finance support to the organization. We reacted swiftly to the change in demand brought on by COVID-19, and are well positioned for improved performance once our markets return to normal volumes. This drive to maximize operational efficiency is not a short-term endeavor but a continuous improvement process, and will remain a focus at Kaman in the future.

Dear Shareholders,

While 2020 brought unprecedented challenges to virtually every business, everywhere, Kaman powered through by relying on the core strengths that have been our hallmarks since we were founded seventy-five years ago. We have a values-based culture, a commitment to financial strength, and a spirit of innovation that enabled Kaman to continue making strong progress despite the headwinds of the global pandemic.

It was an honor to be appointed President and CEO of Kaman this past September. Kaman's culture, which is focused on the ingenuity of its people and their commitment to excellence, has positioned us well for the future. After meeting with Kaman employees over the past few months and seeing first-hand their dedication to the company and our customers, it was immediately clear that our team is unsurpassed in resilience and determination. My confidence is bolstered by Kaman's seventy-five-year legacy of success, a track record of achievements built during all business cycles, and through transformative changes in the markets we serve.

With our outstanding people, diverse portfolio of products and financial flexibility, Kaman has the resources to weather the current challenges and begin the next phase of our successful journey as a company.

A Look at 2020 Results

In 2020, sales from continuing operations increased 3.0% over 2019, due in large part to the contribution of revenue from our Bal Seal acquisition and the strength of our defense products, including Safe and Arm Devices, which were up 5.6% over 2019. During the year, we delivered approximately 48,750 Joint Programmable Fuzes (JPF's). This solid revenue growth reflects the diversity of our product offerings and end-market exposures. On a GAAP basis, we recorded a loss of $70.4 million, or $2.54 per diluted share, which included a non-cash goodwill impairment charge of $50.3 million, or $1.82 per diluted share, and an impairment on our UK Composites business of $36.3 million, or $1.31 per diluted share. Despite these items, the diversity of our business, our strong gross margins in excess of 31%, and our cost reduction and mitigation efforts allowed us to deliver strong adjusted financial results in 2020. The effects of the pandemic most impacted our commercial, business and general aviation products, as evidenced by a decrease in sales of 21.6% from 2019. While sales of our medical and industrial products were curbed due to the impacts of COVID-19, we benefited from additional revenue from Bal Seal in 2020. As we look to 2021, we expect that the diversity of our product offerings and the broad range of platforms we support will continue to benefit our performance.

Operations Review

We began 2020 with the completion of our acquisition of Bal Seal, a leader in the design, development, and manufacturing of highly engineered products including precision springs, seals, and contacts. We welcomed Bal Seal into Kaman in January and began building relationships between workforces. The enthusiasm among employees of both companies for this acquisition remains strong, particularly as we begin to capitalize on new opportunities with customers in the medical technology, aerospace and defense, and industrial end markets.

Our highly engineered products, specifically bearings and medical solutions, were impacted by limited travel and the reduction in elective medical procedures as a result of the pandemic; however, we were able to offset the impact of some of these effects with the diversity of our product offerings. We continue to expect that the strength of our defense, general aviation, business, marine, and industrial bearings will help us accelerate as the effects of the pandemic subside. We had strong performance from our Safe and Arm Device products during 2020, with record delivery of 48,749 JPFs as we satisfied requirements under orders from the U.S. Air Force (USAF) and our direct commercial sales customers. We continue to pursue additional JPF opportunities and, in August, we received an order from the USAF for JPFs worth approximately $57.3 million. Likewise, we finalized a $10.6 million contract with Lockheed Martin Corporation for procurement of Joint Air-to-Surface Standoff Missile and Long Range Anti-Ship Missile fuzes through 2023. We are prepared to meet the future demands of our customers while evaluating the investment required to introduce new product offerings over time.

Despite the headwinds from COVID-19, the results from our commercial, business, and general aviation products benefited from the sale of two K-MAX® helicopters during 2020, and our team worked diligently to identify several opportunities for additional deliveries in 2021. We were particularly proud that the U.S. Forest Service (USFS) awarded 40% of all Type 1, large helicopter exclusive use contracts to K-MAX® helicopter operators. These four-year contracts ensure that immediate resources are available to the USFS when the need for firefighting arises. These contracts also underscore the fact that the K-MAX® is a proven aerial firefighter, and the most cost-effective Type 1 helicopter in service today. In 2020, we entered into a strategic distribution agreement with Trust International Group for the K-MAX® medium-to-heavy lift helicopter. This agreement provides Trust International with exclusive rights to market the K-MAX® and its spare parts to the United Arab Emirates. We look forward to realizing the fruits of the relationship in 2021 and beyond.

We also entered into a new long-term agreement with a major engine OEM to manufacture components for both existing production and newly developed engine programs. The components will be manufactured at our facility in Bennington, Vermont. This contract, with a potential value of over $100 million, underscores our ability to customize our processes and production activity to serve the specific needs of a customer's existing programs, meet their high-quality standards, and deliver product on time and at a competitive price.

Kaman Composites Vermont was named a Rotary and Mission Systems Elite Supplier by Sikorsky Aircraft Corporation, a Lockheed Martin company. The award comes after a partnership with Sikorsky on the design and development of their MH-60R radome program. The award recognizes our success in meeting a critical customer need by leveraging our deep expertise in designing, conducting in-house testing and analysis, and taking a highly complex program into full production, all while maintaining stellar performance.

We continue to make progress on our transformation efforts, and in the fourth quarter of 2020, we kicked off the design and deployment of a new Operational Excellence model. Once this model is fully deployed, our businesses will be driving improved customer satisfaction and margin expansion all while leveraging technology and innovation even more to become the best in class at what we do across all our businesses.

Thank you, Neal.

After thirteen years as CEO of Kaman, Neal Keating announced his retirement in 2020. He leaves Kaman a more focused and centered company, well-positioned to take on the challenges ahead.

"Neal played a central role in creating the 'New Kaman,' a highly focused manufacturer of engineered products serving aerospace, defense, industrial, and medical markets. The 2020 acquisition of Bal Seal represents the fruition of Neal's long-term strategy of building on, and enhancing, Kaman's unparalleled expertise in engineered products. On behalf of the entire Board, we thank Neal for his contribution to Kaman, and wish him the very best in his well-deserved retirement."

—Karen Garrison, Director

"Over the past months, I've been able to observe Neal's wisdom, knowledge and kindness, along with his dedication to the company he has led so admirably over the past thirteen years. I have also experienced first-hand his commitment to ensuring a seamless leadership transition. Neal leaves Kaman a stronger company than the one he joined in 2007. This strength can be measured not only in financial terms, but also by the strength of the cultural values he helped to nurture, and the strong spirit of teamwork across the company that was apparent to me from day one."

— Ian K. Walsh, President and CEO

Rising to the COVID Challenge

These achievements by our operating companies are all the more impressive because they were accomplished during the COVID-19 pandemic. When the scope of this health crisis became apparent early in 2020, we were prepared to implement remote work arrangements to accommodate employees who needed to work from home. We continue to support all employees overcoming the challenges of working during the pandemic, whether at home or in our Kaman facilities, through regular communication from senior management and resources made available from our human resources department. For those Kaman facilities that remained open, we initiated traceability protocols, instituted daily temperature checks, restricted the flow of employees through the facility, and prevented non-essential employees and business partners from entering.

These and other efforts meant that we could continue to operate at near capacity while minimizing the health risks to our employees. Significantly, our response to COVID-19 demonstrated the ability of Kaman's global workforce to come together and overcome an unprecedented challenge. The spirit of teamwork and resolve was truly extraordinary, and will serve us well as we continue to work our way beyond the pandemic to meet the challenges – and capitalize on the opportunities – we will inevitably confront.

A Look Ahead

Even in the face of a difficult year, Kaman continued to invest in our future. We increased R&D investments across the company, including in our Titanium Diffusion Hardening, composite rotor blades, height of burst, and unmanned module programs.

By focusing on operating in a lean, agile fashion, we maintained a strong capital position throughout the year. We continued our quarterly dividends, making 2020 the 51st year of consecutive dividend payments.

As I enter my first full year as President and CEO, we are committed to improving our organic growth rate by working closely with each of our businesses and building on our rich history of innovation. Kaman pioneered so many “firsts” in the aerospace industry during the last 75 years, and we will continue to do so in the future. We intend to maintain a robust acquisition strategy, which has served Kaman well in recent years, by growing our highly engineered product offerings. And we will leverage our new Operational Excellence model by working it into the fabric of our culture to ensure we are best in class at what we do.

On a personal note, I would like to thank our Board of Directors for the confidence they have placed in me. I would like to thank Neal Keating not only for his outstanding leadership over the past thirteen years, but also for his generosity and true partnership in making the transition as smooth and effective as possible.

When a company marks its 75th anniversary, it’s tempting to use this milestone as an opportunity to look back. Our legacy certainly offers much to be proud of. This rare and significant milestone is above all an occasion to look at the opportunities we have ahead to build on our foundation and leverage our reputation as a leader in innovative products and technologies. It’s often said that what is past is prologue. This is undoubtedly true for Kaman. Our illustrious past only hints at what our future holds. I could not be more excited and proud to be a part of the Kaman team as we chart our journey into the future.

Ian K. Walsh
President and CEO

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 December 31, 2020

Commission File No. 001-35419
KAMAN CORPORATION
(Exact name of registrant as specified in its charter)

Connecticut	06-0613548
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1332 Blue Hills Avenue, Bloomfield, Connecticut	06002
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code (860) 743-7100

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock ($1 par value)	KAMN	New York Stock Exchange LLC

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 Exchange 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 checkmark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (Section 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 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 Exchange Act).
Yes ☐ No ☒

The aggregate market value on July 3, 2020, (the last business day of the Company’s most recently completed second quarter) of the voting and non-voting common stock held by non-affiliates of the registrant, computed by reference to the closing price of the stock, was approximately $1,098,247,815 .

At January 29, 2021, there were 27,731,154 shares of Common Stock outstanding.

Documents Incorporated Herein By Reference

Portions of our definitive proxy statement for our 2020 Annual Meeting of Shareholders are incorporated by reference into Part III of this Report.

Kaman Corporation
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PART I

ITEM 1. BUSINESS

GENERAL

Kaman Corporation, headquartered in Bloomfield, Connecticut, was incorporated in 1945. As used in this annual report, "the Company", "we", "us", "our" refer to the registrant and its consolidated subsidiaries. We are a diversified company that conducts business in the aerospace, medical and industrial markets. The Company produces and markets proprietary aircraft bearings and components; super precision, miniature ball bearings; proprietary spring energized seals, springs and contacts; complex metallic and composite aerostructures for commercial, military and general aviation fixed and rotary wing aircraft; and safe and arming solutions for missile and bomb systems for the U.S. and allied militaries. The Company also manufactures and supports our K-MAX® manned and unmanned medium-to-heavy lift helicopters and restores, modifies and supports our SH-2G Super Seasprite maritime helicopters.

Principal customers include the U.S. military, foreign allied militaries, Sikorsky Aircraft Corporation, The Boeing Company, Airbus, Lockheed Martin, Rolls-Royce, Raytheon and Bell Helicopter. The SH-2G aircraft is currently in service with the Egyptian Air Force and the New Zealand, Peruvian and Polish navies. Operations are conducted throughout the United States, as well as in facilities located in Germany, the Czech Republic, Mexico, Singapore, the Netherlands, Switzerland and Hong Kong. Additionally, the Company maintains an investment in a joint venture in India. In the year ended December 31, 2020, three individual customers, the U.S. Government, The Boeing Company and a Joint Programmable Fuze ("JPF") direct commercial sales ("DCS") customer, accounted for more than 10% of consolidated net sales.

We report information in a single business segment. In August 2020, the Company announced the retirement of Neal J. Keating as President and Chief Executive Officer ("CEO") of the Company and the appointment of Ian K. Walsh as President and CEO of the Company as of September 8, 2020. Mr. Walsh, the Chief Operating Decision Maker ("CODM"), reviews operating results for the purposes of allocating resources and assessing performance based on one segment. The Company has not aggregated operating segments for purposes of identifying reportable segments.

On January 3, 2020, the Company completed the acquisition of Bal Seal Engineering Inc. ("Bal Seal"), at a purchase price of $317.5 million. Bal Seal is a leader in the design, development, and manufacturing of highly engineered products including precision springs, seals and contacts. Bal Seal has an established global presence, with manufacturing facilities across the United States and sales representation in the United States, Europe and Asia.

In the fourth quarter of 2020, the Company committed to a plan and received approval from its Board of Directors to sell its United Kingdom ("UK") Composites division. Subsequent to the end of the year, a transaction closed on February 2, 2021.

A discussion of these events and other 2020 developments is included in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, in this Form 10-K.

WORKING CAPITAL

A discussion of our working capital is included in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources, in this Form 10-K.

Our working capital requirements are dependent on the nature and life cycles of the programs for which work is performed. New programs may initially require higher working capital to complete nonrecurring start-up activities and fund the purchase of inventory and equipment necessary to perform the work. Nonrecurring start-up costs on large and complex programs often take longer to recover, negatively impacting working capital in the short-term and producing a corresponding benefit in future periods. As these programs mature and efficiencies are gained in the production process, working capital requirements generally decrease.

Our credit agreement is a revolving credit facility which is available for additional working capital requirements and investment opportunities. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and Note 14, *Debt,* of the Notes to Consolidated Financial Statements, included in Item 8, Financial Statements and Supplementary Data, of this Annual Report on Form 10-K.

PRINCIPAL PRODUCTS AND SERVICES

The following table sets forth the percentage contribution of each major product line to consolidated net sales for each of the three most recently completed years:

	Years Ended December 31,		
	2020	2019	2018
Sales			
Defense	23.0 %	23.4 %	25.9 %
Safe and Arm Devices	31.7 %	29.9 %	26.6 %
Commercial, Business, & General Aviation	28.1 %	36.9 %	37.3 %
Medical	8.9 %	3.8 %	3.9 %
Industrial & Other	8.3 %	6.0 %	6.3 %
Total	100.0 %	100.0 %	100.0 %

AVAILABILITY OF RAW MATERIALS

While we believe we have sufficient sources for the materials, components, services and supplies used in our manufacturing activities, we are highly dependent on the availability of essential materials, parts and subassemblies from our suppliers and subcontractors. The most important raw materials required for our aerospace products are aluminum (sheet, plate, forgings and extrusions), titanium, nickel, steel, copper and composites. Many major components and product equipment items are procured from or subcontracted on a sole-source basis with a number of domestic and non-U.S. companies. Although alternative sources generally exist for these raw materials, qualification of the sources could take a year or more. We are dependent upon the ability of a large number of suppliers and subcontractors to meet performance specifications, quality standards and delivery schedules at anticipated costs. While we maintain an extensive qualification system to control risk associated with such reliance on third parties, failure of suppliers or subcontractors to meet commitments could adversely affect production schedules and contract profitability, while jeopardizing our ability to fulfill commitments to our customers. From time to time, we have experienced shortages in raw materials which have impacted our near term results; however, we do not foresee any near term unavailability of materials, components or supplies that would have an adverse effect on our business. For further discussion of the possible effects of changes in the cost or availability of raw materials on our business, see Item 1A, Risk Factors, in this Form 10-K.

INTELLECTUAL PROPERTY

We use patented and unpatented proprietary information, know-how and trade secrets to develop, maintain and enhance our competitive position, but we believe our continued success depends more on the knowledge, ability, experience and technological expertise of our employees than the legal protection that our patents and other proprietary rights may afford. Moreover, while we rely on a combination of patents, trademarks, copyrights, trade secrets, nondisclosure agreements, physical and information technology security systems, internal controls and compliance systems and other measures to protect our intellectual property, data and technology rights and that of third parties with which we are entrusted, our ability to protect and enforce our intellectual property, data and technology rights may be limited by a variety of factors and may be even more limited in certain countries outside the U.S., as may be our ability to prevent theft or compromise of our intellectual property, data and technology by competitors or third parties.

As of December 31, 2020, we held a total of 394 patents, 110 of which were U.S. patents and 284 of which were foreign patents. In addition, we have numerous U.S. and foreign patents pending. The Company believes the duration of its patents is adequate relative to the expected lives of its products.

Trademarks are also an important aspect of our business. The availability and duration of trademark registrations vary by country; however, trademarks are generally valid and may be renewed indefinitely as long as they are in use and registrations are maintained. We sell products under a number of registered trademarks that we own. Registered trademarks of the Company include KAflex®, KAron®, and K-MAX®. In all, we maintain 82 U.S. and foreign trademarks as of December 31, 2020.

BACKLOG

We anticipate that approximately 71% of our backlog at the end of 2020 will be performed in 2021. Approximately 39.2% of our backlog at the end of 2020 is related to U.S. Government ("USG") contracts or subcontracts.

Total backlog at December 31, 2020, 2019 and 2018, and the portion of the backlog we expect to complete in 2021, is as follows:

	Total Backlog at December 31, 2020[1]	2020 Backlog to be completed in 2021	Total Backlog at December 31, 2019	Total Backlog at December 31, 2018
In thousands				
Backlog	$ 631,236	$ 449,403	$ 806,870	$ 851,814

[1] Of total backlog outstanding at December 31, 2020, $16.8 million relates to backlog of the UK Composites business, which was sold on February 2, 2021.

Backlog related to uncompleted contracts for which we have recorded a provision for estimated losses was $1.0 million as of December 31, 2020. At December 31, 2020, there was no backlog related to firm but not yet funded orders. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and Note 1, *Summary of Significant Accounting Policies,* of the Notes to Consolidated Financial Statements, included in Item 8, Financial Statements and Supplementary Data, of this Annual Report on Form 10-K, for further discussion.

REGULATORY MATTERS

Government Contracts

The USG, and other governments, may terminate any of our government contracts at their convenience or for default if we fail to meet specified performance measurements. If any of our government contracts were to be terminated for convenience, we generally would be entitled to receive payment for work completed and allowable termination or cancellation costs. If any of our government contracts were to be terminated for default, generally the USG would pay only for the work that has been accepted and can require us to pay the difference between the original contract price and the cost to re-procure the contract items, net of the work accepted from the original contract. The USG can also hold us liable for damages resulting from the default.

During 2020, approximately 97.2% of the work performed by the Company directly or indirectly for the USG was performed on a fixed-price basis and the balance was performed on a cost-reimbursement basis. Under a fixed-price contract, the price paid to the contractor is negotiated at the outset of the contract and is not generally subject to adjustment to reflect the actual costs incurred by the contractor in the performance of the contract. Cost reimbursement contracts provide for the reimbursement of allowable costs and an additional negotiated fee.

Compliance with Environmental Protection Laws

Our operations are subject to and affected by a variety of federal, state, local and non-U.S. environmental laws and regulations relating to the discharge, treatment, storage, disposal, investigation and remediation of certain materials, substances and wastes. We continually assess our compliance status and management of environmental matters in an effort to ensure our operations are in substantial compliance with all applicable environmental laws and regulations.

Operating and maintenance costs associated with environmental compliance and management of sites are a normal, recurring part of our operations. These costs often are generally allowable costs under our contracts with the USG. It is reasonably possible that continued environmental compliance could have a material impact on our results of operations, financial condition or cash flows if more stringent clean-up standards are imposed, additional contamination is discovered and/or clean-up costs are higher than estimated.

See Environmental Matters in Item 3, Legal Proceedings and Note 19, *Commitments and Contingencies*, in the Notes to Consolidated Financial Statements, included in Item 8, Financial Statements and Supplementary Data, of this Annual Report on Form 10-K, for further discussion of our environmental matters.

With respect to all other matters that may currently be pending, in the opinion of management, based on our analysis of relevant facts and circumstances, we do not believe that compliance with relevant environmental protection laws is likely to have a material adverse effect upon our capital expenditures, earnings or competitive position. In arriving at this conclusion, we have taken into consideration site-specific information available regarding total costs of any work to be performed and the extent of work previously performed. If we are identified as a “potentially responsible party” ("PRP") by environmental authorities at a particular site, we, using information available to us, will also review and consider a number of other factors, including: (i) the financial resources of other PRPs involved in each site and their proportionate share of the total volume of waste at the site; (ii) the existence of insurance, if any, and the financial viability of the insurers; and (iii) the success others have had in receiving reimbursement for similar costs under similar insurance policies issued during the periods applicable to each site.

International Operations

Our international sales are subject to U.S. and non-U.S. governmental regulations and procurement policies and practices, including regulations relating to import-export control, investment, exchange controls and repatriation of earnings. International sales are also subject to varying currency, political and economic risks.

COMPETITION

The Company operates in a highly competitive environment with many other organizations, some of which are substantially larger than us and have greater financial strength and more extensive resources. We compete for composite and metallic aerostructures subcontracts, and helicopter sales and structures, bearings and components business on the basis of price and/or quality; product endurance and special performance characteristics; proprietary knowledge; the quality of our products and services; the availability of facilities, equipment and personnel to perform contracts; and the reputation of our business. Competitors for our business include small machine shops and offshore manufacturing facilities. We compete for advanced technology fuzing business primarily on the basis of technical competence, product quality and price, and also on the basis of our experience as a developer and manufacturer of fuzes for particular weapon types and the availability of our facilities, equipment and personnel. We are also affected by the political and economic circumstances of our potential foreign customers and, in certain situations, the relationships of those foreign customers with the USG, the USG's perceptions of those foreign customers, such as our Middle Eastern customers, and the ability to obtain necessary export approvals, licenses or authorizations from the U.S. Government.

HUMAN CAPITAL

The Company employs a global workforce focused on serving its customers and creating solutions to meet their needs. We consider our employees to be the most valuable resource for current and future success and we seek to provide a work environment that fosters growth, encourages self-development and provides meaningful work. How we manage our human capital is critical to how we deliver on our strategy and create sustained growth and value for our shareholders. Kaman Corporation is a place where people who want to make a difference come to work.

Employee Demographics

As of December 31, 2020, we employed 3,193 individuals. Of these employees, approximately 73% are employed in the United States and 27% are employed internationally. Within the United States, 65% of the employees are non-exempt and 35% are exempt.

The Company's average age of U.S. employees is 48. U.S. headcount by generation at December 31, 2020 is as follows:

Generation	Headcount
Generation Z (1995-2010)	151
Millennials (1981-1994)	561
Generation X (1965-1980)	832
Baby Boomers (1946-1964)	760
Traditionalist (before 1946)	12

Values

The Company’s core values are Respect, Excellence, Accountability, Creativity and Honor ("REACH"):

- Respect - Employees value people, their skills and their perspectives.
- Excellence - Employees do their best, giving full attention to the quality of every job, outcome and relationship. The highest level of customer service is provided to customers, both externally and internally.
- Accountability - Employees accept responsibility for their actions and work to achieve desired results.
- Creativity - Employees take on every challenge with a spirit of discovery and ingenuity, offering new ideas and resources.
- Honor - Employees behave with integrity.

Our employees are committed to these values, which define how employees behave, treat others and operate.

Business Ethics

The Company's Code of Conduct ("Code") is a statement of the principles and standards that the Company expects the Kaman community to follow. Each officer, director and employee is required to use good ethical judgement when conducting business and comply with applicable laws, rules and regulations. The Code describes what is appropriate behavior and guides ethical business decisions that maintain a commitment to integrity. Failure to comply with the Code and applicable laws can have severe consequences for both individuals involved and the Company, including disciplinary action, civil penalties or criminal prosecution under certain circumstances.

The Company has designated Compliance Officers who are responsible for the following:

- Distributing of the Code to the Kaman community;
- Educating and training personnel on the Code;
- Obtaining written acknowledgments from employees, officers, directors, agents, contractors, suppliers and customers that they have read, understand and will comply with the Code as a condition of their association with the Company;
- Investigating reported Code violations and implementing remedial actions when a violation has been confirmed; and
- Reporting Code submissions to the Company's Chief Compliance Officers.

Talent Acquisition

An important component of the Company’s Human Capital strategy is acquiring new talent. The Company strives to attract top talent with diverse backgrounds and experiences who align with the commitment of driving a culture of innovation.

The foundation of the talent acquisition strategy is the commitment to being an Equal Opportunity Employer. Qualified applicants receive consideration for employment without regard for race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status or any other protected class. The Company provides reasonable accommodations for qualified individuals with disabilities and disabled veterans in job application procedures and processes. The Company fully provides equal opportunity for all.

The Company uses a number of programs to ensure it attracts and hires top talent to develop as future leaders of the organization. The Kaman Internship Program is designed to provide meaningful work experiences and professional development for students. The goal of this program is to ensure a mutual benefit to both the students engaging in the internship and the Company with a pipeline of future employees. The Kaman Early Career Rotational Program is designed to provide prospective Leadership Development Candidates, if selected, with the opportunity to develop leadership skills and learn key organizational processes across multiple business functions. The Early Career Rotational Program is 18 to 24 months in duration and consists of rotations through Operations, Program Management, Engineering, Quality and Supply Chain Management. The Campus Champions Program is designed to engage universities and military organizations through hands-on involvement in a variety of interactive activities including participation in recruitment drives, meeting with faculty, alumni, students, student organizations and veterans’ organizations. This program allows the Company to explore opportunities to strengthen its relationships and develop mutually beneficial partnerships with these institutions.

Talent Development

In addition to acquiring new talent, the Company focuses on growing and developing its existing talent. The Company makes significant investments in enhancing its employees’ skill levels and providing professional opportunities for career development and advancement. The Company’s leadership team utilizes a robust succession planning program for identifying the next

generation of leaders to ensure that the organization is prepared to fill critical roles with employees who are prepared to support the strategy of the business and respond to the needs of key stakeholders.

Training and employee learning are offered to employees, which allows the Company to efficiently develop its staff and meet legal and compliance training requirements. Five thousand webinar courses were completed in 2020, along with hundreds of health, wellness and leadership training sessions delivered to the employee population.

The Company currently uses two programs to support the development of current employees for future leadership roles. First, the Rising Star Mentoring Program provides motivated employees with a formal six-month commitment to work with a Kaman leader to develop and progress their careers. During the mentoring process, mentees develop and progress their career plans, assess and improve career readiness and bolster their professional skills. Second, the Women in Leadership Program develops capabilities of female leaders through a process of learning and personal discovery so they can make stronger contributions within their careers and the organizations in which they work. With the use of a leadership assessment tool, management discovers the strengths and opportunities for its participants and create actions plans to help improve their performance. Professional networking and mentoring helps prepare the female leaders for larger roles in the organization. As of December 31, 2020, 76% and 24% of the Company's management positions were held by men and women, respectively. This compares to the Company's overall U.S. population comprised of 68% males and 32% females.

The Company conducts annual performance appraisals with all employees. Feedback is used to support continuous improvement. Individual, annual goal setting activities align to the overall company and business unit strategies and objectives.

Diversity & Inclusion

The Company views diversity as a competitive advantage and integral to future success. Diversity helps create an innovative workforce, while inclusion ensures the Company has the right culture, processes, policies, and practices to ensure employees feel valued and included.

Women Advocating Leadership at Kaman ("WALK") is a program that is designed to support the advancement of Kaman's strategic diversity goals by implementing specific business initiatives that increase the global representation of women in leadership roles. WALK's long-term objectives include hiring; retaining and promoting more women; supporting the change in Kaman's culture of being more accepting of women in leadership roles; providing women with equal access to development opportunities; and creating a life balance and family-friendly culture.

The Company also seeks opportunities to recruit and hire skilled veterans as well as engage in partnerships and support programs that allow the Company to give back to the veteran community. The Company has a multitude of recognition programs to show its appreciation for their service to the United States. An employee resource group is dedicated to veteran employees which supports community engagement as well as professional development activities.

Total Rewards

The Company focuses on paying its employees fairly and competitively. The Company strives to provide competitive pay opportunities which reward its employees for achieving and exceeding objectives that create long-term value for shareholders. Management aims to have all compensation programs, processes and decisions be transparent and easy to understand. Providing equitable and competitive pay enhances the Company's ability to attract and retain strong, innovative talent.

Providing comprehensive, competitive and affordable benefits is important to the Company's attraction and retention strategy. The Company offers the following:

Health Benefits

The Company offers various medical plan options and provides employees with a cost comparison tool to assist employees with their decision. The options for pharmacy, dental, and vision care coverage are also provided for employees. In addition to insurance benefits, Kaman's Chronic Condition Management programs provides valuable resources to support employees and their family members dealing with a chronic condition, such as diabetes or cancer.

Wealth Benefits

The Kaman Corporation 401(k) Plan provides employees with a tax advantageous way to save for retirement. Contributions up to the first 5% in pre-tax and/or Roth accounts are matched, and matching contributions vest after three years of service. Additionally, the Company offers an Employee Stock Purchase Plan, Health Savings Accounts for those in a high deductible

health plan, Flexible Spending Accounts for both health care and dependent care, life and accidental death and dismemberment insurance, disability benefits, and voluntary accident and critical illness insurance.

Wellness Benefits

The *Fit for Life* Wellness program provides all employees with opportunities to participate in company-wide events, webinars and local wellness challenges focused on living a healthy lifestyle. Kaman Work-Life Solutions is available to all employees and their household members who need help dealing with issues affecting their personal or professional lives. This resource connects employees with individuals who can help them with an array of issues such as locating child care programs and individual counseling.

The Company recognizes the need to support its employees' work-life balance. The Paid Parental Leaves of Absence better enables employees to care for and bond with a newborn, newly adopted, or newly placed foster child during the six-month period immediately following the event. Eligible employees receive three weeks of parental leave at 100% of base pay, inclusive of shift premiums, if applicable. This benefit is offered in addition to short-term disability benefits already provided for pregnancy and childbirth to women at the organization.

Health & Safety

The Company continues to diligently monitor and respond to the challenges faced by the Company and its employees navigating through the COVID-19 pandemic. The Company's employees have worked to keep the Company operational and meet customer requirements throughout the pandemic, while respecting the recommendations of local governments and agencies.

The Company's first priority continues to be the health and safety of employees and their families. As the COVID-19 global health issue evolved, the Company enforced practical precautions, including global travel restrictions and enforcing quarantine periods as appropriate. A number of initiatives were implemented across the Company to ensure employees are safe, including an increase in communications and outreach to the workforce. Enhanced resources have been provided to help employees manage with the stress and anxiety of the current situation. At the onset of the pandemic, a remote work strategy was implemented where appropriate, which continues today. Additionally, work was transferred to alternate locations when necessary. Best practices for hygiene and preventing the spread of germs were implemented including checking temperatures for those entering the Company's facilities, limiting visitors in the workplace and encouraging teleconference meetings. We have increased the frequency of cleaning and disinfecting common areas and our leadership teams have responded to local business needs and priorities to ensure safe operations and minimal business disruptions.

Corporate Responsibility

The Company is a strong supporter of education, including meritorious children of its employees, students pursuing engineering degrees, museums with educational programs and various local education programs across the country. The Company also financially supports charitable and civic organizations such as art councils, boy and girl scouts, food pantries, health organizations and veterans' organizations. Additionally, employees volunteer their time to give back to the communities in which they live and work.

AVAILABLE INFORMATION

We are subject to the reporting requirements of the Exchange Act and its rules and regulations. The Exchange Act requires us to file reports, proxy statements and other information with the SEC.

We make available, free of charge on our website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, proxy statements, and current reports on Form 8-K as well as amendments to those reports filed or furnished pursuant to Section 13 or 15(d) of the Exchange Act, together with Section 16 insider beneficial stock ownership reports, as soon as reasonably practicable after we electronically file these documents with, or furnish them to, the SEC. These documents are posted on our website at www.kaman.com — select the “Investors” link, then the "Financial Information" link and then the “SEC Filings” link.

We also make available, free of charge on our website, our Certificate of Incorporation, By–Laws, Governance Principles and all Board of Directors' standing Committee Charters (Audit, Corporate Governance, Compensation and Finance). These documents are posted on our website at www.kaman.com — select the “Investors” link, then the "Corporate Governance" link and then the "Documents and Downloads" link.

The information contained on our website is not intended to be, and shall not be deemed to be, incorporated into this Form 10-K or any other filing under the Exchange Act or the Securities Act of 1933, as amended.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The Company's executive officers as of the date of this report are as follows:

Name	Age	Position	Prior Experience
Ian K. Walsh	54	President, Chief Executive Officer and Director	Mr. Walsh was appointed President and Chief Executive Officer as well as elected a Director of the Company effective September 8, 2020. Prior to joining the Company, Mr. Walsh served as Chief Operating Officer at REV Group, Inc., a leading designer, manufacturer, and distributor of specialty vehicles and related aftermarket parts and services. Prior to that, he progressed through leadership roles of increasing responsibility at Textron Inc., where he most recently served as President and Chief Executive Officer of TRU Simulation and Training. Prior to joining Textron, he served as an officer and naval aviator in the U.S. Marine Corps. Mr. Walsh is a certified Six Sigma Black Belt.
Neal J. Keating	65	Executive Chairman and Director	Mr. Keating announced his retirement as President and Chief Executive Officer in August 2020, effective September 8, 2020. Mr. Keating will continue to serve as Executive Chairman through the date of the 2021 Annual Meeting of Shareholders, at which time he is expected to retire from the Board.
Robert D. Starr	53	Executive Vice President and Chief Financial Officer	Mr. Starr was appointed Executive Vice President effective July 1, 2015, and has served as the Chief Financial Officer of the company since July 1, 2013. Mr. Starr joined the Company in 2009 as Vice President - Treasurer.
Russell J. Bartlett	59	Senior Vice President and Chief Operating Officer	Mr. Bartlett joined the Company in 2021 and was appointed Senior Vice President and Chief Operating Officer effective January 4, 2021. Prior to joining Kaman, Mr. Bartlett served as President and Chief Executive Officer of Textron Airborne Solutions, and held increasing positions of responsibility at Beechcraft Corporation ending his time as President of Beechcraft Defense Company. Mr. Bartlett held a distinguished military career retiring from the U.S. Navy in 2008 as a Captain.
Shawn G. Lisle	54	Senior Vice President and General Counsel	Mr. Lisle joined the Company in 2011 and was appointed Senior Vice President and General Counsel effective December 1, 2012. Prior to joining the company, Mr. Lisle served as Senior Counsel for International Paper Company in Memphis, Tennessee. Prior to that, he served as legal counsel for Dana Corporation in Toledo, Ohio, and as an attorney at Porter Wright Morris & Arthur LLP in Columbus, Ohio. He also previously worked as a trial attorney at the U.S. Department of Justice, Tax Division in Washington, D.C. and was a Judge Advocate in the U.S. Navy.
Rafael Z. Cohen	63	Vice President, Information Technology and Cybersecurity	Mr. Cohen was appointed Vice President effective February 2021. Mr. Cohen joined the Company in 2017, previously serving as the Senior Director of Kaman Distribution Group SDG. Before joining the Company, Mr. Cohen held positions at Babcock Power, Gerber Scientific, Blum Shapiro, PerkinElmer, The Stanley Works and Accenture.

Name	Age	Position	Prior Experience
James G. Coogan	40	Vice President, Investor Relations & Business Development	Mr. Coogan was appointed Vice President, Investor Relations & Business Development effective January 2020. Mr. Coogan has served in various roles since joining the Company in 2008, most recently as Vice President, Investor Relations from April 2017 through December 2019 and prior to that Assistant Vice President, SEC Compliance and External Reporting from January 2013 through April 2017. Previous Kaman positions include: Director, External Reporting and SEC Compliance, and Manager, External Reporting and SEC Compliance. Prior to joining the company, Mr. Coogan held positions at Ann Taylor Stores Corporation, Mohegan Tribal Gaming Authority and PricewaterhouseCoopers.
Megan A. Morgan	44	Vice President, Human Resources and Chief Human Resources Officer	Ms. Morgan was appointed Vice President, Human Resources and Chief Human Resources Officers, effective February 1, 2020. Ms. Morgan has served in various roles since joining the company in 2018, most recently as Vice President of Human Resources, Kaman Aerospace Group. Prior to joining the company, Ms. Morgan held positions at Legrand Electrical Wiring Systems, Barnes Group Inc, and PricewaterhouseCoopers.
Kristen M. Samson	47	Vice President and Chief Marketing and Communications Officer	Ms. Samson joined Kaman in 2021 and was appointed Vice President and Chief Marketing and Communications Officer effective January 18, 2021. Prior to joining Kaman, Ms. Samson served in various leadership roles, including Vice President, Marketing and Communications for Textron Systems; Vice President, Marketing and Communications for TRU Simulation + Training; and Vice President of Marketing, Communications and Product Management at Lycoming Engines. Prior to this, Ms. Samson held positions at Comcast Sportsnet and Time Warner Cable. She is a certified Six Sigma Green Belt.

Each executive officer holds office for a term of one year and until his or her successor is duly appointed and qualified, in accordance with the Company's By-Laws.

ITEM 1A. RISK FACTORS

Our business, financial condition, operating results and cash flows can be impacted by the factors set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results.

RISKS RELATED TO OUR BUSINESS, THE INDUSTRIES IN WHICH WE OPERATE, OUR PROGRAMS AND OUR CONTRACTS

Our business, results of operations, financial condition and cash flows have been and are expected to continue to be adversely impacted by the ongoing COVID-19 pandemic.

Economic and health conditions in the United States and across most of the world have changed dramatically since COVID-19 was first discovered in late 2019. In March 2020, the World Health Organization characterized COVID-19 as a pandemic, and the President of the United States declared the COVID-19 pandemic a national emergency. The pandemic has resulted in governments around the world implementing increasingly stringent measures intended to control the spread of the virus, including quarantines, “shelter in place” and “stay at home” orders, travel restrictions, business curtailments, school closures and other measures. The public health issues resulting from COVID-19 and the precautionary measures instituted by governments and businesses to mitigate its spread has resulted in business and manufacturing disruptions, plant closures, inventory shortages, delivery delays, supply chain disruptions, and order reductions, cancellations and deferrals, all of which have adversely affected our business, results of operations, financial condition and cash flows as approximately 50% of our 2020 sales were anticipated to be in commercial end markets which have been particularly impacted by the effects of the pandemic. Of total sales, approximately 30% of total expected sales were anticipated to be to commercial aerospace customers. During the second quarter of 2020, we began to see order deferrals and cancellations resulting in declines in our commercial aerospace programs, which continued into the second half of 2020. More specifically, we have had lower sales of our commercial bearings products and decreases in our medical programs due to the limited number of elective procedures being performed. We anticipate further challenges in these end markets in 2021; however, we expect the medical and industrial end markets to recover more quickly than travel related end markets, such as commercial aerospace. The extent to which COVID-19 may adversely impact our business depends on future developments, which are highly uncertain and unpredictable, the severity and duration of the pandemic and the effectiveness of actions taken globally to contain or mitigate its effects. Even after the COVID-19 pandemic has subsided, we may experience adverse impacts to our business due to any resulting economic recession or depression. Additionally, concerns over the economic impact of COVID-19 have caused extreme volatility in financial and other capital markets which has, and may continue to, adversely impact our stock price and our ability to access capital markets. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this report, such as those relating to our products and financial performance.

Our concentration of sales to a few major direct commercial sales customers under the JPF program puts us at financial risk.

We sell the JPF to foreign militaries through direct commercial sales, with reliance on two Middle Eastern customers. During 2020, sales to these customers accounted for more than 20% of consolidated sales. In addition to being impacted by the cadence of these customers' operations, sales to these customers require export approvals, licenses and other authorizations from the USG. Given the recent change in Administration and the current composition of the U.S. Congress, there can be no assurance that we will be able to obtain the necessary approvals, licenses and authorizations. In the event that we are unable to obtain the regulatory approvals, licenses or other authorizations needed to effectuate sales to these Middle Eastern customers, our financial position, results of operations, and cash flows would be adversely impacted.

JPF orders can be quite large, frequently exceeding $50.0 million or more, resulting in significant variations in our cash flows and outstanding accounts receivable. At December 31, 2020, $64.0 million of accounts receivable on the Company's Consolidated Balance Sheet relates to a single direct commercial sales contract with a Middle Eastern customer. Of this amount $32.4 million were over twelve months past due. The Company continues to receive payments from this customer for recent JPF shipments and expects to receive payment in full on all outstanding receivables, but the delay in payment has adversely affected our cash flows. If we are unable to collect the full amount of these, and other JPF receivables, our business, financial condition, results of operations and cash flows would be adversely impacted.

The direct commercial sales contract with this Middle Eastern customer is secured by unconditional letters of credit aggregating $146.2 million, which may be drawn upon unilaterally by the customer in the event of a disagreement or alleged failure to perform. Any such draw down, whether warranted or not, would adversely impact our business, financial condition, results of operation and cash flows.

The U.S. Navy contract award for the FMU-139 D/B bomb fuze could jeopardize the continued viability, profitability and cash flows of the Company's FMU-152 A/B bomb fuze program.

The Company currently provides the FMU-152 A/B bomb fuze (also referred to as the JPF) to the USAF, but the U.S. Navy currently utilizes a different fuze - the FMU-139. During 2015, the U.S. Naval Air Systems Command ("NAVAIR") solicited proposals for a firm, fixed-price production contract to implement improvements to the performance characteristics of the FMU-139 (such improved fuze having been designated the FMU-139 D/B). The USAF has stated that, if and when a contract is awarded and production begins, the funds associated with the FMU-152 A/B will be redirected to the FMU-139 D/B. During the third quarter of 2015, the U.S. Navy awarded the FMU-139 D/B contract to a competitor. In the event that the FMU-139 D/B program proceeds as planned and the USAF redirects the funds associated with the FMU-152 A/B to the FMU-139 D/B, our business, financial condition, results of operations and cash flows are expected to be materially adversely impacted. During the third quarter of 2019, our competitor announced that it received its first production order from the U.S. Navy to manufacture the FMU-139 D/B. In 2020, we continued to satisfy the requirements for orders for both the USAF and foreign militaries under Option 14 and we completed our pricing negotiations for Options 15 and 16 with the USG. We received an order under Option 15 for the procurement of fuzes for 25 foreign militaries and we expect future orders under Option 16 to extend FMU-152 A/B deliveries into 2023. While these orders are effectuated through our contract with the USG, we expect future orders to exclusively be foreign market sales. Due to the complexity of this program and the pending status of the USAF's final decision to redirect funds to the FMU-139 D/B, the timing and magnitude of the impact on the Company's financial statements is not certain.

The order that grounded the 737 MAX fleet was recently lifted. We are subject to a number of risks and uncertainties related to the timing and conditions surrounding the aircraft's return to service.

On March 13, 2019, the FAA issued an order to suspend operations of all 737 MAX aircraft in the U.S. and by U.S. aircraft operators following two fatal 737 MAX accidents. Non-U.S. civil aviation authorities have issued directives to the same effect. Boeing suspended deliveries until the FAA and other civil aviation authorities worldwide grant the clearance to return the aircraft to service and suspended production of the 737 MAX in January 2020 as a result of the ongoing evaluation. In November 2020, the FAA lifted the orders to suspend operations of the Boeing 737 MAX and in early 2021, airlines around the globe have begun to clear the Boeing 737 MAX for flying. There can be no assurance that the production rate will return to the production rate prior to the grounding of the 737 MAX fleet. We have recognized $5.6 million and $19.9 million in revenue associated with the sale of our products that are utilized on the 737 MAX aircraft fleet in the years ended December 31, 2020 and 2019, respectively. Any future reductions to the production rate or lower than anticipated production levels than previously anticipated could have an adverse effect on our financial position, results of operations, and/or cash flows.

Our financial performance is significantly influenced by conditions within the aerospace and defense industries.

The financial performance of our business is directly tied to economic conditions in the commercial aviation and defense industries. The commercial aviation industry tends to be cyclical, and capital spending by airlines and aircraft manufacturers may be influenced by a variety of global factors including current and future traffic levels, aircraft fuel pricing, labor issues, competition, the retirement of older aircraft, regulatory changes, terrorism and related safety concerns, general economic conditions, worldwide airline profits and backlog levels. The defense industry may be influenced by a changing global political environment, changes in U.S. and global defense spending, U.S. foreign policy and the activity level of military flight operations. Changes to the aerospace and defense industries and any reductions in U.S. defense spending could have a material impact on our current and proposed aerospace programs, which could adversely affect our operating results and future prospects. In addition, changes in economic conditions may cause customers to request that firm orders be rescheduled or canceled, which could put a portion of our backlog at risk.

Furthermore, because of the lengthy research and development cycle involved in bringing new products to market, we cannot predict the economic conditions that will exist when a new product is introduced. A reduction in capital spending in the aviation or defense industries could have a significant effect on the demand for our products, which could have an adverse effect on our financial performance or results of operations.

Our USG programs are subject to unique risks.

We have several significant long-term contracts either directly with the USG or where the USG is the ultimate customer, including the Sikorsky BLACK HAWK cockpit program, the JPF program and the AH-1Z program. These contracts are subject to unique risks, some of which are beyond our control. Examples of such risks include:

- The USG may modify, curtail or terminate its contracts and subcontracts at its convenience without prior notice, upon payment for work done and commitments made at the time of termination. Modification, curtailment or termination of our major programs or contracts could have a material adverse effect on our business, financial condition, results of operations and cash flows.
- Our USG business is subject to specific procurement regulations and other requirements. These requirements, although customary in USG contracts, increase our performance and compliance costs. These costs might increase in the future, reducing our margins, which could have a negative effect on our financial condition. Although we have procedures designed to assure compliance with these regulations and requirements, failure to do so under certain circumstances could lead to suspension or debarment, for cause, from USG contracting or subcontracting for a period of time and could have a material adverse effect on our business, financial condition, results of operations and cash flows and could adversely impact our reputation and our ability to receive other USG contract awards in the future.
- The costs we incur on our USG contracts, including allocated indirect costs, may be audited by USG representatives. Any costs found to be improperly allocated to a specific contract would not be reimbursed, and such costs already reimbursed would have to be refunded, which could have a material adverse effect on our business, financial condition, results of operations and cash flows. Moreover, if any audit were to reveal the existence of improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the USG.
- We are from time to time subject to governmental inquiries and investigations of our business practices due to our participation in domestic and foreign government contracts and programs and our transaction of business domestically and internationally. Adverse findings associated with any such inquiry or investigation could also result in civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with domestic and foreign governments.
- The costs to implement and comply with the Cybersecurity Maturity Model Certification ("CMMC") as initiated by the US Department of Defense in order to measure their defense contractors' capabilities, readiness, and sophistication in the area of cybersecurity.

Our business may be adversely affected by changes in budgetary priorities of the USG.

Because a significant percentage of our revenue is derived either directly or indirectly from contracts with the USG, changes in federal government budgetary priorities could directly affect our financial performance. A significant decline in government expenditures, a shift of expenditures away from programs that we support or a change in federal government contracting policies could cause federal government agencies to reduce their purchases under contracts, to exercise their right to terminate contracts at any time without penalty or not to exercise options to renew contracts.

Estimates of future costs for long-term contracts impact our current and future operating results and profits.

We generally recognize sales and gross margin on long-term contracts based on the over time method of accounting. This method allows for revenue recognition as our work progresses on a contract and requires that we estimate future revenues and costs over the life of a contract. Revenues are estimated based upon the negotiated contract price, with consideration being given to exercised contract options, change orders and, in some cases, projected customer requirements. Contract costs may be incurred over a period of several years, and the estimation of these costs requires significant judgment based upon the acquired knowledge and experience of program managers, engineers and financial professionals.

Estimated costs are based primarily on anticipated purchase contract terms, historical performance trends, business base and other economic projections. The complexity of certain programs as well as technical risks and the availability of materials and labor resources could affect our ability to accurately estimate future contract costs. Additional factors that could affect recognition of revenue and gross margin under this method include:

- Accounting for initial program costs;
- The effect of nonrecurring work;
- Delayed contract start-up or changes to production schedules;
- Transition of work to or from the customer or other vendors;
- Claims or unapproved change orders;
- Product warranty issues;
- Delayed completion of certain programs for which inventory has been built up;
- Our ability to estimate or control scrap level;
- Accrual of contract losses; and
- Changes in our overhead rates.

Because of the significance of the judgments and estimation processes, it is likely that materially different sales and profit amounts could be recorded if we used different assumptions or if the underlying circumstances were to change. Changes in underlying assumptions, circumstances or estimates may adversely affect current and future financial performance. While we perform quarterly reviews of our long-term contracts to address and lessen the effects of these risks, there can be no assurance that we will not make material adjustments to underlying assumptions or estimates relating to one or more long-term contracts that have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may lose money or generate lower than expected profits on our fixed-price contracts.

Our customers set demanding specifications for product performance, reliability and cost. Most of our government contracts and subcontracts provide for a predetermined, fixed price for the products we make regardless of the costs we incur. Therefore, we must absorb cost overruns, notwithstanding the difficulty of estimating all of the costs we will incur in performing these contracts and in projecting the ultimate level of sales that we may achieve. Our failure to anticipate technical problems, estimate costs accurately, integrate technical processes effectively or control costs during performance of a fixed-price contract may reduce the profitability of a fixed-price contract or cause a loss. While we believe that we have recorded adequate provisions in our financial statements for losses on our fixed-price contracts as required under GAAP, there can be no assurance that our contract loss provisions will be adequate to cover all actual future losses.

We face significant pressure to lower our pricing notwithstanding our own internal costs.

There is substantial and continuing pressure from original equipment manufacturers ("OEMs") in the commercial aerospace industry to reduce the prices they pay to suppliers, such as Kaman. We attempt to manage such downward pricing pressure, while trying to preserve our business relationships with our customers, by seeking to reduce our production and procurement costs through various measures, including implementing cost-effective process improvements and partnering with our own suppliers to reduce our cost of raw materials and components. Our suppliers have periodically resisted, and in the future may resist, pressure to lower their prices and may seek to impose price increases. If we are unable to offset price reductions to our OEM customers, this could have a material adverse effect on our business, financial condition, results of operations and cash flows.

The ability to obtain and retain product approvals issued by the Federal Aviation Administration ("FAA") and any intellectual property claims could adversely affect our operating results and profits.

Our business may be impacted by regulations set forth by the FAA to obtain Parts Manufacturer Approvals ("PMAs") to design or produce a modification or replacement aircraft part. The loss or suspension of the Company's product and design approvals could negatively impact our operating results and profits. We believe our current design and production processes that are subject to such regulations by the FAA are in compliance; however, there can be no assurance that we will not lose approvals for our products in the future. Additionally, we may be subject to claims of intellectual property infringement by third parties, including in connection with our PMA business, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Competition from domestic and foreign manufacturers may result in the loss of potential contracts and opportunities.

The aerospace markets in which we participate are highly competitive, and we often compete for work not only with large OEMs but also sometimes with our own customers and suppliers. Many of our large customers may choose not to outsource production due to, among other things, their own direct labor and overhead considerations and capacity utilization objectives. This could result in these customers supplying their own products or services and competing directly with us for sales of these products or services, all of which could significantly reduce our revenues.

Our competitors may have more extensive or more specialized engineering, manufacturing and marketing capabilities than we do in some areas, and we may not have the technology, cost structure, or available resources to effectively compete with them. We believe that developing and maintaining a competitive advantage requires continued investment in product development; engineering; supply chain management; production capabilities, including technology, equipment and facilities; and sales and marketing, and we may not have enough resources to make the necessary investments to do so. Further, our significant customers may attempt to use their position to negotiate price or other concessions for a particular product or service without regard to the terms of an existing contract or the underlying cost of production.

We believe our strategies for our business will allow us to continue to effectively compete for key contracts and customers, but there can be no assurance that we will be able to compete successfully in this market or against such competitors.

Our failure to comply with the covenants contained in our credit facility could trigger an event of default, which could materially and adversely affect our operating results and our financial condition.

Our credit facility requires us to maintain certain financial ratios and comply with various operational and other covenants. If we were unable to maintain these ratios and comply with such covenants, we would need to seek relief from our lenders in order to avoid, cure or have waived an event of default under the facility. There can be no assurance that we would be able to obtain such relief on commercially reasonable terms or otherwise. If an event of default occurs and is not cured or waived, we may not be able to make further borrowings under the credit facility and our lenders could, among other things, cause all outstanding indebtedness under the credit facility to be due and payable immediately. There can be no assurance that our assets or cash flows would be sufficient to provide us with sufficient liquidity to fund outstanding commitments or meet other business requirements or to enable us to fully repay those amounts or that we would be able to refinance or restructure the indebtedness. If, as or when required, we are unable to repay, refinance or restructure the indebtedness outstanding under our senior credit facility, or amend the financial ratios and covenants contained therein, the lenders under our credit facility could elect to terminate their commitments thereunder, cease making further loans and institute foreclosure proceedings against our assets. This, in turn, could result in an event of default under one or more of our other financing agreements, including our convertible notes.

In addition, in the ordinary course of business, certain of our customers require us to deliver standby letters of credit to guarantee our performance under our contractual obligations with them, which are currently issued by certain of our lenders pursuant to our credit facility. If we are unable to obtain letters of credit as needed to operate our business as a result of any of the circumstances described above or otherwise, our ability to enter into certain contracts may be adversely affected. Moreover, by their nature, standby letters of credit may be drawn upon by the beneficiaries thereof, which could affect our financial ratios and ability to make additional borrowings. The occurrence of any of these events could have a material adverse effect on our liquidity, financial position or results of operations.

Changes affecting the availability of the London Interbank Offered Rate (“LIBOR”) could affect our financial results.

The Company has outstanding debt and receivable transactions with variable interest rates based on LIBOR. The LIBOR benchmark has been the subject of national, international, and other regulatory guidance and proposals for reform. In July 2017, the U.K. Financial Conduct Authority announced that it intends to stop persuading or compelling banks to submit rates for calculation of LIBOR after 2021. In November 2020, the ICE Benchmark Association announced its intention to delay the timeline for the retirement of certain LIBOR reference rates until mid-2023. As a result, doubt remains as to the future of LIBOR as a reference rate. Alternative benchmark rate(s) may replace LIBOR and could affect the Company's debt securities, derivative instruments, receivables, debt payments and receipts. At this time, it is not possible to predict the effect of any changes to LIBOR, any phase out of LIBOR or any establishment of alternative benchmark rates. Any new benchmark rate will likely not replicate LIBOR exactly, which could impact our contracts which terminate after 2023. There is uncertainty about how applicable law, the courts or the Company will address the replacement of LIBOR with alternative rates on variable rate retail loan contracts and other contracts that do not include alternative rate fallback provisions. In addition, any changes to benchmark rates may have an uncertain impact on our cost of funds and our access to the capital markets, which could impact our liquidity, financial position or results of operations.

The freezing of our defined benefit pension plan could trigger a curtailment adjustment in favor of the USG.

Our defined benefit pension plan was frozen with respect to future benefit accruals effective December 31, 2015. U.S. Government Cost Accounting Standard 413 ("CAS 413") requires the Company to determine the USG’s share of any resulting pension curtailment adjustment attributable to pension expense charged to Company contracts with the USG, which could result in an amount due to the USG if the plan is determined to be in a surplus position or an amount due to the Company if the plan is determined to be in a deficit position. During the fourth quarter of 2016, the Company accrued a $0.3 million liability representing our estimate of the amount due to the USG based on our pension curtailment adjustment calculation, which was submitted to the USG for review in December 2016. The Company has maintained its accrual at $0.3 million as of December 31, 2020. There can be no assurance that the ultimate resolution of this matter will not have a material adverse effect on our results of operations, financial position and cash flows.

RISKS RELATED TO INFORMATION TECHNOLOGY AND CYBERSECURITY

Cybersecurity requirements, vulnerabilities, threats and more sophisticated and targeted computer crime could pose a risk to our systems, networks, products and data.

Our information technology systems provide critical data connectivity, information and services for internal and external users. These interactions include, but are not limited to, ordering and managing materials from suppliers, inventory management, shipping products to customers, processing transactions, summarizing and reporting results of operations, complying with regulatory, legal or tax requirements and other processes necessary to manage our business. Our computer systems face the threat of unauthorized access, computer hackers, computer viruses, malicious code, organized cyber-attacks and other security problems and system disruptions. We rely heavily on our information technology systems, networks and services, some of which are managed, hosted and provided by third-parties to conduct our business.

Cyber-attacks are evolving and include, but are not limited to, malicious software, destructive malware, attempts to gain unauthorized access to data, manipulation of data, disruption or denial of service attacks and other electronic security breaches that could lead to disruptions in critical systems, unauthorized release of confidential, personal or otherwise protected information, including trade secrets, and corruption of data, networks or systems. We provide products and services to customers who also face cyber threats. Our products and services may be subject to cyber threats and we may not be able to detect or deter such threats, which could result in losses that could adversely affect our customers and our company. On December 17, 2020, Bal Seal identified file encryption activity and ransom notes on systems within its environment indicative of a Doppelpaymer ransomware attack, which disrupted Bal Seal's information technology systems. Bal Seal undertook immediate steps to address the incident, including engaging IT security and forensics experts to assess the impact on Bal Seal’s IT systems and to prepare for restoration. Based on the information available to the Company to date: (i) the Company believes the unauthorized access was limited solely to the Bal Seal IT systems; (ii) the threat actor accessed the Bal Seal environment through a phishing email and deployed DoppelPaymer ransomware, which encrypted files on a significant number of Bal Seal's systems; (iii) there is no indication that the IT systems or data maintained at the Company’s corporate office or its other businesses have been affected; (iv) there was no evidence of data staging or exfiltration in the Bal Seal environment that was identified by a forensic investigator; and (v) there is no indication that the incident is related to the recent “SolarWinds” cybersecurity incident. Although no payments were made to the threat actor, the interruption resulted in a temporary delay of revenue and in the incurrence of incremental costs for the year ended December 31, 2020; however, the incident was not material to the Company's fiscal year 2020 financial results. The Company expects that the majority of the costs incurred will be recoverable by insurance.

We could also be impacted by cyber threats in products that we use in our partners' and customers' systems that are used in connection with our business, including threats directed towards our third-party and cloud service providers. Any such breach could compromise our networks and the information there could be accessed, publicly disclosed, lost or stolen. These events, if not prevented or mitigated, could damage our reputation, require remedial action and lead to loss of business, regulatory actions, potential liability and other financial losses. To address the risks to our information technology systems and data, we manage an information security program, maintain strong incident report capabilities and perform daily off-site backups. Additionally, we have put in place business continuity plans and security precautions for our critical systems, including a back-up data center. Updates on cyber security are provided to the Board of Directors at least annually.

Our information technology systems, processes and sites may suffer interruptions or failures which may affect our ability to conduct our business.

In the event our information technology systems are damaged or cease to function properly due to any number of causes, such as catastrophic events, power outages and security breaches resulting in unauthorized access or cyber-attacks, and our information security program, incident report capabilities, business continuity plans and security precautions do not function effectively on a timely basis, we may suffer interruptions in our operations or the misappropriation of proprietary information, which may adversely impact our business, financial condition, results of operations and cash flows. In December 2020, an unauthorized party disrupted access to Bal Seal's information technology systems. The interruption resulted in a temporary delay of revenue and in the incurrence of incremental costs for the year ended December 31, 2020; however, the incident was not material to the Company's fiscal year 2020 financial results. Bal Seal was able to restore its affected systems and resume business operations in a relatively short period of time.

As we outsource our information technology functions and transition to cloud-based technologies, disruptions or delays at our third-party service providers could impact our operations.

As part of the comprehensive review of our general and administrative functions in order to improve operational efficiency and to align the Company's costs with its revenues, we identified information technology functions to be outsourced. While we believe we conducted appropriate diligence before entering into agreements with our third-party service providers and have the proper controls and oversight over the IT functions performed by our third parties, the failure of one or more of such entities to meet our performance standards and expectations, with respect to data security, compliance with data protection and privacy laws, providing services on a timely basis or providing services at the prices we expect, may have an adverse effect on our results of operations or financial condition. Additionally, we are considering the transition of certain technology to cloud-based infrastructure, which is complex, time consuming, and can involve substantial expenditures. Our utilization of cloud services is critical to developing and providing products and services to our customers, scaling our business for future growth, accurately maintaining data and otherwise operating our business; any such implementation involves risks inherent in the conversion to a new system, including loss of information and potential disruption to our normal operations. We may discover deficiencies in our design or implementation or maintenance of the new cloud-based systems that could adversely affect our business. Upon implementation of the new cloud-based solutions, failure of cloud infrastructure providers to maintain adequate physical, technical and administrative safeguards to protect the security of our confidential information and data could result in unauthorized access to our systems or a system or network disruption that could lead to improper disclosure of confidential information or data, regulatory penalties and remedial costs. There may also be a discrepancy between the contractual liability profile that the cloud service provider has agreed to and our contractual liability profile with our customers. Any disruption to either the outsourced systems or the communication links between us and the outsourced suppliers could negatively affect our ability to operate our data systems, and could impair our ability to provide services to our customers. As we increase our reliance on these third-party systems, our exposure to damage from service disruptions may increase and we may incur additional costs to remedy the damages caused by these disruptions.

RISKS RELATED TO COMPLIANCE

Exports of certain of our products are subject to various export control regulations and authorizations, and we may not be successful in obtaining the necessary U.S. Government approvals and resultant export licenses for proposed sales to certain foreign customers.

We must comply with numerous laws and regulations relating to the export of our products and technologies, including, among others, the FMU-152A/B JPF, before we are permitted to sell those products and technologies outside of the United States. Compliance often entails the submission and timely receipt of necessary export approvals, licenses or authorizations from the U.S. Government and, depending on the size and nature of the proposed transaction, may even require the submission of formal notification to the United States Congress, which then has the ability to pass a joint resolution of disapproval blocking or amending the sale. Over the last several years, the U.S. export licensing environment for munitions, such as the JPF, has been adversely affected by a number of factors, including, but not limited to, the changing geopolitical environment and heightened tensions with other countries (which shift and evolve over time). Accordingly, we can give no assurance that we will be successful in obtaining, in a timely manner or at all, the approvals, licenses or authorizations we need to sell our products and technologies outside the United States, which may result in the cancellation of orders, the incurrence of significant penalties payable by the Company and the return of advance payments to our customers if we do not make deliveries and fulfill our contractual commitments. Any significant delay in, or impairment of, our ability to sell products or technologies outside of the United States could have a material adverse effect on our business, financial condition and results of operations.

Tariffs on certain imports to the United States and other potential changes to U.S. tariff and import/export regulations may have a negative effect on global economic conditions and our business, financial results and financial condition.

In 2018, tariffs were implemented on imports of steel and aluminum into the United States. As the implementation of tariffs is ongoing, more tariffs may be added in the future. While any steel and aluminum we use in our products is produced primarily in North America, the tariffs may provide domestic steel and aluminum producers the flexibility to increase their prices, at least to a level where their products would still be priced below foreign competitors once the tariffs are taken into account. These tariffs could have an adverse impact on our financial results, which include, but are not limited to, products we sell that include steel and aluminum, and if we are unable to pass such price increases through to our customers, it would likely increase our cost of sales and, as a result, decrease our gross margins, operating income and net income. To date, the impact of the tariffs has not been material to the Company. In addition, in response to the tariffs, a number of other countries are threatening to impose tariffs on U.S. imports, which, if implemented, could increase the price of our products in these countries and may result in our customers looking to alternative sources for our products. This would result in decreased sales, which could have a negative impact on our net income and financial condition. Any of these factors could depress economic activity and restrict our access to suppliers or customers and have a material adverse effect on our business, financial condition and results of operations.

We are subject to litigation, tax, environmental and other legal compliance risks that could adversely affect our operating results.

We are subject to a variety of litigation, tax and legal compliance risks. These risks include, among other things, possible liability relating to contract-related claims, government contracts, product liability matters, personal injuries, intellectual property rights, taxes, employment, environmental matters and compliance with U.S. and foreign export laws, competition laws, laws governing improper business practices and data privacy laws, including the EU-wide General Data Protection Regulation (the "GDPR") and the California Consumer Privacy Act. In the event that we or one of our business units engage in wrongdoing in connection with any of these kinds of matters, we could be subject to significant fines, penalties, repayments, other damages (in certain cases, treble damages), or suspension or debarment from government contracts. Moreover, our failure to comply with applicable export and trade practice laws could result in civil or criminal penalties and suspension or termination of export privileges.

As a global business, we are subject to complex laws and regulations in the U.S. and other countries in which we operate. Those laws and regulations may be interpreted in different ways. They may also change from time to time, as may related interpretations and other guidance. Changes in laws or regulations could result in higher expenses and payments, and uncertainty relating to laws or regulations may also affect how we conduct our operations and structure our investments and could limit our ability to enforce our rights. Changes in environmental and climate change laws or regulations, including laws relating to greenhouse gas emissions, could lead to new or additional investment in product designs and could increase environmental compliance expenditures. Changes in climate change concerns, or in the regulation of such concerns, including greenhouse gas emissions, could subject us to additional costs and restrictions, including increased energy and raw material costs.

Our financial results may be adversely affected by the outcome of pending legal proceedings and other contingencies that cannot be predicted. In accordance with GAAP, if a liability is deemed probable and reasonably estimable in light of the facts and circumstances known to us at a particular point in time, we make an estimate of material loss contingencies and establish reserves based on our assessment. Subsequent developments in legal proceedings may affect our assessment. The accrual of a loss contingency adversely affects our results of operations in the period in which a liability is recognized. This could also have an adverse impact on our cash flows in the period during which damages are paid.

For a discussion of these matters, please refer to Note 19, *Commitments and Contingencies*, and Note 13, *Environmental Costs,* in the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K.

Our foreign operations require us to comply with a number of United States and international laws and regulations, violations of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We are required to comply with a number of United States and international laws and regulations, such as the U.S. Foreign Corrupt Practices Act of 1977 (the "FCPA"), the U.K. Bribery Act of 2010 (the "Bribery Act"), and other similar anticorruption laws and regulations. The FCPA generally prohibits United States companies or their agents and employees from providing anything of value to a foreign official for the purposes of influencing any act or decision of these individuals in their official capacity to help obtain or retain business, direct business to any person or corporate entity or obtain any unfair advantage. Although we have internal controls, procedures and compliance programs to train our employees and agents with respect to compliance with the FCPA and other applicable international laws and regulations, there can be no assurance that our policies, procedures and programs will always protect us from reckless or criminal acts committed by our employees or agents. Allegations of violations of applicable international laws and regulations, including the FCPA and the Bribery Act, may result in internal, independent or government investigations. Violations of the FCPA and other international laws and regulations may lead to severe criminal or civil sanctions and could result in liabilities that have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our foreign operations present additional risks and uncertainties which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our foreign business operations create additional risks and uncertainties, including the following:

- Longer payment cycles;
- Difficulties in accounts receivable collection, including complexities in documenting letters of credit;
- Changes in regulatory requirements;
- Export restrictions, tariffs and other trade barriers;

- Difficulties in staffing and managing foreign operations;
- Seasonal reductions in business activity during the summer months in Europe and certain other parts of the world;
- Political or economic instability in the markets we serve;
- Potentially adverse tax consequences; and
- Cultural and legal differences impacting the conduct of business.

In addition, our contracts with foreign customers may include terms and reflect legal requirements that create additional risks. These include, among others, industrial cooperation agreements requiring specific in-country purchases, investments, manufacturing agreements or other financial obligations, known as offset requirements, and provide for significant penalties if we fail to meet such requirements. Certain of our foreign customers have required us to enter into letters of credit, performance or surety bonds, bank guarantees and/or other financial arrangements to secure our performance obligations. All or any of these factors have the potential to have a material adverse effect on our business, financial condition, results of operations and cash flows.

Additional tax exposure and tax law changes could have a material effect on our financial results.

We are subject to income taxes in the United States and certain foreign jurisdictions. The determination of the Company’s provision for income taxes and other tax liabilities requires judgment and is based on legislative and regulatory structures that exist in the jurisdictions in which we operate, and we are periodically under audit by various tax authorities. We regularly assess the potential outcomes of examinations by tax authorities in determining the adequacy of our provision for income taxes. We are currently under audit by various states for the years 2015 through 2017. Although we do not believe that any material adjustments will result from these audits, the outcome of tax audits cannot be predicted with certainty. Any final assessment resulting from tax audits may result in material changes to our past or future taxable income, tax payable or deferred tax assets and may require us to pay penalties and interest that could have a material adverse effect on our results of operations.

The value of our deferred tax assets could become impaired, which could materially and adversely affect our operating results.

As of December 31, 2020, we had approximately $32.4 million in net deferred tax assets after valuation allowance. These deferred tax assets can be used to offset taxable income in future periods and reduce income taxes payable in those future periods. Each quarter, we determine the probability of the realization of deferred tax assets, using significant judgments and estimates with respect to, among other things, historical operating results, expectations of future earnings and tax planning strategies. In the event that there is insufficient positive evidence to support the valuation of these assets, we may be required to further adjust the valuation allowance to reduce our deferred tax assets. Such a reduction could result in a material non-cash charge in the period in which the valuation allowance is adjusted and could have a material adverse effect on our results of operations.

RISKS RELATING TO ACQUISITIONS, JOINT VENTURES, DIVESTITURES AND RESTRUCTURING

We may make acquisitions or investments in new businesses, products or technologies that involve additional risks, which could disrupt our business or harm our financial condition or results of operations.

As part of our business strategy, we have made, and expect to continue to make, acquisitions of businesses or investments in companies that offer complementary products, services and technologies. Such acquisitions or investments involve a number of risks, including:

- Assimilating operations and products may be unexpectedly difficult;
- Management's attention may be diverted from other business concerns;
- We may enter markets in which we have limited or no direct experience;
- We may lose key employees, customers or vendors of an acquired business;
- We may not be able to achieve the synergies or cost savings we anticipated;
- We may not realize the assigned value of the acquired assets;
- We may experience quality control failures or encounter other customer relationship issues; and
- We may become subject to preexisting liabilities and obligations of the acquired businesses.

These factors could have a material adverse effect on our business, financial condition, results of operations and cash flows. In addition, the consideration paid for any future acquisitions could include our stock or require that we incur additional debt and contingent liabilities. As a result, future acquisitions could cause dilution of existing equity interests and earnings per share.

The performance of required transition services may disrupt our continuing businesses, divert our resources and distract our management.

In connection with the sale of our former Distribution business, we entered into a transition services agreement, pursuant to which we agreed to provide various transition services to the purchasers of the Distribution business for specified periods beginning as of the closing date. The buyer has the right to terminate individual services at any point over the renewal term and began to terminate services in the third quarter of 2020. All services are expected to be terminated by the end of the first quarter of 2021. In order to perform our obligations under the transition services agreement, we allocate certain of our resources, including Company assets, facilities, equipment and the time and attention of our senior management team, to ensure a smooth transition of the businesses sold, which may negatively impact our own business, results of operations, financial condition and cash flows. Difficulties in separating the operations, technologies and IT infrastructure of the Distribution business from those of our aerospace and engineered products businesses may require substantially more time and funds than we anticipated in negotiating the terms of the transition services agreement. Although the transition services agreement generally entitles us to compensation for services rendered under the agreement, the compensation specified in the transition services agreement may not be sufficient to cover the costs incurred in providing the services, which could result in unrecoverable costs that could be material. If we are unable to effectively manage these risks, our business, results of operations, financial condition and cash flows may be adversely affected.

Certain of our operations are conducted through joint ventures, which entail special risks.

The Company has a 49% equity interest in Kineco-Kaman Composites - India Private Limited, a composites manufacturing joint venture located in Goa, India. The Company relies significantly on the services and skills of its joint venture partner to manage and conduct the local business operations of the joint venture and ensure compliance with all applicable laws and regulations. If our joint venture partner fails to perform these functions adequately, it may adversely affect our business, financial condition, results of operations and cash flows. Moreover, if our joint venture partner fails to honor its financial obligations to commit capital, equity or credit support to the joint venture as a result of financial or other difficulties or for any other reason, the joint venture may be unable to perform contracted services or deliver contracted products unless we provide the necessary capital, equity or credit support.

We may be unable to realize expected benefits from our cost reduction and restructuring efforts and our profitability may be hurt or business otherwise might be adversely affected.

In order to operate more efficiently and control costs, from time to time, we announce restructuring plans or other cost savings initiatives, which include workforce reductions as well as facility consolidations and other cost reduction initiatives, such as streamlining our processes. These plans are intended to generate operating expense savings through direct cost and indirect overhead expense reductions, as well as other savings. We may undertake further workforce reductions or restructuring actions in the future. These types of cost reduction and restructuring activities are complex. If we do not successfully manage our current initiatives and restructuring activities or any other similar activities that we may undertake in the future, expected efficiencies and benefits might be delayed or not realized, and our operations and business could be disrupted. Risks associated with these initiatives, actions and other workforce management issues include political responses to such actions, unforeseen delays in the implementation of anticipated workforce reductions, additional unexpected costs, changes in responsibilities, business and information technology systems disruptions, changes in internal controls, potential impacts on financial reporting, adverse effects on employee morale and the failure to meet operational targets, whether due to the loss of employees, work stoppages or otherwise, any of which may impair our ability to achieve anticipated sales or cost reductions and could have a material adverse effect on our business, financial condition, results of operations and cash flows.

GENERAL RISK FACTORS

Our future operating results will be impacted by changes in global economic and political conditions.

Our future operating results and liquidity are expected to be impacted by changes in general economic and political conditions which may affect, among other things, the following:

- The availability of credit and our ability to obtain additional or renewed bank financing, the lack of which could have a material adverse impact on our business, financial condition and results of operations and may limit our ability to invest in capital projects and planned expansions or to fully execute our business strategy;
- Market rates of interest, any increase in which would increase the interest payable on some of our borrowings and adversely impact our cash flow;

- The investment performance of our pension plan, as well as the associated discount rate, any adverse changes in which may result in a deterioration in the funded status of the plan and an increase in required contributions and plan expense;
- The relationship between the U.S. dollar and other currencies, any adverse changes in which could negatively impact our financial results;
- The ability of our customers to pay for products and services on a timely basis, any adverse change in which could negatively impact sales and cash flows and require us to increase our bad debt reserves;
- The volume of orders we receive from our customers, any adverse change in which could result in lower operating profits as well as less absorption of fixed costs due to a decreased business base;
- The ability of our suppliers to meet our demand requirements, maintain the pricing of their products or continue operations, any of which may require us to find and qualify new suppliers;
- The issuance and timely receipt of necessary export approvals, licenses and authorizations from the U.S. Government, the lack or untimely receipt of which could have a material adverse effect on our business, financial condition and results of operations; and
- The political stability and leadership of countries where our customers reside, including military activity, training and threat levels, any adverse changes in which could negatively impact our financial results.

While general economic and political conditions have not impaired our ability to access credit markets and finance our operations to date, there can be no assurance that we will not experience future adverse effects that may be material to our cash flows, competitive position, financial condition, results of operations or our ability to access capital.

We could be negatively impacted by the loss of key suppliers, the consolidation of suppliers, the lack of product availability or changes in supplier programs.

Our business depends on maintaining a sufficient supply of various products to meet our customers' demands. We have long-standing relationships with key suppliers but these relationships generally are non-exclusive and could be terminated by either party. If we were to lose a key supplier, or were unable to obtain the same levels of deliveries from these suppliers and were unable to supplement those purchases with products obtained from other suppliers, it could have a material adverse effect on our business. Additionally, we rely on foreign and domestic suppliers and commodity markets to secure raw materials used in many of the products we manufacture. Suppliers have consolidated and formed alliances to broaden their product and integrated system offerings, and achieve critical mass. Supplier consolidation could cause us to compete against certain competitors with greater financial resources, market penetration and purchasing power. This exposes us to volatility in the price and availability of raw materials. In some instances, we depend upon a single source of supply. Supply interruptions could arise from shortages of raw materials, labor disputes, weather conditions or pandemics, such as the novel strain of coronavirus, affecting suppliers' production, transportation disruptions or other reasons beyond our control. Even if we continue with our current supplier relationships, high demand for certain products may result in us being unable to meet our customers' demands, which could put us at a competitive disadvantage. Additionally, our key suppliers could also increase the pricing of their products, which would negatively affect our operating results if we were not able to pass these price increases through to our customers. We base our supply management process on an appropriate balancing of the foreseeable risks and the costs of alternative practices. To protect ourselves against such risks, we may engage in strategic inventory purchases during the year, negotiate long-term vendor supply agreements, monitor our inventory levels and obtain second sources when applicable to ensure that we have the appropriate inventory on hand to meet our customers' requirements.

We may not realize all of the sales expected from our existing backlog or anticipated orders.

At December 31, 2020, we had $631.2 million of order backlog. There can be no assurance that the revenues included in our backlog will be realized or, if realized will result in profits. We consider backlog to be firm customer orders. OEM customers may provide projections of components and assemblies that they anticipate purchasing in the future under existing programs. These projections may represent orders that are beyond lead time and are included in backlog when supported by a long term agreement. Our customers have the right under certain circumstances or with certain penalties or consequences to terminate, reduce or defer firm orders that we have in backlog. If our customers terminate, reduce or defer firm orders, we may be protected from certain costs and losses, but our sales would be adversely affected. Although we strive to maintain ongoing relationships with our customers, there is an ongoing risk that orders may be canceled or rescheduled due to fluctuations in our customers’ business needs or purchasing budgets.

Our revenue, cash flows and quarterly results may fluctuate, which could adversely affect our stock price.

We may in the future experience significant fluctuations in our quarterly operating results attributable to a variety of factors. Such factors include but are not limited to:

- Changes in demand for our products;
- Introduction, enhancement or announcement of products by us or our competitors;
- Market acceptance of our new products;
- The growth rates of certain market segments in which we compete;
- Size, timing and shipment terms of significant orders;
- Difficulties with our technical programs;
- Budgeting cycles of customers;
- Pricing pressures from customers;
- Customer advances;
- Longer payment terms required by our customers;
- Mix of distribution channels;
- Mix of products and services sold;
- Mix of domestic and international revenues;
- Fluctuations in currency exchange rates;
- Changes in the level of operating expenses;
- Changes in our sales and management incentive plans;
- Changes in tax laws in the jurisdictions in which we conduct business;
- Timing of tax payments, assessments and settlements;
- Inventory obsolescence;
- Accrual of contract losses;
- Fluctuations in oil and utility costs;
- Health care reform;
- Completion or announcement of acquisitions or divestitures
- Timing of recovery from the COVID-19 pandemic; and
- General economic conditions in regions in which we conduct business.

Most of our expenses are relatively fixed in the short-term, including costs of personnel and facilities, and are not easily reduced. Thus, an unexpected reduction in our revenue, or failure to achieve an anticipated rate of growth, could have a material adverse effect on our profitability. If our operating results do not meet the expectations of investors, our stock price may decline.

Our financial results of operations could be adversely affected by impairment of our goodwill or other intangible assets.

When we acquire a business, we record goodwill equal to the excess of the amount we pay for the business, including liabilities assumed, over the fair value of the tangible and identifiable intangible assets of the business we acquire. Goodwill and other intangible assets that have indefinite useful lives must be evaluated at least annually for impairment. The specific guidance for testing goodwill and other non-amortized intangible assets for impairment requires management to make certain estimates and assumptions when allocating goodwill to reporting units and determining the fair value of reporting unit net assets and liabilities, including, among other things, an assessment of market conditions, projected cash flows, investment rates, cost of capital and growth rates, which could significantly impact the reported value of goodwill and other intangible assets. Changes in our estimates and assumptions could adversely impact projected cash flows and the fair value of reporting units. Fair value is generally determined using a combination of the discounted cash flow, market multiple and market capitalization valuation approaches. Absent any impairment indicators, we generally perform our evaluations annually in the fourth quarter, using available forecast information. If at any time we determine an impairment has occurred, we are required to reflect the reduction in value as an expense within operating income, resulting in a reduction of earnings and a corresponding reduction in our net asset value in the period such impairment is identified. As part of management's evaluation of triggering events in the third quarter of 2020, the assessment of the Company's operating results identified a decline in earnings compared to forecasts used in prior periods for its Aerosystems reporting unit. The quantitative analysis resulted in a conclusion that the fair value of the Aerosystems reporting unit was $56.1 million below its carrying value; therefore, goodwill was impaired. In year ended December 31, 2020, the Company recorded a goodwill impairment charge of $50.3 million for the Aerosystems reporting unit, which represented the entire goodwill balance for the reporting unit. In the event there are deteriorations in business conditions or estimated cash flows beyond amounts previously or currently forecasted, there is a risk of future impairments on our goodwill balance.

The cost and effort to start up new programs and introduce new products and technologies could negatively impact our operating results and profits.

The time required and costs incurred to ramp up a new program can be significant and include nonrecurring costs for tooling, first article testing, finalizing drawings and engineering specifications and hiring new employees able to perform the technical work required. New programs can typically involve a greater volume of scrap, higher costs due to inefficiencies, delays in production and learning curves that are often more extended than anticipated, all of which could have a material effect on our business, financial condition, results of operations and cash flows.

We also seek to achieve growth through the design, development, production, sale and support of innovative products that incorporate advanced technologies. The product, program and service needs of our customers change and evolve regularly and we invest in research and development efforts to pursue advances in technologies, products and services. We are currently developing the next generation K-MAX® unmanned aircraft system that will allow operators to have the ability to fly either manned or unmanned missions. We have received six orders, including one order related to a lease, as of December 31, 2020, which allow for a short time frame to develop and manufacture the unmanned aircraft systems. If any of our development and/or production efforts are delayed, if suppliers cannot deliver timely or perform to our standards and/or if we identify or experience any other issues, we may not meet delivery schedules agreed upon with our customers, which could result in material additional costs, including liquidated damages or other liabilities that could be assessed.

Our ability to realize the anticipated benefits of our technological advancements depends on a variety of factors, including meeting development, production, certification and regulatory approval schedules; execution of internal and external performance plans; availability of supplier and internal facility capacity to perform maintenance, repair, and overhaul services on our products; hiring and training of qualified personnel; achieving cost and production efficiencies, identification of emerging technological trends in our target end markets; validation of innovative technologies; the level of customer interest in new technologies and products; and customer acceptance of products we manufacture. Development efforts divert resources from potential resources in our businesses, and these efforts may not lead to the development of new technologies on a timely basis or meet the needs of our customers as fully as competitive offerings. Additionally, the markets for our products or products that incorporate our technologies may not develop or grow as we anticipate. We may encounter difficulties in developing and/or producing new products or services and may not realize the degree or timing of benefits initially anticipated or may otherwise suffer significant adverse financial consequences. Due to the design complexity of our products, we may experience delays in completing the development and introduction of new products. Delays could result in increased development costs or deflect resources from other projects. Furthermore, our competitors or customers may develop competing technologies which gain market acceptance in advance or instead of our products. Additionally, our competitors may develop new technologies or offerings that may cause our existing technologies or offerings to become obsolete. These risks associated with efforts to start up new programs and introduce new products and technologies could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We rely on the experience and expertise of our skilled employees, and must continue to attract and retain qualified technical, marketing and managerial personnel in order to succeed.

Our future success will depend largely upon our ability to attract and retain highly skilled technical, operational and financial managers and marketing personnel. There is significant competition for such personnel in the aerospace industry. We try to ensure that we offer competitive compensation and benefits as well as opportunities for continued development, and we continually strive to recruit and train qualified personnel and retain key employees. There can be no assurance, however, that we will continue to be successful in attracting and retaining the personnel we require to develop new and enhanced products and to continue to grow and operate profitably.

We depend on our intellectual property, and have access to certain intellectual property and information of our customers and suppliers and any infringement or failure to protect such intellectual property could have a material adverse effect on our business, financial condition results of operations and cash flows.

We rely on a combination of patents, trademarks, copyrights, trade secrets, nondisclosure agreements, physical and information technology security systems, internal controls and compliance systems and other measures to protect our intellectual property, data, and technology rights, both domestically and internationally, as well as the intellectual property, data and technology rights of our customers and suppliers that we have in our possession or to which we have access. Our efforts to protect such intellectual property, data and technology rights may not be sufficient. There can be no assurance that our pending patent applications will result in the issuance of patents to us, that patents issued to or licensed by us in the past or in the future will not be challenged or circumvented by competitors, or that these patents will be found to be valid or sufficiently broad to preclude our competitors from introducing technologies similar to those covered by our patents and patent applications. Our

ability to protect and enforce our intellectual property, data and technology rights may be limited in certain countries outside the U.S. as may be our ability to prevent theft or compromise of our intellectual property, data and technology rights by competitors, state actors or third parties. In addition, we may be the target of competitor or other third-party patent enforcement actions seeking substantial monetary damages or seeking to prevent our sale and marketing of certain of our products or services. Our competitive position also may be adversely impacted by limitations on our ability to obtain possession of, and ownership or necessary licenses concerning, data important to the development or provision of our products or service offerings, or by limitations on our ability to restrict the use by others of data related to our products or services. Any of these events or factors could have a material adverse effect on our competitive position, subject us to judgments, penalties and significant litigation costs or temporarily or permanently disrupt our sales and marketing of the affected products or services. Any of the foregoing could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

Business disruptions could seriously affect our sales and financial condition or increase our costs and expenses.

Our business may be impacted by disruptions including, but not limited to, threats to physical security, information technology attacks or failures, damaging weather or other acts of nature and pandemics or other public health crises. Any of these disruptions could affect our internal operations or services provided to customers, and could impact our sales, increase our expenses or adversely affect our reputation or our stock price. We have developed and are implementing business continuity plans for each of our businesses, in order to mitigate the effects disruptions may have on our financial results.

Our insurance coverage may be inadequate to cover all significant risk exposures.

We are exposed to risks that are unique to the products and services we provide. While we believe that we maintain adequate insurance for certain risks, insurance cannot be obtained to protect against all risks and liabilities. It is therefore possible that our insurance coverage may not cover all claims or liabilities, and we may be forced to bear substantial unanticipated costs.

A failure to maintain effective internal controls could adversely affect our ability to accurately report our financial results or prevent fraud.

Our ability to provide assurance with respect to our financial reports and to effectively prevent fraud depends on effective internal controls. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements; therefore, even effective controls can only provide reasonable assurance with respect to the preparation and fair presentation of financial statements. If our internal controls were to be compromised, our financial statements could become materially misleading, which could adversely affect the trading price of our common stock. Any material weakness could adversely impact investor confidence in the accuracy of our financial statements, affecting our ability to obtain additional financing. This would likely have an adverse effect on our business, financial condition and the market value of our stock. Additionally, we would be required to incur costs to make the necessary improvements to our internal control systems.

Although management has assessed our internal control over financial reporting as effective based on criteria set forth by the Committee of Sponsoring Organizations - Integrated Framework, we can give no assurance that material weaknesses will not occur in the future nor that existing controls will continue to be adequate to prevent or identify irregularities or ensure fair presentation of our financial statements in the future.

The adoption of new accounting guidance or changes in the interpretations of existing guidance could affect our financial results.

We prepare our financial statements in conformity with accounting principles generally accepted in the United States. These accounting principles are subject to interpretation by the Financial Accounting Standards Board ("FASB") and the Securities and Exchange Commission ("SEC"). A change in these principles or interpretations could have a significant effect on our reported financial results, may retroactively affect previously reported results, could cause unexpected financial reporting fluctuations and may require us to make costly changes to our operational processes and accounting systems.

Our business could be impacted as a result of actions by activist shareholders or others.

We may be subject, from time to time, to legal and business challenges in the operation of our company due to actions instituted by activist shareholders or others. Responding to such actions could be costly and time-consuming, may not align with our business strategies and could divert the attention of our Board of Directors and senior management from the pursuit of our business strategies. Perceived uncertainties as to our future direction as a result of shareholder activism may lead to the perception of a change in the direction of the business or other instability and may make it more difficult to attract and retain

qualified personnel and business partners and may affect our relationships with vendors, customers and other third parties.

FORWARD-LOOKING STATEMENTS

This report contains "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements also may be included in other publicly available documents issued by the Company and in oral statements made by our officers and representatives from time to time. These forward-looking statements are intended to provide management's current expectations or plans for our future operating and financial performance, based on assumptions currently believed to be valid. They can be identified by the use of words such as "anticipate," "intend," "plan," "goal," "seek," "believe," "project," "estimate," "expect," "strategy," "future," "likely," "may," "should," "would," "could," "will" and other words of similar meaning in connection with a discussion of future operating or financial performance. Examples of forward looking statements include, among others, statements relating to future sales, earnings, cash flows, results of operations, uses of cash and other measures of financial performance.

Because forward-looking statements relate to the future, they are subject to inherent risks, uncertainties and other factors that may cause the Company's actual results and financial condition to differ materially from those expressed or implied in the forward-looking statements. Such risks, uncertainties and other factors include, among others: (i) risks related to Kaman's performance of its obligations under the transition services agreement entered into in connection with the sale of our former Distribution business and UK Composites business and disruption of management time from ongoing business operations relating thereto; (ii) changes in domestic and foreign economic and competitive conditions in markets served by the Company, particularly the defense, commercial aviation and industrial production markets; (iii) changes in government and customer priorities and requirements (including cost-cutting initiatives, government and customer shut-downs, the potential deferral of awards, terminations or reductions of expenditures to respond to the priorities of Congress and the Administration, or budgetary cuts resulting from Congressional actions or automatic sequestration); (iv) the global economic impact of the COVID-19 pandemic; (v) changes in geopolitical conditions in countries where the Company does or intends to do business; (vi) the successful conclusion of competitions for government programs (including new, follow-on and successor programs) and thereafter successful contract negotiations with government authorities (both foreign and domestic) for the terms and conditions of the programs; (vii) the timely receipt of any necessary export approvals and/or other licenses or authorizations from the USG; (viii) timely satisfaction or fulfillment of material contractual conditions precedents in customer purchase orders, contracts, or similar arrangements; (ix) the existence of standard government contract provisions permitting renegotiation of terms and termination for the convenience of the government; (x) the successful resolution of government inquiries or investigations relating to our businesses and programs; (xi) risks and uncertainties associated with the successful implementation and ramp up of significant new programs, including the ability to manufacture the products to the detailed specifications required and recover start-up costs and other investments in the programs; (xii) potential difficulties associated with variable acceptance test results, given sensitive production materials and extreme test parameters; (xiii) the receipt and successful execution of production orders under the Company's existing USG JPF contract, including the exercise of all contract options and receipt of orders from allied militaries, but excluding any next generation programmable fuze programs, as all have been assumed in connection with goodwill impairment evaluations; (xiv) the continued support of the existing K-MAX® helicopter fleet, including sale of existing K-MAX® spare parts inventory and the receipt of orders for new aircraft sufficient to recover our investments in the K-MAX® production line; (xv) the accuracy of current cost estimates associated with environmental remediation activities; (xvi) the profitable integration of acquired businesses into the Company's operations; (xvii) the ability to recover from cyber-based or other security attacks, information technology failures or other disruptions, including the December 2020 Bal Seal incident; (xviii) changes in supplier sales or vendor incentive policies; (xix) the ability of our suppliers to satisfy their performance obligations; (xx) the effects of price increases or decreases; (xxi) the effects of pension regulations, pension plan assumptions, pension plan asset performance, future contributions and the pension freeze, including the ultimate determination of the USG's share of any pension curtailment adjustment calculated in accordance with CAS 413; (xxii) future levels of indebtedness and capital expenditures; (xxiii) the continued availability of raw materials and other commodities in adequate supplies and the effect of increased costs for such items; (xxiv) the effects of currency exchange rates and foreign competition on future operations; (xxv) changes in laws and regulations, taxes, interest rates, inflation rates and general business conditions; (xxvi) future repurchases and/or issuances of common stock;(xxvii) the occurrence of unanticipated restructuring costs or the failure to realize anticipated savings or benefits from past or future expense reduction actions; (xxviii) the ability to recruit and retain skilled employees; and (xxix) other risks and uncertainties set forth herein.

Any forward-looking information provided in this report should be considered with these factors in mind. We assume no obligation to update any forward-looking statements contained in this report.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our facilities are generally suitable for, and adequate to serve, their intended uses. At December 31, 2020, we occupied major facilities at the following principal locations:

Location	Property Type [1]
Jacksonville, Florida	Leased - Manufacturing & Office
Chihuahua, Mexico	Leased - Manufacturing & Office
Rimpar, Germany	Owned - Manufacturing & Office
Prachatice, Czech Republic	Owned - Assembly & Office
Wichita, Kansas	Leased - Manufacturing & Office
Darwen, Lancashire, United Kingdom [2]	Leased - Manufacturing & Office
Orlando, Florida	Owned - Manufacturing & Office
Höchstadt, Germany	Owned - Manufacturing & Office
Middletown, Connecticut	Owned - Manufacturing & Office
Bloomfield, Connecticut	Owned - Manufacturing, Office & Service Center
Bennington, Vermont	Owned - Manufacturing & Office
Gilbert, Arizona	Leased - Office & Service Center
Foothills Ranch, California	Owned - Manufacturing & Office
Colorado Springs, Colorado	Owned - Manufacturing & Office
Bloomfield, Connecticut	Owned - Office & Information Technology Back-Up Data Center

	Square Feet
Aerospace [2]	2,287,715
Corporate [3]	100,602
Total	2,388,317

(1) Owned facilities are unencumbered.

(2) On February 2, 2021, the Company sold its UK Composites business, which occupied 145,000 square feet in Darwen, Lancashire, United Kingdom.

(3) We occupy a 40,000 square foot corporate headquarters building, 38,000 square foot mixed use building, and 8,000 square foot data center in Bloomfield, Connecticut.

ITEM 3. LEGAL PROCEEDINGS

General

From time to time, as a normal incident of the nature and kinds of businesses in which the Company and its subsidiaries are, and were, engaged, various claims or charges are asserted and legal proceedings are commenced by or against the Company and/or one or more of its subsidiaries. Claimed amounts may be substantial but may not bear any reasonable relationship to the merits of the claim or the extent of any real risk of court or arbitral awards. We record accruals related to those matters for which we consider a loss to be both probable and reasonably estimable. Gain contingencies, if any, are not recognized until they are realized. Legal costs are generally expensed when incurred.

We evaluate, on a quarterly basis, developments in legal proceedings that could affect the amount of any accrual and developments that would make a loss contingency both probable and reasonably estimable. Our loss contingencies are subject to substantial uncertainties, however, including for each such contingency the following, among other factors: (i) the procedural status of the case; (ii) whether the case has or may be certified as a class action suit; (iii) the outcome of preliminary motions; (iv) the impact of discovery; (v) whether there are significant factual issues to be determined or resolved; (vi) whether the proceedings involve a large number of parties and/or claims in multiple jurisdictions or jurisdictions in which the relevant laws are complex or unclear; (vii) the extent of potential damages, which are often unspecified or indeterminate; and (viii) the status of settlement discussions, if any, and the settlement postures of the parties. Because of these uncertainties, management has determined that, except as otherwise noted below, the amount of loss or range of loss that is reasonably possible in respect of each matter described below (including any reasonably possible losses in excess of amounts already accrued), is not reasonably estimable.

While it is not possible to predict the outcome of these matters with certainty, based upon available information, management believes that all settlements, arbitration awards and final judgments, if any, which are considered probable of being rendered against us in legal proceedings and that can be reasonably estimated are accrued for at December 31, 2020. Despite this analysis, there can be no assurance that the final outcome of these matters will not have a material adverse effect on our business, financial condition, results of operations or cash flows.

Except as set forth below, as of December 31, 2020, neither the Company nor any of its subsidiaries is a party, nor is any of its or their property subject, to any material pending legal proceedings, other than ordinary routine litigation incidental to the business of the Company and its subsidiaries. Additional information relating to certain of these matters is set forth in Note 19, *Commitments and Contingencies*, and Note 13, *Environmental Costs*, of the Notes to Consolidated Financial Statements, included in Item 8, Financial Statements and Supplementary Data, of this Annual Report on Form 10-K.

Environmental Matters

The Company and its subsidiaries are subject to numerous U.S. Federal, state and international environmental laws and regulatory requirements and are involved from time to time in investigations or litigation of various potential environmental issues concerning activities at our facilities or former facilities or remediation as a result of past activities (including past activities of companies we have acquired). From time to time, we receive notices from the U.S. Environmental Protection Agency or equivalent state or international environmental agencies that we are a potentially responsible party under the Comprehensive Environmental Response, Compensation and Liability Act (commonly known as the “Superfund Act”) and/or equivalent laws. Such notices assert potential liability for cleanup costs at various sites, which may include sites owned by us, sites we previously owned and treatment or disposal sites not owned by us, allegedly containing hazardous substances attributable to us from past operations. While it is not possible to predict the outcome of these proceedings, in the opinion of management, any payments we may be required to make as a result of all such claims in existence at December 31, 2020, will not have a material adverse effect on our business, financial condition and results of operations or cash flows. Additional information relating to certain of these matters is set forth in Note 19, *Commitments and Contingencies*, and Note 13, *Environmental Costs*, of the Notes to Consolidated Financial Statements, included in Item 8, Financial Statements and Supplementary Data, of this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

MARKET, DIVIDEND AND SHAREHOLDER INFORMATION

Our Common Stock is traded on the New York Stock Exchange under the symbol "KAMN". As of January 29, 2021, there were 3,463 registered holders of our Common Stock. Holders of the Company's Common Stock are eligible to participate in the Computershare CIP program, which offers a variety of services including dividend reinvestment and direct stock purchase. The plan brochure describing the program may be obtained by contacting Computershare at (800) 227-0291 or via the web at www.computershare.com/investor.

ISSUER PURCHASES OF EQUITY SECURITIES

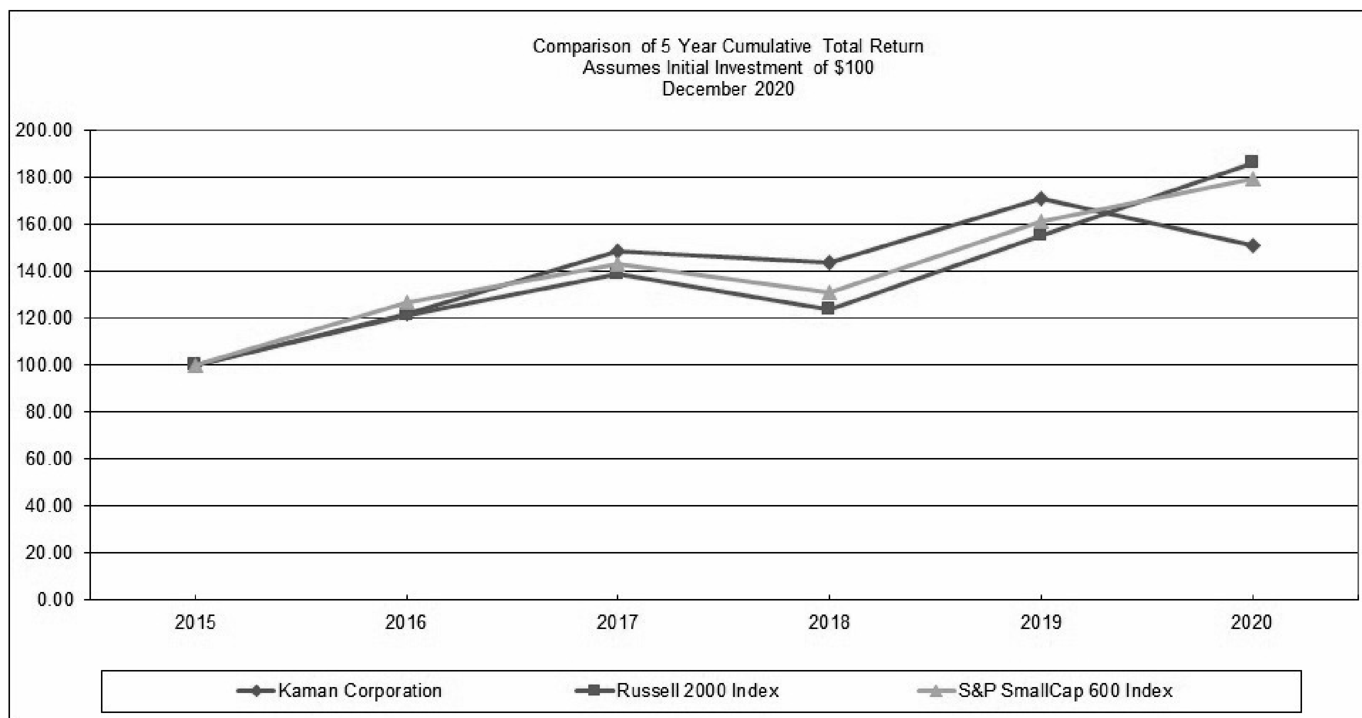
The following table provides information about purchases of Common Stock by the Company during the three months ended December 31, 2020:

Period	Total Number of Shares Purchased (a)	Average Price Paid per Share	Total Number of Shares Purchased as Part of a Publicly Announced Plan (b)	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plan (*in thousands*)
October 3, 2020 – October 30, 2020	—	$ —	—	$ 2,168
October 31, 2020 – November 27, 2020	92	$ 50.79	—	$ 2,168
November 28, 2020 – December 31, 2020	—	$ —	—	$ 2,168
Total	92		—	

(a) During the quarter the Company purchased 92 shares in connection with employee tax withholding obligations as permitted by our equity compensation plans; these purchases were made in compliance with SEC Rule 16b-3. These are not purchases under our publicly announced program.
(b) On April 29, 2015, the Company announced that its Board of Directors approved a $100.0 million share repurchase program ("2015 Share Repurchase Program").

PERFORMANCE GRAPH

Following is a comparison of our total shareholder return for the period 2015 – 2020 compared to the S&P 600 Small Cap Index and the Russell 2000 Small Cap Index. The performance graph does not include a published industry or line-of-business index or peer group of similar issuers because during the performance period the Company was conducting operations in diverse lines of business and we do not believe a meaningful industry index or peer group can be reasonably identified. Accordingly, as permitted by regulation, the graph includes the S&P 600 Small Cap Index and the Russell 2000 Small Cap Index, both of which are comprised of issuers with market capitalizations generally similar to that of the Company.



	2015	2016	2017	2018	2019	2020[1]
Kaman Corporation	100.00	121.88	148.83	143.69	171.08	151.08
S&P Small Cap 600	100.00	126.56	143.30	131.15	161.03	179.20
Russell 2000	100.00	121.31	139.08	123.76	155.35	186.36

[1] The Company's 2020 results were impacted by the effects of the COVID-19 pandemic on the commercial aerospace end market, which represented approximately 28% of net sales in 2020.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

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

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to provide readers of our consolidated financial statements with the perspectives of management. MD&A presents in narrative form information regarding our financial condition, results of operations, liquidity and certain other factors that may affect our future results. This should allow the readers of this report to obtain a comprehensive understanding of our businesses, strategies, current trends and future prospects. MD&A should be read in conjunction with the Consolidated Financial Statements and related Notes included in this Form 10-K.

OVERVIEW OF BUSINESS

Kaman Corporation ("The Company") currently operates as a single segment that conducts business in the aerospace and defense, industrial and medical markets. The Company produces and markets proprietary aircraft bearings and components; super precision, miniature ball bearings; proprietary spring energized seals, springs and contacts; complex metallic and composite aerostructures for commercial, military and general aviation fixed and rotary wing aircraft; and safe and arming solutions for missile and bomb systems for the U.S. and allied militaries. The Company also manufactures and supports our K-MAX® manned and unmanned medium-to-heavy lift helicopters and restores, modifies and supports our SH-2G Super Seasprite maritime helicopters.

Our strategy is to continuously differentiate ourselves through leveraging innovation to drive organic growth and acquiring value by developing businesses and product lines, all focused around a best in class operations excellence model. We continue to focus on highly engineered parts, automation and best in class engineering and seek to design our technology and solutions into our customer’s products. This strategy requires a relentless focus on recruiting, developing, and retaining top talent, while deploying an operating model focused on continuous improvement. We strive to find the right balance in the markets we serve: aerospace and defense, commercial aviation, medical and industrial. Having a stronger diversified portfolio of businesses and products allows us leverage our broad capabilities and to make intelligent choices around our research and development expenditures. Fundamentally we will continue investing in those high value creating opportunities, which will drive stronger total shareholder returns and cash flow.

Executive Summary

In the year ended December 31, 2020, consolidated net sales from continuing operations increased by 3.0% to $784.5 million due to the contribution of $77.0 million in total sales from Bal Seal, partially offset by a 7.1% decrease in organic sales. Gross margin remained relatively flat at 31.3% compared to 31.6% in the prior year period. This performance was driven in part by a higher volume of sales from our lower margin structures programs and the mix of bearings products, mostly offset by the addition of the higher margin product portfolio at Bal Seal and the mix of joint programmable fuze ("JPF") sales. Absent the addition of selling, general and administrative expenses ("S,G&A") from Bal Seal and acquisition-related costs, S,G&A decreased, driven by lower employee-related costs as we began to realize the benefits of the workforce reductions implemented and lower costs as a result of the precautions taken by our employees and the restrictions imposed to limit the spread of COVID-19, including lower travel expenses and trade show costs and a decrease in group health costs due to the limited number of elective procedures being performed. In the third quarter, we recorded a goodwill impairment charge of $50.3 million due to a decline in earnings compared with forecasts used in prior periods for our Aerosystems reporting unit. The Company considered this decline, as well as the updated forecasts for the reporting unit, which indicated the forecasted cash flows for this reporting unit were lower than amounts previously forecasted. Additionally, a $36.3 million impairment charge was recorded associated with the anticipated sale of our United Kingdom ("UK") Composites business as the estimated fair value of the business based on the anticipated transaction was less than the book value of its assets. The impairment charges were the main drivers of the GAAP diluted loss per share from continuing operations of $2.54.

Other financial highlights

- Loss from continuing operations, net of tax was $70.4 million, a 224.8% decrease compared to the prior year. This decrease reflects the goodwill impairment charge and loss on the anticipated sale of our UK Composites business.
- Cash flows provided by operating activities of continuing operations were $16.5 million for 2020, a decrease of $26.0 million. This change was largely driven by lower net earnings.
- Total unfulfilled performance obligations ("backlog") decreased 21.8% to $631.2 million, mostly driven by deliveries under our JPF program and lower orders of bearings products as a result of the impact of the novel coronavirus ("COVID-19").

COVID-19 Discussion

The impact of COVID-19 and the precautionary measures instituted by governments and businesses to mitigate the spread, including limiting non-essential gatherings of people, ceasing all non-essential travel, ordering certain businesses and government agencies to cease non-essential operations at physical locations and issuing “shelter-in-place” orders, have contributed to a general slowdown in the global economy and significant volatility in financial markets, including a decrease in our stock price. We are closely monitoring the impact of the COVID-19 pandemic on all aspects of our business and across the geographies in which we operate and serve customers, and we are working to assess the extent to which it will impact our customers, suppliers and other business partners.

Impact on our Business

Kaman is operating as an essential business in the United States and in most of the markets in which it operates around the world. While we did not incur significant disruptions related to the COVID-19 pandemic during 2020, our structures facility in Mexico and joint venture in India were temporarily closed during the second quarter, due to mandates by their local governments. We have been able to largely offset the impacts of our Mexico facility temporary closure by satisfying our customer requirements out of our Jacksonville facility. We were also able to largely offset the impacts of our joint venture in India due to on-time deliveries before the business was required to halt production. Both facilities were open throughout the third and fourth quarters and continue to remain open through the date of this filing. During 2020, we implemented furloughs at two domestic businesses and two foreign businesses. The furloughs provided savings of $3.4 million in the current year. We also elected to eliminate certain open positions and implemented workforce reductions at the majority of our facilities, which are expected to provide annualized savings of $19.0 million. During the fourth quarter, we continued to evaluate our workforce in light of the impacts of COVID-19. Workforce reductions resulted in severance costs of $3.5 million in 2020. Additionally, while certain of our customers and suppliers have temporarily shut down operations, disruptions to our supply chain have been limited to date and we continue to meet the demands of our customers.

Despite our efforts to mitigate the risks associated with COVID-19, our operations continue to be adversely impacted, as approximately 50% of our 2020 sales were anticipated to be in commercial end markets, which were particularly impacted by the effects of the pandemic. Of total expected sales, approximately 30% was anticipated to be to commercial aerospace customers. Furthermore, direct and indirect sales to Boeing and Airbus were expected to account for approximately 40% of commercial aerospace sales. During the second quarter, we began to see order deferrals and cancellations resulting in declines in our commercial aerospace programs, which continued into the second half of 2020. More specifically, we have had lower sales of our commercial bearings products to Boeing and Airbus and decreases in our medical programs due to the limited number of elective procedures being performed. Our defense and safe and arm devices end markets have not been impacted by COVID-19 and we do not expect future declines due to COVID-19 on the results of these end markets.

Steps to Protect our Workforce

The health and safety of our employees, their families and communities, and our customers are our highest priorities. We have allocated significant resources to protect our workforce and attempt to reduce the impact of COVID-19 on our communities and our customers. To maintain employee productivity and minimize the risk of exposure while working, we have implemented policies and procedures to allow our employees to work with confidence knowing that their health and safety is a key priority.

Work-from-home guidelines and travel bans were implemented in March, and all employees who are able to work from home have been encouraged to do so for the foreseeable future to limit contact points and reduce the risk of exposure. To support a higher volume of employees working from home, we have upgraded our remote capabilities, and our human resources department has made training materials available on how to overcome the challenges of working from home.
For those on-site, we have implemented segregated workspaces to increase physical distancing within our facilities, improve the traceability of employee contacts, and limit risk of exposure while in the facility. We have also restricted free flow of employees throughout the factories and prevented non-essential employees and business associates from entering these facilities. We have developed detailed plans on how to respond quickly to an ill employee showing symptoms or a confirmed case within a facility. In addition, we implemented mandatory daily temperature checks for all persons entering our facilities. Face masks have been made available to all employees and are required in production facilities, those areas where required by law, and strongly encouraged in all other areas.

Resources are available to our employees via the Company's benefits website, which include the latest news on COVID-19, steps to prevent illness, resources for mental health, including coping with stress, supporting employees in a time of uncertainty and managing anxiety and stress, and resources for children and family activities.

Our senior management team meets regularly to review the status of our operations, including the health and safety of our employees, and the impact of COVID-19 on our customers, suppliers and communities. Our Board of Directors are updated regularly on the realized and expected impacts of COVID-19 and the Company's response to COVID-19, including steps to protect the workforce and cost-savings initiatives. A communications cadence has been developed to provide regular updates to our employees to keep them informed on what is happening within the organization, including risk identification and mitigation and relevant information and resources to support them during these challenging times. Additionally, the management team has benchmarked our efforts with peer companies to adopt best practices, improve our processes and share challenges that we are facing as we manage through the crisis. In light of the COVID-19 pandemic and its potential impact on our business, our Chairman and former Chief Executive Officer voluntarily agreed to reduce his annual base salary by 20% for the balance of the year, and our non-employee directors agreed to temporarily reduce their quarterly cash retainer payments by 20% for the second and third fiscal quarters of 2020. In addition, the base salaries of our other executive officers were temporarily reduced by 15%, and the base salaries of our other U.S. based corporate officers and certain of our subsidiary senior management teams were temporarily reduced by 10% through the end of the third quarter of 2020.

Looking Ahead

Despite efforts to mitigate the risks associated with COVID-19, we expect our operations to continue to be adversely impacted through at least the first half of 2021. We continued to see order deferrals and cancellations resulting in declines in commercial aerospace products through the end of 2020. As the pandemic continues, we anticipate further challenges in our commercial and medical end markets. Our defense and safe and arm devices end markets have not been impacted by COVID-19 and we do not expect future declines due to COVID-19 on the results of these end markets. We look forward to improved performance in the second half of 2021; however, the extent to which COVID-19 may adversely impact the Company depends on future developments, which are highly uncertain and unpredictable at this time.

Refer to the Liquidity and Capital Resources section of the Management's Discussion and Analysis for information on the impact of COVID-19 on the liquidity of the Company and Item 1A, Risk Factors, for the Company’s risk factor(s) on the potential impacts of COVID-19 on our business, results of operations, financial condition and cash flows.

Acquisitions and divestitures

- In December 2020, the Company committed to a plan to sell its UK Composites division and received approval from its Board of Directors. Subsequent to the end of the year, the transaction closed on February 2, 2021.
- In January 2020, we completed the acquisition of Bal Seal Engineering, Inc. ("Bal Seal") for a purchase price $317.5 million.

Awards and recognition

- In August 2020, Kaman Composites Vermont ("KCV"), a division of Kaman Corporation, was named Rotary and Mission Systems Elite Supplier by Sikorsky Aircraft Corporation.

Management changes

- In August 2020, Neal J. Keating announced his retirement as President and CEO of the Company and Ian K. Walsh was appointed President and CEO as of September 8, 2020. Mr. Keating will continue to serve as Executive Chairman through the date of the 2021 Annual Meeting of Shareholders, at which time he is expected to retire from the Board.
- Richard R. Barnhart, Executive Vice President of the Company and President of Kaman Aerospace Group, retired from the Company as of September 30, 2020.
- Gregory T. Troy, Senior Vice President - Human Resources & Chief Human Resources Officer, retired from the Company as of January 31, 2021. Megan A. Morgan was appointed Vice President - Human Resources and Chief Human Officer as of February 1, 2021.
- Russell J. Bartlett was appointed the Company's Chief Operating Officer, effective January 4, 2021
- Kristen M. Samson was appointed the Company's Chief Marketing Officer, effective January 18, 2021.
- In November 2020, the Board of Directors appointed Michelle J. Lohmeier and Aisha M. Barry as directors, effective immediately. The appointments increase the size of the Board to eleven directors.

Other key events

- In January 2021, the Agencia Nacional de Aviação Civil ("ANAC") in Brazil issued the Type Certificate for the Kaman K-1200 K-MAX® helicopter. We have been marketing the K-MAX® helicopter to various Brazilian operators, power line, oil and gas firms, and engineering companies over the past two years, and this certification clears the path for K-MAX® operations in Brazil.
- In September 2020, we received a follow-on order for Lots 17 and 18 of our current Joint Air-to-Surface Standoff Missile contract with Lockheed Martin Corporation. The order has an expected value of approximately $10.6 million with performance beginning in 2021 through 2023.
- In August 2020, we received an order under Option 15 of our JPF contract with the USG. This order has an expected value of approximately $57.3 million for the procurement of JPFs for 25 foreign militaries.
- In August 2020, KCV entered into a new Long Term Agreement ("LTA") with a major engine original equipment manufacturer to manufacture components for both existing production and newly developed engine programs. The LTA has a potential value of $118 million and initial deliveries are expected in the second half of 2021.
- In May 2020, the United States Forest Service awarded Kaman Air Vehicles 40% of all Type 1, large helicopters exclusive use contracts, to K-MAX® helicopter operators. These four-year contracts ensure immediate resources are available when the need for firefighting arises.
- In March 2020, as we evaluated the uncertainty associated with the COVID-19 outbreak, we elected to borrow $200 million under our $800 million revolving credit facility. We have since repaid these borrowings in full.
- In 2020, we identified workforce reductions to be completed in 2020 as part of our comprehensive review of our general and administrative functions in order to improve operational efficiency and to align the Company's costs with its revenues. The workforce reductions are expected to provide annualized cost savings of approximately $13.2 million.
- In February 2020, Kaman Air Vehicles entered into a strategic distribution agreement with Trust International Group. This reseller agreement provides Trust International with exclusive rights to market the K-MAX® medium-to-heavy lift helicopter and its spare parts in the United Arab Emirates.

RESULTS FROM CONTINUING OPERATIONS

During the third quarter of 2019, we completed the sale of our Distribution business for total cash consideration of $700.0 million, excluding certain working capital adjustments. As a result of the sale, the Distribution business results met the criteria for the presentation of discontinued operations. The results presented below represent the results of continuing operations. See Note 2, *Discontinued Operations and Liabilities Held for Sale*, in the Notes to Consolidated Financial Statements included in this Form 10-K for further details.

Refer to Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, of the Annual Report on Form 10-K for the year ended December 31, 2019 for a discussion of the change in results of continuing operations from the earliest year presented.

Net Sales from Continuing Operations

In thousands	2020	2019	2018
Organic sales	$ 707,494	$ 761,608	$ 735,994
Acquisition sales	76,965	—	—
Net sales	$ 784,459	$ 761,608	$ 735,994
$ change	22,851	25,614	11,050
% change	3.0 %	3.5 %	1.5 %

Net sales for 2020 increased when compared to 2019, primarily due to the contribution of $77.0 million of sales from our Bal Seal acquisition. This increase was partially offset by a 7.1% decrease in organic sales, driven by lower sales of $63.2 million in our commercial, business and general aviation programs, $6.5 million in our medical and industrial and other commercial programs and $5.0 million in our defense programs, partially offset by an increase in sales of $20.6 million on our safe and arm device programs. Foreign currency exchange rates relative to the U.S. dollar had a favorable impact of $1.8 million on net sales.

The decrease in sales under our commercial, business and general aviation programs were primarily attributable to lower sales volume of our commercial bearings products, driven by lower sales to Boeing and Airbus due to the impacts of COVID-19, lower sales under certain structures programs and the K-MAX® program. These decreases, totaling $70.7 million, were partially offset by higher sales on our Boeing Wing-to-Body Fairing program and Bell Commercial helicopter program.

The decrease in sales under our defense programs, excluding safe and arm devices was primarily attributable to the absence of sales under our SH-2G program for Peru, a decrease in sales under the AH-1Z program and a certain structures program, and lower sales volume of spares for the SH-2 program with New Zealand. These decreases, totaling $24.2 million, were partially offset by higher sales volume of our defense bearings products and an increase in sales on the Combat Rescue Helicopter program.

Sales under our medical and industrial and other commercial programs decreased when compared to the corresponding period in 2019. This was attributable to lower sales volume of our bearings products and decreases in sales under our imaging program and measuring programs.

The increase in sales under our safe and arm device product programs was primarily attributable to higher direct commercial sales of our JPF to foreign militaries and an increase in sales on our MK54 fuzing program, partially offset by lower sales under our JPF program with the USG.

Gross Profit from Continuing Operations

In thousands	2020	2019	2018
Gross profit	$ 245,582	$ 240,805	$ 227,317
$ change	4,777	13,488	(6,712)
% change	2.0 %	5.9 %	(2.9)%
% of net sales	31.3 %	31.6 %	30.9 %

Gross profit for 2020 increased when compared to 2019. This was primarily attributable to higher direct commercial sales of our JPF to foreign militaries, higher sales and associated gross profit on defense bearings products and the contribution of $29.1 million in gross profit from our Bal Seal acquisition. These increases, totaling $62.4 million, were partially offset by lower sales and associated gross profit on our commercials bearings products, our JPF program with the USG and certain structures programs.

Selling, General & Administrative Expenses (S,G&A) from Continuing Operations

In thousands	2020	2019	2018
S,G&A	$ 199,906	$ 177,187	$ 172,271
$ change	22,719	4,916	2,588
% change	12.8 %	2.9 %	1.5 %
% of net sales	25.5 %	23.3 %	23.4 %

The increase in S,G&A expenses for 2020 as compared to 2019 was primarily attributable to $36.6 million in additional S,G&A from our Bal Seal acquisition, which includes $11.1 million of intangible amortization expense associated with the purchase accounting for the acquisition. Additionally, we incurred $10.8 million of nonrecurring costs in the period, which consisted of $8.5 million of Bal Seal acquisition costs and $2.3 million in third party costs associated with our efforts to reduce general and administrative expenses. These increases were partially offset by lower organic S,G&A driven by a decrease in employee-related costs, including lower incentive compensation costs and lower salary and wage expenses as a result of the workforce reductions implemented to support our cost savings initiative, a decrease in group health costs due to the limited number of elective procedures being performed as a result of COVID-19, and a decrease in travel expenses and trade show costs due to restrictions imposed to limit the spread of COVID-19.

Costs from Transition Services Agreement

In thousands	2020	2019	2018
Costs from transition services agreement	$ 12,515	$ 4,673	$ —

Upon closing the sale of the Distribution business, the Company entered into a transition services agreement ("TSA") with the buyer, pursuant to which the Company agreed to support the information technology, human resources and benefits, tax and treasury functions of the Distribution business for six to twelve months. The buyer had the option to extend the support period for up to an additional year for certain services. The buyer exercised the option to extend the support period for up to a maximum of an additional year for certain information technology services. The buyer has the right to terminate individual services at any point over the renewal term and began to terminate certain services during the third quarter of 2020. All services are expected to be terminated by the end of the first quarter of 2021. The Company incurred $12.5 million and $4.7 million in costs associated with the TSA in the years ending December 31, 2020 and December 31, 2019, respectively. These costs are partially offset by $8.4 million and $3.7 million in income earned from the TSA included in income from transition services agreement, which is below operating income on the Company's Consolidated Statements of Operations.

Cost of Acquired Retention Plans

In thousands	2020	2019	2018
Costs of acquired retention plans	$ 22,814	$ —	$ —

Bal Seal's previous owner implemented employee retention plans prior to our acquisition in the first quarter of 2020. Upon closing, we funded $24.7 million of the purchase price into escrow accounts associated with these employee retention plans. Eligible participants received an allocation of the escrow balances one year following the acquisition date. Upon acquisition, Bal Seal had $1.9 million in costs accrued for these employee retention plans; therefore, we incurred $22.8 million in compensation expense associated with these retention plans in the year ended December 31, 2020.

Goodwill and Other Intangibles Impairment

In thousands	2020	2019	2018
Goodwill and other intangibles impairment	$ 50,307	$ —	$ 10,039

During the third quarter of 2020, we identified a triggering event for possible impairment of our Aerosystems reporting unit based on a decline in earnings compared to forecasts used in prior periods and projections, which indicated the projected cash flows for this reporting unit were lower than amounts previously forecasted. We performed a quantitative analysis on the Aerosystems reporting unit using an income methodology based on management's estimates of forecasted cash flows, with those cash flows discounted to present value using rates commensurate with the risks associated with those cash flows. In addition, management used a market-based valuation method involving analysis of market multiples of revenues and earnings before interest, taxes, depreciation and amortization ("EBITDA") for (i) a group of comparable companies and (ii) recent transactions, if any, involving comparable companies. The quantitative analysis resulted in a conclusion that the fair value of the Aerosystems reporting unit was $56.1 million below its carrying value; therefore, goodwill was impaired. In the year ended December 31, 2020, we recorded a goodwill impairment charge of $50.3 million for the Aerosystems reporting unit, which represented the entire goodwill balance for the reporting unit.

In 2018, we identified a triggering event for possible impairment of long-lived intangible assets at a certain asset group within the Company's United Kingdom ("UK") business based on an analysis of historical performance, the current forecast for the remainder of the year and the loss of future orders from one of its customers. We performed a recoverability test by comparing the undiscounted cash flows of the asset group to its carrying value, and the estimated future cash flows of the business did not exceed the carrying value of the assets. Based on these results, we calculated the fair value of the asset group using an income approach, which resulted in an impairment charge of $10.0 million, or the remaining balance of the customer lists/relationships at a certain asset group within the U.K. business.

Impairment of Assets Held for Sale

In thousands	2020	2019	2018
Impairment of assets held for sale	$ 36,285	$ —	$ —

In the fourth quarter of 2020, the Company committed to a plan and received approval from its Board of Directors to sell its UK Composites division. At December 31, 2020, the assets of the UK Composites business were considered impaired as the estimated fair value of the disposal group was lower than the estimated carrying value of the UK Composites business. As a result, $24.3 million in assets were written off and the remaining loss related to the anticipated sale of the disposal group of $12.0 million was accrued for in liabilities held for sale, current portion on the Company's Consolidated Balance Sheets, resulting in a total loss of $36.3 million recorded to impairment on assets held for sale on the Company's Consolidated Statements of Operations in the year ended December 31, 2020. Of this amount, $22.9 million relates to the cumulative translation adjustment balance for the UK Composites division. Subsequent to the end of the year, the transaction closed on February 2, 2021.

Restructuring Costs from Continuing Operations

In thousands	2020	2019	2018
Restructuring costs	$ 8,359	$ 1,558	$ 7,353

Following the sale of our former distribution business, we announced that we would undertake a comprehensive review of our general and administrative functions in order to improve operational efficiency and to align our costs with our revenues. We identified information technology functions to be outsourced, workforce reductions and other reductions in certain general and administrative expenses to be completed in 2020 to support the cost savings initiative. These actions resulted in $4.0 million in severance costs in the year ended December 31, 2020, and are expected to provide annualized cost savings of approximately $13.2 million, contributing to total annualized cost savings of approximately $18.2 million since the announcement of the cost savings initiative. In 2019, the Company's corporate office incurred $0.9 million in associated severance expense.

In addition to the severance costs associated with the cost savings initiative discussed above, we incurred $0.5 million in severance costs as we integrated the acquisition of Bal Seal in year ended December 31, 2020. This action is expected to provide annual cost savings of approximately $1.2 million.

During the second quarter of 2020, the Company implemented workforce reductions, including temporary furloughs, and elected to eliminate certain open positions as a response to the unprecedented hardships brought on by COVID-19. For the year ended December 31, 2020, the Company recorded severance costs of $3.5 million related to workforce reductions, which were included in restructuring costs on the Company's Consolidated Statements of Operations. These actions are expected to provide annualized cost savings of approximately $19.0 million.

During the third quarter of 2017, we announced restructuring activities at certain businesses to support the ongoing effort of improving capacity utilization and operating efficiency to better position the Company for increased profitability and growth. Such actions included workforce reductions and the consolidation of operations, with the majority completed by the end of 2019. In the years ended December 31, 2020, 2019 and 2018, we recorded $0.3 million, $0.6 million, and $6.0 million, respectively, in costs associated with the restructuring activities.

In 2018, we incurred $1.4 million in other non-related restructuring costs associated with the termination of certain distributor agreements and separation costs associated with certain employees not included in restructuring activities discussed above.

(Gain) Loss on Sale of Business

In thousands	2020	2019	2018
(Gain) loss on sale of business	$ (493)	$ 3,739	$ 5,722

During 2018, we sold our U.K. Tooling business. This sale did not qualify for the reporting of discontinued operations within the consolidated financial statements. In the year ended December 31, 2018, we incurred a loss of $5.7 million associated with the sale. Of this amount, $1.7 million related to the foreign currency translation reclassified from accumulated other comprehensive income (loss) to net income. In the year ended December 31, 2019, the Company incurred an additional loss of $3.7 million associated with the write-off of note receivables recorded for the remaining amounts to be collected on the sale of the UK Tooling business as this balance was deemed not likely to be collected. In the year ended December 31, 2020, we collected $0.5 million of the note receivables written off in 2019.

Operating (Loss) Income from Continuing Operations

In thousands	2020	2019	2018
Operating (loss) income	$ (84,311)	$ 53,411	$ 32,963
$ change	(137,722)	20,448	(28,753)
% change	(257.9)%	62.0 %	(46.6)%
% of net sales	(10.7)%	7.0 %	4.5 %

We had an operating loss of $84.3 in 2020, compared to operating income of $53.4 in 2019. This change was primarily attributable to the goodwill impairment charge associated with the Aerosystems reporting unit recorded in the third quarter, the impairment loss on the anticipated sale of the UK Composites business, costs incurred related to the TSA, an increase in restructuring costs and costs associated with the purchase accounting for the Bal Seal acquisition as discussed above. These changes were partially offset by increases in gross profit on certain programs as discussed above and the contribution of gross profit from Bal Seal.

Interest Expense, Net from Continuing Operations

In thousands	2020	2019	2018
Interest expense, net	$ 19,270	$ 17,202	$ 20,046

Interest expense, net generally consists of interest charged on our Credit Agreement, which includes a revolving credit facility and a term loan under our previously existing credit facility, and our convertible notes and the amortization of debt issuance

costs, offset by interest income. The increase in interest expense, net for 2020 as compared to 2019 was primarily due to lower interest income earned on marketable securities and higher average borrowings in the current period, partially offset by the absence of interest expense associated with our previous term loan facility.

Effective Income Tax Rate from Continuing Operations

	2020	2019	2018
Effective income tax rate	9.9 %	(39.1)%	36.8 %

The effective tax rate represents the combined federal, state and foreign tax effects attributable to pretax earnings for the year. The comparison of the effective tax rate from continuing operations for the year ended December 31, 2020 to the corresponding rate in the prior period was impacted by the pretax loss in the current period. The rate was unfavorably impacted by the impairment charge on the UK Composites business as a result of the anticipated sale, for which no associated tax benefit was recognized in the current period. Due to an entity classification election in 2019 related to the investment in the Company's UK business, which had the effect of treating the subsidiary as a disregarded entity for U.S. tax purposes, a loss was recorded resulting in a significant tax benefit recognized by the Company in 2019. Additionally, the Company recognized additional benefits from research and development credits relating to research completed in the three prior years. See Note 16, *Income Taxes*, in the Notes to Consolidated Financial Statements included in this Form 10-K for further details.

Backlog

In thousands	2020	2019	2018
Backlog	$ 631,236	$ 806,870	$ 851,814

Backlog decreased from 2019 to 2020, primarily driven by revenue recognized for deliveries of direct commercial JPF orders and sales outpacing orders of bearings products as a result of the impacts of COVID-19.

Other Matters

Information regarding our various environmental remediation activities and associated accruals can be found in Note 19, *Commitments and Contingencies*, and Note 13, *Environmental Costs*, in the Notes to Consolidated Financial Statements included in this Form 10-K.

Long-Term Contracts

For long-term contracts, we generally recognize sales and cost of sales over time because of continuous transfer of control to the customer, which allows for recognition of revenue as work on a contract progresses. For those programs for which there is a continuous transfer of control to the customer, we recognize sales and profit on a cost-to-cost basis, in which case sales and profit are recorded based upon the ratio of costs incurred to date to the total estimated costs to complete the contract. Conversely, revenue on certain programs, such as the K-MAX® program and on direct commercial sales under our JPF program, is recognized at a point in time, with revenue being recognized upon transfer to the end customer. See Note 1, *Summary of Significant Accounting Policies*, in the Notes to the Consolidated Financial Statements included in this Form 10-K for additional information regarding the effects of adjustments in profit estimates on long-term contracts for which revenue is recognized over time.

Major Programs/Product Lines

Defense Markets

A-10

In 2019, the USAF awarded Boeing a contract to provide up to 112 new wing assemblies and up to 15 wing kits through 2030 and we announced that we had been awarded a contract by Boeing to manufacture wing control surfaces and structural assemblies in support of the USAF's A-10 Thunderbolt Advanced Wing Continuation Kitting ("ATTACK") program. At December 31, 2020 and 2019, our program backlog was $35.7 million and $36.5 million, respectively.

Bearings

Our bearings products are included on numerous military platforms manufactured in North America, South America, Asia and Europe. These products are used as original equipment and/or specified as replacement parts by the manufacturers. The most significant portion of our military bearings sales is derived from U.S. military platforms, such as the AH-64 helicopter, Virginia Class submarine and Joint Strike Fighter aircraft, and sales in Europe for the Typhoon program. These products are primarily proprietary self-lubricating, ball and roller bearings for aircraft flight controls, turbine engines and landing gear, and helicopter driveline couplings.

BLACK HAWK

The Sikorsky BLACK HAWK helicopter cockpit program involves the manufacture of cockpits, including the installation of all wiring harnesses, hydraulic assemblies, control pedals and sticks, seat tracks, pneumatic lines and the composite structure that holds the windscreen for most models of the BLACK HAWK helicopter. We delivered 53 cockpits in 2020 as compared to the 66 cockpits delivered in 2019. In July 2017, we announced that we had entered into a new multi-year contract with Sikorsky to manufacture H-60 cockpits under the Department of Defense MY IX H-60 procurement authorization. The term of the agreement is five years, beginning in 2018 and ending in 2022. Included in backlog at December 31, 2020 and 2019, was $47.0 million and $53.0 million, respectively, for orders on this program. We anticipate cockpit deliveries to total 67 in 2021.

AH-1Z

We manufacture sheet metal details and subassemblies for the increased capability AH-1Z attack helicopter, which is produced by Bell Helicopter for the U.S. Marine Corps. We are on contract through Lot 16 and are currently negotiating Lots 17 and 18. As of December 31, 2020 and 2019, our backlog for this program was $11.2 million and $17.6 million, respectively.

FMU-152 A/B – Joint Programmable Fuze

We manufacture the JPF, an electromechanical bomb safe and arming device, which allows the settings of a weapon to be programmed in flight. Sales of these fuzes can be direct to the USAF, Foreign Military Sales ("FMS") through the USG and DCS to foreign militaries that, although not funded by the USG, require regulatory approvals from the USG.

A total of 48,749 fuzes were delivered in 2020. We expect to deliver 30,000 to 35,000 fuzes in 2021. Total JPF backlog at December 31, 2020 was $214.7 million. Of this amount, JPF backlog that requires future export approvals, licenses or authorizations from the USG allowing for the sale of these products outside of the United States was not material. The receipt of export approvals, licenses or authorizations are subject to political and geopolitical conditions which could impact the timing and/or our ability to sell these products outside of the United States. Given the change in Administration, there can be no assurance that backlog with appropriate approvals will be recognized due to potential future policies to cease shipments to certain countries. Total JPF backlog at December 31, 2019 was $356.8 million.

JPF - USG

Revenue for JPF USG programs is recognized over time when costs are incurred as work progresses on the program. The Company currently provides the FMU-152 A/B to the USAF, but the U.S. Navy currently utilizes a different fuze - the FMU-139. In 2015, NAVAIR solicited proposals for a firm fixed price production contract to implement improvements to the performance characteristics of the FMU-139 (such improved fuze having been designated the FMU-139 D/B), and, the USAF had stated that, if and when a contract is awarded and production begins, the funds associated with the FMU-152 A/B will be redirected to the FMU-139 D/B. During the third quarter of 2015, the U.S. Navy announced that a competitor was awarded the contract for the FMU-139 D/B. In the event the FMU-139 D/B program proceeds as planned and the USAF redirects the funds associated with the FMU-152 A/B to the FMU-139 D/B, our business, financial condition, results of operations and cash flows may be materially adversely impacted. During the third quarter of 2019, our competitor announced that it received its first production order from the U.S. Navy to manufacture the FMU-139 D/B. Due to the complexity of this program and the pending status of the USAF's final decision to redirect funds to the FMU-139 D/B, the timing and magnitude of the impact on the Company's financial statements are not certain; however, the Company continues to see demand for the FMU-152 A/B. In 2020, we have continued to satisfy the requirements for orders for both the USAF and foreign militaries under Option 14, which has a total value of approximately $121.4 million. During the third quarter of 2020, we completed our pricing negotiations for Options 15 and 16 with the USG and we received an order under Option 15 with an expected value of approximately $57.3 million for the procurement of fuzes for 25 foreign militaries. We expect future orders under Option 16 to extend FMU-152 A/B deliveries into 2023. Refer to Item 1A. Risk Factors included in this Form 10-K for further details on the risks associated with our JPF-USG program.

JPF - DCS

Revenue for DCS programs is generally recognized at the point in time when control is transferred to the customer. The Company continues to see strong demand for DCS fuzes. During 2019, we were awarded two DCS contracts totaling approximately $90.0 million. During 2018, we were awarded a DCS contract totaling approximately $324.0 million, of which $307.5 million was included in backlog. The remaining $16.5 million relates to potential penalties payable to the customer in the event the offset requirements of the contract are not met, which remained excluded from backlog at December 31, 2020. This agreement is designed to return economic value to the foreign country by requiring us to engage in activities supporting local defense or commercial industries, promoting a balance of trade, developing in-country technology capabilities or addressing other local development priorities. The offset agreement may be satisfied through activities that do not require a direct cash payment, including transferring technology, providing manufacturing, training and other consulting support to in-country projects and the purchase by third parties of supplies from in-country vendors. This agreement may also be satisfied through the Company's use of cash for activities, such as subcontracting with local partners, purchasing supplies from in-country vendors, providing financial support for in-country projects and making investments in local ventures. The offset requirements associated with this contract could extend for several years and have a notional value of approximately $194.0 million, which is equal to sixty percent of the total contract value as defined by the agreement with the customer. The amount ultimately applied against the offset agreement is based on negotiations with the customer and may require cash outlays that represent only a fraction of the notional value in the offset agreement. The Company continues to work with the customer to further define the requirements to satisfy the offset agreement. The satisfaction of the offset requirements will be determined by the customer and is expected to occur over a seven-year period. Additionally, this contract provides for potential penalties payable to the customer of up to 10% of the total contract value in the event that we default on the contract and we are unable to fulfill our contractual commitments.

Direct commercial sales are primarily concentrated with two Middle Eastern customers. Sales to these customers require export approvals, licenses and other authorizations from the USG and given the recent change in Administration and the current composition of the U.S. Congress, there can be no assurance that we will be able to obtain the necessary approvals, licenses and authorizations. In the event that we are unable to obtain the regulatory approvals, licenses or other authorizations needed to effectuate sales to these Middle Eastern customers, our financial position, results of operations, and cash flows would be adversely impacted. Refer to Item 1A. Risk Factors included in this Form 10-K for further details on the risks associated with our DCS contracts.

Commercial Markets

K-MAX®

During 2015, we announced that we were resuming production of commercial K-MAX® aircraft. The aircraft are being manufactured at our Jacksonville, Florida and Bloomfield, Connecticut facilities. The first fifteen helicopters from the reopened commercial production line were accepted by our customers through December 2020. During 2019, we announced that we are developing the next generation K-MAX® unmanned aircraft system that will allow operators to have the capability to fly either manned or unmanned missions. We expect to offer unmanned system kits for new production and existing aircraft in 2022. As of December 31, 2020 and 2019, our backlog for this program was $20.9 million and $13.1 million, respectively.

777 / 767

In 2019, we signed a multi-year follow-on contract with Boeing for the production of fixed trailing edge ("FTE") assemblies for the Boeing 777 and 767 commercial aircraft. Annual quantities will vary, as they are dependent upon the orders Boeing receives from its customers. To date, Kaman has provided approximately 1,435 FTE kits and assemblies for each of the 777 and 767 programs since 1995 and 1986, respectively. During 2020, on average, we delivered two and one-half shipsets per month on the Boeing 777 platform and two and one-half shipsets per month on the Boeing 767 platform, which includes one shipset per month associated with a military tanker derivative of the 767. For 2021, we estimate deliveries on the 777 program to be one and one-half shipsets per month and on the 767 program to be three shipsets per month which includes one shipset per month associated with a military tanker derivative of the 767. As of December 31, 2020 and 2019, our backlog for these programs was $28.7 million and $25.8 million, respectively.

On February 21, 2021, Boeing recommended grounding active Boeing 777 aircraft equipped with a particular engine model following an engine failure. In the year ended December 31, 2020, revenue associated with the Boeing 777 aircraft was approximately 1% of total sales.

Bearings

Our bearings products are included on commercial airliners and regional/business jets manufactured in North and South America, Europe and Asia and are used as original equipment and/or specified as replacement parts by airlines and aircraft manufacturers. These products are primarily proprietary self-lubricating, ball and roller bearings for aircraft flight controls, turbine engines, landing gear and helicopter driveline couplings. The most significant portion of our commercial sales is derived from Boeing, Airbus and Bombardier platforms, such as the Boeing 737, 747, 777 and 787, the Airbus A320, A330, A350 and A380, and the Bombardier Global 7500. Additionally, our bearings offerings include super precision miniature ball bearings used primarily in aerospace applications, dental products, surgical power tools, analytical devices and various industrial applications. Our commercial bearings products were particularly impacted by the COVID-19 pandemic. We expect recovery in sales related to single-aisle aircraft to occur over the next three years, while the recovery for sales related to twin-aisle aircraft to be more gradual over the next decade.

In the first quarter of 2019, the Federal Aviation Administration ("FAA") issued an order to suspend all 737 MAX aircraft in the U.S. and by U.S. aircraft operators following two fatal 737 MAX accidents. Boeing suspended deliveries until the FAA and other civil aviation authorities worldwide granted the clearance to return the aircraft to service. In November 2020, the FAA lifted the orders to suspend operations of the Boeing 737 MAX and in early 2021, airlines around the globe have begun to clear the Boeing 737 MAX for flying. In the years ended December 31, 2020 and 2019, we recognized $5.6 million and $19.9 million in revenue associated with the sale of our products that are utilized on the 737 MAX aircraft fleet. Any future reductions in the production rate or lower than anticipated production levels than previously anticipated could have an adverse impact on our financial position, results of operations and/or cash flows.

Springs, Seals and Contacts

Our precision springs, seals and contacts are used in the medical technology, aerospace and defense and industrial end markets. These products improve the performance and reliability of components in high cost of failure environments, such as powered surgical tools, orthopedic implants, pumps, monitors, active implantables and other critical medical equipment. These offerings are also used within radar systems, fuel pumps, hydraulics, navigation systems, motors and robotics.

Learjet 85

In 2010, our U.K. Composites operation was awarded a contract to manufacture composite passenger entry and over-wing exit doors for the Learjet 85, a mid-sized business jet built primarily from composites and featuring advances in aerodynamics, structures and efficiency; however, in October 2015, Bombardier Inc. announced the cancellation of its Learjet 85 business aircraft program. At December 31, 2020, our net balance sheet exposure on the program was $3.2 million. During 2016, we filed suit against our customer to recover this amount. Although we expect to recover the full amount of our claim, there can be no assurance that we will prevail in the litigation.

For a discussion of other matters, see Note 19, *Commitments and Contingencies*, in the Notes to Consolidated Financial Statements included in this Form 10-K.

LIQUIDITY AND CAPITAL RESOURCES

Discussion and Analysis of Cash Flows

We assess liquidity in terms of our ability to generate cash to fund working capital requirements and investing and financing activities. Significant factors affecting liquidity include: cash flows generated from or used by operating activities, capital expenditures, investments in our business and its programs, acquisitions, divestitures, dividends, availability of future credit, adequacy of available bank lines of credit and factors that might otherwise affect the Company's business and operations generally, as described under the heading “Risk Factors” and “Forward-Looking Statements” in Item 1A of Part I of this Form 10-K.

COVID-19

We anticipate that the disruptions and delays resulting from the spread of COVID-19 and the measures instituted by governments and businesses to mitigate its spread will impact our liquidity in the next twelve months. In consideration of the potential future impact of the COVID-19 pandemic on our business, we borrowed approximately $200.0 million under our Credit Agreement in the first quarter of 2020 to provide additional financing flexibility and readily accessible liquidity. The proceeds from the borrowing were available for working capital adjustments, ongoing operating needs and general corporate

purposes. In the third quarter, we paid down $100.0 million of the $200.0 million we had borrowed under our Credit Agreement and in the fourth quarter we paid down the remaining $100.0 million. At December 31, 2020, the Company had $104.4 million of cash on our Consolidated Balance Sheet, excluding any restricted cash. We are closely managing our daily cash flows to optimize our liquidity position. We also continue to closely monitor the collectability of our receivables from commercial aerospace customers as we recognize there may be delays in payments due to the impacts of COVID-19 on our customers. As of the date of this filing, we do not believe there has been any material impact on the collectability of these receivables. In addition to the daily reviews of collections and payables, management meets with our business units on a regular basis to review liquidity.

During 2020, the Company reduced hiring activities, limited discretionary spending and implemented workforce reductions and the aforementioned temporary salary reductions amongst senior management and the Board. We evaluated our capital investment projects and reduced spending for the year. Despite the impacts of COVID-19, we did continue to pay our regular quarterly dividend during 2020 and also contributed $10.0 million to our pension plan. As of the date of this filing, we believe the Company has adequate liquidity due to the cash we have on hand, the bank financing we have available to us and the other actions we have taken to enhance financial flexibility and reduce the potential impact of the pandemic on the Company.

A summary of our consolidated cash flows from continuing operations is as follows:

(in thousands)	2020	2019	2018	20 vs. 19	19 vs. 18
Total cash provided by (used in):					
Operating activities	$ 16,469	$ 42,488	$ 118,714	$ (26,019)	$ (76,226)
Investing activities	(318,722)	628,316	(22,538)	(947,038)	650,854
Financing activities	(33,535)	(152,713)	(141,145)	119,178	(11,568)
Free Cash Flow[1] :					
Net cash provided by operating activities	$ 16,469	$ 42,488	$ 118,714	$ (26,019)	$ (76,226)
Expenditures for property, plant and equipment	(17,783)	(22,447)	(21,504)	4,664	(943)
Free cash flow	$ (1,314)	$ 20,041	$ 97,210	$ (21,355)	$ (77,169)

[1] Free Cash Flow, a non-GAAP financial measure, is defined as net cash provided by operating activities less expenditures for property plant and equipment, both of which are presented in our Consolidated Statements of Cash Flows. See Management's Discussion and Analysis of Financial Condition and Results of Operations-Non-GAAP Financial Measures, in this Form 10-K.

Net cash provided by operating activities decreased in 2020 compared to 2019. This change was largely driven by lower net earnings, contributions to the pension plan and lower accounts payable, partially offset by higher working capital requirements on the JPF DCS program and the K-MAX® program in the prior year. Our cash flows for 2020 were also impacted by the delay in the collection of a significant JPF DCS receivable which was expected in the fourth quarter of 2020 and has now pushed into 2021.

Net cash used in investing activities was $318.7 million in 2020, compared to net cash provided by investing activities of $628.3 million in 2019. This change was primarily attributable to cash used to acquire Bal Seal in the current period versus proceeds received from the sale of the Distribution business in the prior period.

Net cash used in financing activities decreased in 2020 compared to 2019, primarily due to lower net repayments of our credit facility and a decrease in purchases of treasury shares, partially offset by lower proceeds from the exercise of employee stock awards.

Refer to Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, of the Annual Report on Form 10-K for the year ended December 31, 2019 for a discussion of the change in cash flows from the earliest year presented.

Material Cash Commitments

The Company considers its material contractual obligations when assessing its liquidity.

Debt and Related Interest Payments

We rely on debt financing as a source of liquidity for our business activities, including both convertible notes and our revolving credit facility. Under the convertible notes, $199.5 million of principal liability is due in 2024. No amounts were outstanding under the revolving credit agreement at December 31, 2020. The Company is contractually obligated to make interest payments on our debt, which are estimated to be $56.8 million as of December 31, 2020, of which $14.1 million will be paid within one year. Interest payments on debt are calculated based on the applicable rate and payment dates for each instrument. For variable-rate instruments, interest rates and payment dates are based on management's estimate of the most likely scenarios for each relevant debt instrument. For further information on debt and the related interest payments, refer to Financing Arrangement discussed below and Note 14, *Debt,* in the Notes to Consolidated Financial Statements included in this Form 10-K.

Leasing

Future rental payments for operating and financing leases total $14.6 million and $6.5 million, respectively, as of December 31, 2020. For further information on leasing obligations, including the timing of these payments, refer to Note 20, *Leases,* in the Notes to Consolidated Financial Statements included in this Form 10-K.

Purchase Obligations

The Company has entered into purchase commitments with suppliers for materials and supplies as part of the ordinary course of business, consulting arrangements and support services. Obligations of at least $50,000 total $200.8 million as of December 31, 2020, of which $154.2 million will be paid within one year. Included within these amounts is $0.3 million of purchase obligations which will not be paid by the Company in 2021 due to the sale of the UK Composites business on February 2, 2021.

Transition Services Agreement

We entered into a transition services agreement upon the closing the sale of the Company's Distribution business. We agreed to support the information technology, human resources and benefits, tax and treasury functions of the Distribution business for six to twelve months from the date of sale. The buyer has exercised the option to extend the support period for up to a maximum of an additional year for certain IT services. The buyer has the right to terminate individual services at any point over the renewal term and began to terminate certain services in 2020. All services are expected to be terminated by the end of the first quarter of 2021. We expect to incur $0.7 million in costs under our transition services agreement within the next year. For further information on the TSA, refer to Note 2, *Discontinued Operations and Liabilities Held for Sale,* in the Notes to Consolidated Financial Statements included in this Form 10-K.

Additionally, upon closing of the sale of the Distribution business, the Company entered into separate trademark, trade name and domain license agreements with certain licensees. Under each such agreement, the Company granted the licensee a non-exclusive, royalty-free license to use certain registered service marks, common law service marks, trade names and domain names owned by the Company for a period of five years after the closing date, subject to the licensee's agreement to use commercially reasonable efforts to phase its use of such service marks and domain names as soon as it is reasonably practicable prior to the expiration of the term. These agreements, and the licenses granted therein, apply only within North America.

Retention Payments

Upon closing the acquisition of Bal Seal, the Company funded $24.7 million associated with employee retention plans into escrow accounts. This amount and related interest was included in restricted cash on the Company's Consolidated Balance Sheets as of December 31, 2020. Eligible participants received an allocation of the escrow balance in January 2021.

Other

Our other long-term obligations, which include obligations under the Company's long-term incentive plan, deferred compensation plan, environmental liabilities, acquisition holdbacks and unrecognized tax benefits, total $52.6 million at December 31, 2020, of which $15.8 million will be paid within one year. For further information on these obligations refer to Note 13, *Environmental Costs*; Note 16, *Income Taxes*; Note 18, *Other Long-Term Liabilities;* and Note 19, *Commitments and Contingencies* in the Notes to Consolidated Financial Statements included in this Form 10-K.

Off-Balance Sheet Arrangements

During 2020, the Company and the USG entered into a Guaranty Agreement, pursuant to which the Company agreed to guarantee the full, complete and satisfactory performance of its subsidiary, Kaman Precision Products, Inc. ("KPPI") under all current and future contracts with the USG. As of the date of this filing, the only contract in place between KPPI and the USG relates to the production and sale of the JPF. KPPI is currently fulfilling the requirements of Option 14 and has completed pricing negotiations on Options 15 and 16. The guarantee was provided in lieu of a periodic financial capability review by the Financial Capacity Team ("FCT") of the Defense Contract Management Agency ("DCMA"). The Company is unable to estimate the maximum potential amount of future payments under the guarantee as it is dependent on costs incurred by the USG in the event of default. Although the Company believes the risk of default is low given the maturity and operational performance of the JPF program, there can be no assurance that the guarantee will not have a material adverse effect on the Company's results of operations, financial position and cash flows.

As of December 31, 2020, we had no significant off-balance sheet arrangements other than purchase obligations, the guarantee discussed above and $165.4 million of outstanding standby letters of credit, all of which were under the revolving credit facility. Of this amount, $146.2 million letters of credit relate to a JPF DCS contract.

In addition to the impacts of COVID-19, our working capital requirements and the material cash commitments discussed above, one or more of the following items could have an impact on our liquidity during the next 12 months:

- the matters described in Note 19, *Commitments and Contingencies*, in the Notes to Consolidated Financial Statements, including the cost of existing environmental remediation matters discussed in Note 13, *Environmental Costs*;
- contributions to our qualified pension plan and Supplemental Employees' Retirement Plan ("SERP");
- deferred compensation payments to officers;
- income tax payments;
- costs associated with acquisitions and corporate development activities;
- capital expenditures;
- research and development expenditures;
- repurchase of common stock under the 2015 Share Repurchase Program;
- payment of dividends;
- costs associated with the start-up of new programs; and
- the timing of payments and extension of payment terms by our customers.

Financing Arrangements

We continue to rely upon bank financing as an important source of liquidity for our business activities including acquisitions. We believe this, when combined with cash generated from operating activities, will be sufficient to support our anticipated cash requirements for the foreseeable future. However, we may decide to raise additional debt or equity capital to support other business activities including potential future acquisitions. We regularly monitor credit market conditions to identify potential issues that may adversely affect, or provide opportunities for, the securing and/or pricing of additional financing, if any, that may be necessary to continue with our growth strategy and finance working capital requirements. Refer to Note 14, *Debt*, in the Notes to the Consolidated Financial Statements, included in Item 8, Financial Statements and Supplementary Data, of this Form 10-K for further information on our Financing Arrangements.

Convertible Notes

2024 Notes

During May 2017, we issued $200.0 million aggregate principal amount of convertible senior unsecured notes due May 2024 (the "2024 Notes") pursuant to an indenture (the "Indenture"), dated May 12, 2017, between the Company and U.S. Bank National Association, as trustee. In connection therewith, we entered into certain capped call transactions that cover, collectively, the number of shares of the Company's common stock underlying the 2024 Notes. The 2024 Notes bear 3.25% interest per annum on the principal amount, payable semiannually in arrears on May 1 and November 1 of each year, beginning on November 1, 2017. The 2024 Notes will mature on May 1, 2024, unless earlier repurchased by the Company or converted. We will settle any conversions of the 2024 Notes in cash, shares of the Company's common stock or a combination of cash and shares of common stock, at the Company's election.

The sale of the Distribution business in the third quarter of 2019 was deemed to be a "Fundamental Change" and a "Make-Whole Fundamental Change" pursuant to the terms and conditions of the indenture governing the 2024 Notes. As a result, the sale triggered the right of the holders of our 2024 Notes to require us to repurchase all of the 2024 Notes, or any portion thereof that is a multiple of $1,000 principal amount on September 27, 2019. The aggregate principal amount of the 2024 Notes validly tendered and not validly withdrawn was $0.5 million, representing 0.25% of all outstanding notes. Holders of such notes receive the purchase price equal to 100% of the principal amount of the 2024 Notes being purchased, plus accrued and unpaid interest.

The following table illustrates the dilutive effect of securities issued under the 2024 Notes at various theoretical average share prices for our stock as of December 31, 2020:

	Theoretical Average Share Price of Kaman Stock				
	$65.26	$70.00	$75.00	$80.00	$84.84
Dilutive Shares associated with:					
Convertible Debt	—	206,879	396,879	563,129	705,394

Credit Agreement

On December 13, 2019, the Company closed an amended and restated $800.0 million Credit Agreement (the "Credit Agreement") with JPMorgan Chase Bank, N.A., as Administrative Agent and as Collateral Agent. The Credit Agreement amends and restates the Company's previously existing credit facility in its entirety to, among other things: (i) extend the maturity date to December 13, 2024; (ii) increase the aggregate amount of revolving commitments from $600.0 million to $800.0 million; (iii) remove the existing term loan credit facility; (iv) modify the affirmative and negative covenants set forth in the facility; and (v) effectuate a number of additional modifications to the terms and provision of the facility, including its pricing. Capitalized terms used but not defined within this discussion of the Credit Agreement have the meanings ascribed thereto in the Credit Agreement.

Interest rates on amounts outstanding under the Credit Agreement are variable based on LIBOR. The LIBOR benchmark has been the subject of national, international, and other regulatory guidance and proposals for reform. In July 2017, the U.K. Financial Conduct Authority announced that it intends to stop persuading or compelling banks to submit rates for calculation of LIBOR after 2021. In November 2020, the ICE Benchmark Association announced its intention to delay the timeline for the retirement of LIBOR until mid-2023. These reforms may cause LIBOR to perform differently than in the past and LIBOR may ultimately cease to exist after 2023. Alternative benchmark rate(s) may replace LIBOR and could affect the Company's debt securities, derivative instruments, receivables, debt payments and receipts. At this time, it is not possible to predict the effect of any changes to LIBOR, any phase out of LIBOR or any establishment of alternative benchmark rates. Any new benchmark rate will likely not replicate LIBOR exactly, which could impact our contracts which terminate after 2023. There is uncertainty about how applicable law, the courts or the Company will address the replacement of LIBOR with alternative rates on variable rate retail loan contracts and other contracts that do not include alternative rate fallback provisions. In addition, any changes to benchmark rates may have an uncertain impact on our cost of funds and our access to the capital markets, which could impact our liquidity, financial position or results of operations.

At December 31, 2020, there were no outstanding amounts on the Credit Agreement. In addition, we are required to pay a quarterly commitment fee on the unused revolving loan commitment amount at a rate ranging from 0.150% to 0.250% per annum, based on the Senior Secured Net Leverage Ratio. Fees for outstanding letters of credit range from 1.125% to 1.625%, based on the Senior Secured Net Leverage Ratio. Total average bank borrowings under our revolving credit facility and previously existing term loan facility during the year ended December 31, 2020, were $111.9 million compared to $70.6 million for the year ended December 31, 2019.

The following table shows the amounts available for borrowing under the Company's revolving credit facility:

In thousands	December 31, 2020	December 31, 2019
Total facility	$ 800,000	$ 800,000
Amounts outstanding, excluding letters of credit	—	—
Amounts available for borrowing, excluding letters of credit	800,000	800,000
Letters of credit under the credit facility[1][2]	165,373	152,614
Amounts available for borrowing	$ 634,627	$ 647,386
Amounts available for borrowing subject to EBITDA, as defined by the Credit Agreement[3]	$ 363,997	$ 322,900

[1] The Company has entered into standby letters of credit issued on the Company's behalf by financial institutions, and directly issued guarantees to third parties primarily related to advances received from customers and the guarantee of future performance on certain contracts. Letters of credit generally are available for draw down in the event the Company does not perform its obligations.
[2] Of these amounts, $146.2 million letters of credit relate to a certain JPF DCS contract in both periods.
[3] Amounts available for borrowing subject to EBITDA as of December 31, 2019 reflect the minimum borrowing capacity under EBITDA, subject to adjustments.

Other Sources/Uses of Capital

Advance Payments

We received $97.2 million in advance payments in 2018, which relate to $146.2 million in letters of credit for a JPF DCS contract, including the offset agreement. In the event that we default on the contract and we are unable to fulfill our contractual commitments, our customer has the ability to draw on the letters of credit.

Pension

Management regularly monitors its pension plan asset performance and the assumptions used in the determination of our benefit obligation, comparing them to actual experience. We continue to believe the assumptions selected are valid due to the long-term nature of our benefit obligation.

We contributed $10.0 million to the qualified pension plan during 2020. We did not make any contributions to the qualified pension plan in 2019. In 2021, we expect to contribute $10.0 million to the qualified pension plan. We paid $0.5 million in SERP benefits during both 2020 and 2019. We expect to pay $2.8 million in SERP benefits in 2021.

Effective December 31, 2015, the qualified pension plan was frozen with respect to future benefit accruals. Under U.S. Government Cost Accounting Standard ("CAS") 413 we must calculate the USG’s share of any pension curtailment adjustment resulting from the freeze. Such adjustments can result in an amount due to the USG for pension plans that are in a surplus position or an amount due to the contractor for plans that are in a deficit position. During the fourth quarter of 2016, we accrued a $0.3 million liability representing our estimate of the amount due to the USG based on our pension curtailment adjustment calculation which was submitted to the USG for review in December 2016. We have maintained our accrual at $0.3 million as of December 31, 2020. There can be no assurance that the ultimate resolution of this matter will not have a material adverse effect on our results of operations, financial position and cash flows.

For more information refer to Note 17, *Pension Plans,* in the Notes to Consolidated Financial Statements included in this Form 10-K.

Acquisitions

On January 3, 2020, the Company completed the acquisition of Bal Seal, at a purchase price of approximately $317.5 million. We continue to identify and evaluate potential acquisition candidates, the purchase of which may require the use of additional capital. No acquisitions were completed in 2019 or 2018. For a discussion of the Bal Seal acquisition, see Note 3, *Business Combinations*, in the Notes to Consolidated Financial Statements included in this Form 10-K.

Share-based Arrangements

In 2021, the Company modified its long-term incentive program to increase the emphasis on equity and permit the more timely reporting of long-term incentive compensation payouts. The long-term incentive awards granted to our Named Executive Officers (“NEOs”) in February 2021 consist of a combination of service-based restricted shares ("RSAs") and performance share units settled in shares ("PSUs"), as opposed to the cash-based awards that had been utilized before. The Committee believes this will increase the alignment of interests between our NEOs and shareholders, and help build stock ownership by new executives, striking a reasonable balance between awards focused on executive retention and those linked to the Company’s long-term financial performance. RSAs will vest over a three-year period on each of the first three anniversaries of the date of grant. Performance-based awards will continue to be based on total shareholder return ("TSR") and return on total invested capital ("ROIC") over a three-year performance period, each of which will remain equally weighted in determining payouts. Expense associated with the RSAs and PSUs will be dependent on the grants issued in 2021. Historically, the Company has granted the majority of the awards in the first quarter of the year, which will be reported in our First Quarter Form 10-Q. Any further grants in 2021 will be reported in the quarterly filings thereafter. As of December 31, 2020, future compensation costs related to non-vested stock options and restricted stock grants is $4.9 million. The Company anticipates that this cost will be recognized over a weighted-average period of 2.9 years.

Stock Repurchase Plans

On April 29, 2015, we announced that our Board of Directors approved a share repurchase program ("2015 Share Repurchase Program") authorizing the repurchase of up to $100.0 million of the common stock, par value $1.00 per share, of the Company. We repurchase shares to offset the annual issuance of shares under our employee stock plans, but the timing and actual number of shares repurchased will depend on a variety of factors including stock price, market conditions, corporate and regulatory requirements, capital availability and other factors, including acquisition opportunities. During 2020, we repurchased 290,000 shares, for approximately $13.5 million, under the 2015 Share Repurchase Program, bringing the total number of shares repurchased through the life of the 2015 Share Repurchase Program to 1,880,422 shares. Although approximately $2.2 million remains available for repurchases under this authorization, we do not intend to effectuate any additional share repurchases until the ongoing COVID-19 pandemic and any related impact on our business, results of operations and cash flows have subsided.

NON-GAAP FINANCIAL MEASURES

Management believes that the non-GAAP measures used in this Annual Report on Form 10-K provide investors with important perspectives into our ongoing business performance. We do not intend for the information to be considered in isolation or as a substitute for the related GAAP measures. Other companies may define the measures differently. We define the non-GAAP measures used in this report and other disclosures as follows:

Organic Sales

Organic Sales is defined as "Net Sales" less sales derived from acquisitions completed during the preceding twelve months. We believe that this measure provides management and investors with a more complete understanding of underlying operating results and trends of established, ongoing operations by excluding the effect of acquisitions, which can obscure underlying trends. We also believe that presenting Organic Sales enables a more direct comparison to other businesses and companies in similar industries. Management recognizes that the term "Organic Sales" may be interpreted differently by other companies and under different circumstances.

Organic Sales (in thousands)

	2020	2019	2018
Net sales	$ 784,459	$ 761,608	$ 735,994
Less: Acquisition Sales	76,965	—	—
Organic Sales	$ 707,494	$ 761,608	$ 735,994

Free Cash Flow

Free cash flow is defined as GAAP “Net cash provided by (used in) operating activities” in a period less “Expenditures for property, plant & equipment” in the same period. Management believes Free Cash Flow provides an important perspective on our ability to generate cash from our business operations and, as such, that it is an important financial measure for use in evaluating the Company's financial performance. Free Cash Flow should not be viewed as representing the residual cash flow available for discretionary expenditures such as dividends to shareholders or acquisitions, as it may exclude certain mandatory expenditures such as repayment of maturing debt and other contractual obligations. Management uses Free Cash Flow internally to assess overall liquidity.

CRITICAL ACCOUNTING ESTIMATES

Our significant accounting policies are outlined in Note 1, *Summary of Significant Accounting Policies*, to the Consolidated Financial Statements included in this Form 10-K. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosures based upon historical experience, current trends and other factors that management believes to be relevant. We are also responsible for evaluating the propriety of our estimates, judgments and accounting methods as new events occur. Actual results could differ from those estimates. Management periodically reviews the Company’s critical accounting policies, estimates and judgments with the Audit Committee of our Board of Directors. The most significant areas currently involving management judgments and estimates are described below.

Revenue from Contracts with Customers

Methodology

We recognize sales and profit based upon either (1) the over time method, in which sales and profit are recorded based upon the ratio of costs incurred to date to estimated total costs to complete the performance obligation, or (2) the point-in-time method, in which sales are recognized at the time control is transferred to the customer. For long-term contracts, we generally recognize sales and income over time because of continuous transfer of control to the customer. Revenue is generally recognized using the cost-to-cost method based on the extent of progress towards completion of the performance obligation, which allows for recognition of revenue as work on a contract progresses.

On January 1, 2018, the Company adopted Accounting Standard Codification 606, Revenue from Contracts with Customers, using the modified retrospective method. As a result, the Company applied ASC 606 only to contracts that were not completed as of January 1, 2018. Prior to the adoption of ASC 606, for long-term contracts, we generally recognized sales and income

based on the percentage-of-completion method accounting, which allowed for recognition of revenue as work on a contract progressed. We recognized sales and profit based upon either (1) the cost-to-cost method, in which sales and profit were recorded based upon the ratio of costs incurred to estimated total costs to complete the contract, or (2) the units-of delivery method, in which sales were recognized as deliveries were made and cost of sales was computed on the basis of the estimated ratio of total contract cost to total contract sales.

Management performs detailed quarterly reviews of all of our significant long-term contracts. Based upon these reviews, we record the effects of adjustments in profit estimates each period. If at any time management determines that in the case of a particular contract total costs will exceed total contract revenue, we record a provision for the entire anticipated contract loss at that time.

Judgment and Uncertainties

The over time revenue recognition model requires that we estimate future revenues and costs over the life of a contract. Revenues are estimated based upon the original contract price, with consideration being given to exercised contract options, change orders and, in some cases, projected customer requirements. Contract costs may be incurred over a period of several years, and the estimation of these costs requires significant judgment based upon the acquired knowledge and experience of program managers, engineers and financial professionals. Estimated costs are based primarily on anticipated purchase contract terms, historical performance trends, business base and other economic projections. The complexity of certain programs as well as technical risks and uncertainty as to the future availability of materials and labor resources could affect the Company’s ability to accurately estimate future contract costs.

The following table illustrates the amount of revenue recognized for performance obligations satisfied over time versus the amount of revenue recognized for performance obligations satisfied at a point in time.

	2020	2019	2018
In thousands			
ASC 606			
Revenue recognized for performance obligations satisfied			
Point-in-time	$ 538,183	$ 466,866	$ 383,109
Over time	246,276	294,742	352,885
Total revenue recognized for performance obligations satisfied	$ 784,459	$ 761,608	$ 735,994
% of Net sales - Point-in-time	68.6 %	61.3 %	52.1 %
% of Net sales - Over time	31.4 %	38.7 %	47.9 %
% of Net sales - Performance obligations satisfied	100.0 %	100.0 %	100.0 %

Effect if Actual Results Differ From Assumptions

While we do not believe there is a reasonable likelihood there will be a material change in estimates or assumptions used to calculate our long-term revenues and costs, estimating the percentage of work complete on certain programs is a complex task. As a result, changes to these estimates could have a significant impact on our results of operations. These programs include the Sikorsky BLACK HAWK program, the JPF program with the USG, the Boeing A-10 program, the AH-1Z program, our other Bell Helicopter programs and several other programs. Estimating the ultimate total cost of these programs is challenging due to the complexity of the programs, unanticipated increases in production requirements, the nature of the materials needed to complete these programs, change orders related to the programs and the need to manage our customers’ expectations. These programs are an important element in our continuing strategy to increase operating efficiencies and profitability as well as broaden our business base. Management continues to monitor and update program cost estimates quarterly for these contracts. A significant change in an estimate on one or more of these programs could have a material effect on our financial position and results of operations. The company recognized a reduction in revenue of $7.0 million and $4.6 million for the years ended December 31, 2020 and 2019, respectively, due to changes in profit estimates. The amount of revenue recognized from performance obligations satisfied (or partially satisfied) in previous periods was $6.7 million for the year ended December 31, 2018.

Allowance for Doubtful Accounts

Methodology

The allowance for doubtful accounts represents management's best estimate of probable losses inherent in the receivable balance. These estimates are based on known past due amounts and historical write-off experience, as well as trends and factors impacting the credit risk associated with specific customers. In an effort to identify adverse trends for trade receivables, we perform ongoing reviews of account balances and the aging of receivables. Amounts are considered past due when payment has not been received within a predetermined time frame based upon the credit terms extended. For our government and commercial contracts, we evaluate, on an ongoing basis, the amount of recoverable costs. The recoverability of costs is evaluated on a contract-by-contract basis based upon historical trends of payments, program viability and the customer's credit-worthiness.

Judgment and Uncertainties

Write-offs are charged against the allowance for doubtful accounts only after we have exhausted all collection efforts. Actual write-offs and adjustments could differ from the allowance estimates due to unanticipated changes in the business environment as well as factors and risks associated with specific customers.

Of the accounts receivable on the Company's Consolidated Balance Sheet as of December 31, 2020, approximately $64.0 million relates to delays in payments on outstanding receivables related to a customer contract. Of this amount, $32.4 million in outstanding receivables were over twelve months past due. The Company continues to receive payments from this customer for recent shipments under this contract and expects to receive payment on the outstanding receivables. While the Company has determined that these receivable amounts continue to be collectible, to the extent these balances are not collected, this would have a material impact on the Company's liquidity, financial position and results of operations.

Effect if Actual Results Differ From Assumptions

As of December 31, 2020 and 2019, our allowance for doubtful accounts was $2.0 million and $1.2 million, respectively. Receivables written off, net of recoveries, in 2020 and 2019 were $1.4 million and $0.8 million, respectively.

Currently we do not believe that we have a significant amount of risk relative to the allowance for doubtful accounts. A 10% change in the allowance would have a $0.2 million effect on pre-tax earnings.

Inventory Valuation

Methodology

We have four types of inventory (a) raw materials, (b) contracts in process, (c) other work in process and (d) finished goods. Raw material includes certain general stock materials but primarily relates to purchases that were made in anticipation of specific programs that have not been started as of the balance sheet date. Raw materials are stated at the lower of the cost of the inventory or its fair market value. Contracts in process, other work in process and finished goods are valued at production cost comprised of material, labor and overhead. Contracts in process, other work in process and finished goods are reported at the lower of cost or net realizable value.

Judgment and Uncertainties

The process for evaluating inventory obsolescence or market value often requires the Company to make subjective judgments and estimates concerning future sales levels, quantities and prices at which such inventory will be sold in the normal course of business. We adjust our inventory by the difference between the estimated market value and the actual cost of our inventory to arrive at net realizable value. Changes in estimates of future sales volume may necessitate future write-downs of inventory value. At December 31, 2020, $60.4 million of K-MAX® inventory was included in contracts and other work in process and finished goods, of which management believes that approximately $19.9 million will be sold after December 31, 2021, based upon the anticipation of additional aircraft manufacturing and supporting the fleet for the foreseeable future. We believe the inventory is stated at net realizable value, although lack of demand for spare parts in the future could result in additional write-downs of the inventory value. Overall, management believes that our inventory is appropriately valued and not subject to further obsolescence in the near term.

At December 31, 2020, $6.3 million of SH-2G(I) inventory was included in contracts and other work in process inventory on the Company's Consolidated Balance Sheets. Management believes $5.3 million of the SH-2G(I) inventory will be sold after December 31, 2021. This balance represents spares requirements and inventory to be used in SH-2G programs.

Effect if Actual Results Differ From Assumptions

Management reviews the K-MAX® inventory balance on an annual basis to determine whether any additional write-downs are necessary. We believe this inventory is stated at net realizable value, although lack of demand for spare parts in the future could result in additional write-downs of the inventory value. Overall, management believes that our inventory is appropriately valued and not subject to further obsolescence in the near term. If such a write-down were to occur, this could have a significant impact on our operating results. A 10% write-down of the December 31, 2020 K-MAX® inventory balance would have affected pre-tax earnings by approximately $6.0 million in 2020.

The balance of SH-2G(I) inventory projected to be sold after December 31, 2020, represents spares requirements and inventory to be used to support the SH-2G programs in future periods and as such is appropriately valued as of December 31, 2020.

Business Combinations

Methodology

On January 3, 2020, we completed the acquisition of Bal Seal for consideration of $317.5 million. In accordance with generally accepted accounting principles, we recognized the identifiable assets acquired and liabilities assumed separately from goodwill and measured the respective assets and liabilities at their acquisition-date fair values. Goodwill for the acquisition of $95.1 million was determined based on the consideration transferred less the net value of assets acquired and liabilities assumed at their acquisition-date fair values.

Judgment and Uncertainties

As part of the acquisition, management identified four classes of intangible assets acquired related to Bal Seal, consisting of customer relationships, developed technologies, trade name and acquired backlog. The fair value of the intangible assets of $110.3 million was determined using an income methodology based on management's estimates of forecasted cash flows, with those cash flows discounted to present value using rates commensurate with the risks associated with those cash flows, specifically a multi-period, excess earnings method for customer relationships and backlog and the relief-from-royalty method for the trade name and developed technologies. Significant judgment was applied with respect to estimates of forecasted cash flows, more specifically, the estimated revenue growth rates to determine the fair value of all of the intangible assets and the estimated profit rates used to determine the fair value of the customer relationship intangible assets. Management evaluated the reasonableness of the revenue growth rates and profit rates based on consideration of the past performance, general economic conditions in the markets served by Bal Seal and industry-specific performance statistics.

A discount rate of 10% was utilized for customer relationships, developed technologies and the trade name and a discount rate of 8% was utilized for backlog to reflect the risk and uncertainty in the financial markets and specifically in our internally developed earnings projections. A change in these assumptions could materially affect the valuation of the identified intangible assets. Management evaluated the reasonableness of the discount rates based on consideration of the cost of capital of comparable businesses and other industry factors.

Effect if Actual Results Differ from Assumptions

As with all assumptions, there is an inherent level of uncertainty and actual results, to the extent they differ from those assumptions, could have a material impact on fair value. For example, multiples for a comparable business could deteriorate due to changes in technology or a downturn in economic conditions. A reduction in customer demand would impact our assumed growth rate resulting in a reduced fair value. Potential events or circumstances could have a negative effect on the estimated fair value. The loss of a major customer or program could have a significant impact on the future cash flows of the acquired business. Advances in technology by our competitors could result in our products becoming obsolete.

We do not currently believe there to be a reasonable likelihood that actual results will vary materially from estimates and assumptions used to value the assets acquired and liabilities assumed. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to an impairment charge that could be material.

Goodwill and Other Intangible Assets

Methodology

Goodwill and certain intangible assets that have indefinite lives are evaluated at least annually for impairment. The annual evaluation is generally performed during the fourth quarter, using forecast information. All intangible assets are also reviewed for possible impairment whenever changes in conditions indicate that their carrying value may not be recoverable. For reporting units that qualify for a qualitative assessment, management will perform the quantitative impairment test after a period of three years has elapsed since the test was last performed.

In accordance with generally accepted accounting principles, we test goodwill for impairment at the reporting unit level and other long-lived intangible assets (excluding goodwill) for impairment at the lowest level for which identifiable cash flows are available. The identification and measurement of goodwill impairment involves the estimation of fair value of the reporting unit as compared to its carrying value. The identification and measurement of other long-lived intangible asset impairment involves the estimation of future cash flows of the business unit as compared to its carrying value. Goodwill is tested one level below the segment level, and components are not aggregated for purposes of goodwill testing.

The carrying value of goodwill as of December 31, 2020 was $247.2 million. The specific reporting units contributing to the total goodwill balance were as follows: Precision Products Orlando ("KPP-Orlando"), $41.4 million; Specialty Bearings and Engineered Products, $110.7 million; and Bal Seal, $95.1 million. During the third quarter of 2020, we identified a triggering event for possible impairment of our Aerosystems reporting unit based on a decline in earnings compared to forecasts used in prior periods and updated forecasts which indicated the forecasted cash flows for this reporting unit were lower than amounts previously forecasted. We performed a quantitative analysis on the Aerosystems reporting unit using an income methodology based on management's estimates of forecasted cash flows, with those cash flows discounted to present value using rates commensurate with the risks associated with those cash flows. In addition, management used a market-based valuation involving analysis of market multiples of revenues and earnings before interest, taxes, depreciation and amortization ("EBITDA") for (i) a group of comparable companies and (ii) recent transactions, if any, involving comparable companies. The quantitative analysis resulted in a conclusion that the fair value of the Aerosystems reporting unit was $56.1 million below its carrying value; therefore, goodwill was impaired. In 2020, we recorded a goodwill impairment charge of $50.3 million for the Aerosystems reporting unit, which represented the entire goodwill balance associated with this reporting unit. See Note 12, *Goodwill and Other Intangible Assets, Net*, in the Notes to Consolidated Financial Statements for additional information regarding these assets.

The carrying value of other intangible assets as of December 31, 2020, was $150.2 million. During the third quarter of 2018, management identified a triggering event for possible impairment at a certain asset group in its UK business based on a review of historical performance, the current forecast for the remainder of the year and the loss of future orders from one of its significant customers, requiring the Company to evaluate the intangible assets for impairment. No such triggering events were identified in 2020 or 2019. See Note 12, *Goodwill and Other Intangible Assets, Net*, in the Notes to Consolidated Financial Statements for additional information regarding these assets.

Judgment and Uncertainties

In years that management performs a qualitative assessment we consider the following qualitative factors: general economic conditions in the markets served by the reporting units carrying goodwill, relevant industry-specific performance statistics, changes in the carrying value of the individual reporting units and assumptions used in the most recent fair value calculation, including forecasted results of operations, the weighted average cost of capital and recent transaction multiples.

We performed a qualitative assessment for the KPP-Orlando reporting unit. The results of this analysis indicated that it is more likely than not that goodwill is not impaired and this reporting unit did not need to proceed to a quantitative assessment.

For the quantitative impairment tests, management estimated the fair value of the reporting units using an income methodology based on management's estimates of forecasted cash flows, with those cash flows discounted to present value using rates commensurate with the risks associated with those cash flows. In addition, management used a market-based valuation method involving analysis of market multiples of revenues and earnings before interest, taxes, depreciation and amortization (“EBITDA”) for (i) a group of comparable public companies and (ii) recent transactions, if any, involving comparable companies. In estimating the fair value of the reporting units, a weighting of 80% to the income approach and 20% to the market-based valuation method was selected, consistent with the prior year. A higher weighting was applied to the estimate derived from the income approach as it is based on management's assumptions specific for the reporting units, which are the outcome of an internal planning process. While the selected companies in the market based valuation method have comparability to the reporting units, they may not fully reflect the market share, product portfolio and operations of the

reporting units. The estimated fair value of the reporting units is adjusted for an excess net working capital assumption, which represents management's identification of specific contract-related assets that will generate cash flows in the future.

In performing our quantitative tests for the reporting units, we assumed a terminal growth rate of 3.0%. The discount rate utilized to reflect the risk and uncertainty in the financial markets and specifically in our internally developed earnings projections ranged from 9.5% - 10.25% for these reporting units. Changes in these estimates and assumptions could materially affect the results of our tests for goodwill impairment.

An impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation. The residual fair value after this allocation is the implied fair value of the reporting unit goodwill. The results of the quantitative tests indicated that the fair values of the reporting units exceeded the respective carrying values; therefore, no impairment charge was recorded for the Specialty Bearings and Bal Seal reporting units.

Effect if Actual Results Differ From Assumptions

We performed the quantitative impairment test for the Specialty Bearings and Bal Seal reporting units. Specialty Bearings' fair values exceeded its respective carrying value in excess of 100% and Bal Seal's fair value exceeded the carrying value by approximately 8%. A one percentage point decrease in our terminal growth rate or an increase of one percentage point in our discount rate would not result in a fair value calculation less than the carrying value for these reporting units. In the third quarter of 2020, we identified a triggering event for possible impairment at the Aerosystems reporting unit. The fair value of the Aerosystems reporting unit was $56.1 million below its carrying value. We recorded a goodwill impairment charge of $50.3 million for the Aerosystems reporting unit in the third quarter of 2020, which represented the entire goodwill balance associated with this reporting unit.

During the third quarter of 2018, we identified a triggering event for possible impairment at a certain asset group in our UK business based on a review of its historical performance, the current forecast for the remainder of the year and the loss of future orders from one of our significant customers, requiring us to evaluate the intangible assets for impairment. We performed a recoverability test on the intangibles for a certain asset group in our UK business by comparing the undiscounted cash flows of the asset group to its carrying value, and the estimated future cash flows of the business did not exceed the carrying value of the assets. Based on these results, we calculated the fair value of the asset group using an income approach, which resulted in an impairment charge of $10.0 million, or the remaining balance of the customer lists/relationships at a certain asset group within the UK business.

As with all assumptions, there is an inherent level of uncertainty and actual results, to the extent they differ from those assumptions, could have a material impact on fair value. For example, multiples for similar type reporting units could deteriorate due to changes in technology or a downturn in economic conditions. A reduction in customer demand would impact our assumed growth rate resulting in a reduced fair value. Potential events or circumstances could have a negative effect on the estimated fair value. The loss of a major customer or program could have a significant impact on the future cash flows of the reporting unit(s). Advances in technology by our competitors could result in our products becoming obsolete.

We do not currently believe there to be a reasonable likelihood that actual results will vary materially from estimates and assumptions used to test goodwill and other intangible assets for impairment losses. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to an impairment charge that could be material.

Long-Term Incentive Programs

Methodology

The Company maintains a Management Incentive Plan, which provides for cash and share-based payment awards, including non-statutory stock options, restricted stock, stock appreciation rights and long-term incentive program ("LTIP") awards. We determine the fair value of our non-qualified stock option awards at the date of grant using a Black-Scholes model. We determine the fair value of our restricted share awards at the date of grant using the closing price the day prior to the grant.

LTIP awards provide certain senior executives an opportunity to receive long-term incentive award payments, generally in cash, for achieving targets established by the Personnel Compensation Committee of the Board of Directors. Prior to 2018, LTIP grants were based on the Company's financial results compared to the Russell 2000 indices for the same periods based upon the following metrics: (a) average return on total capital, (b) average earnings per share growth and (c) total return to shareholders for the performance period. Beginning in 2018, the performance metrics were changed to the following: (a) average return on

total capital and (b) total return to shareholders, both compared to the Russell 2000 indices for the same performance period. No awards will be payable if the Company's performance is below the 25th percentile of the designated indices. The maximum award is payable if performance reaches the 75th percentile of the designated indices. Awards will be paid out at 100% at the 50th percentile. Awards for performance between the 25th and 75th percentiles are determined by straight-line interpolation between 0% and 200%.

In order to estimate the liability associated with LTIP awards, management must make assumptions as to how our current performance compares to current Russell 2000 data based upon the Russell 2000's historical results. This analysis is performed on a quarterly basis. When sufficient Russell 2000 data for a year is available, which typically will not be until May or June of the following year, management will adjust the liability to reflect its best estimate of the total award. Actual results could differ significantly from management's estimates. The total estimated liability as of December 31, 2020, was $15.3 million.

Judgment and Uncertainties

Option-pricing models and generally accepted valuation techniques require management to make assumptions and to apply judgment to determine the fair value of our awards. These assumptions and judgments include estimating the future volatility of our stock price, expected dividend yield, future employee turnover rates and future employee stock option exercise behaviors. Changes in these assumptions can materially affect the fair value estimate.

Our LTIP requires management to make assumptions regarding the likelihood of achieving long-term Company goals as well as estimate future Russell 2000 results.

Effect if Actual Results Differ From Assumptions

We do not currently believe there is a reasonable likelihood that there will be a material change in the estimates or assumptions we use to determine cash and share-based compensation expense. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to changes in cash and share-based compensation expense that could be material.

If actual results are not consistent with the assumptions used, the share-based compensation expense reported in our financial statements may not be representative of the actual economic cost of the share-based compensation. A 10% change in our share-based compensation expense from continuing operations for the year ended December 31, 2020, would have affected pre-tax earnings by approximately $0.5 million in 2020.

Due to the timing of availability of the Russell 2000 data, there is a risk that the amount we have recorded as LTIP expense could be different from the actual payout. A 10% increase in the total estimated liability for our LTIP would result in a reduction of 2020 pretax earnings of $1.5 million.

Pension Plans

Methodology

We maintain a qualified defined benefit pension, as well as a non-qualified Supplemental Employees Retirement Plan ("SERP") for certain key executives. See Note 17, *Pension Plans*, in the Notes to Consolidated Financial Statements included in this Form 10-K for further discussion of these plans.

Expenses and liabilities associated with each of these plans are determined based upon actuarial valuations. Integral to these actuarial valuations are a variety of assumptions including expected return on plan assets and discount rates. We regularly review these assumptions, which are updated at the measurement date, December 31st. In accordance with generally accepted accounting principles, the impact of differences between actual results and the assumptions are accumulated and generally amortized over future periods, which will affect expense recognized in future periods.

We utilize a "spot rate approach" in the calculation of pension interest and service cost. The spot rate approach applies separate discount rates for each projected benefit payment in the calculation of pension interest and service cost.

Judgment and Uncertainties

The discount rate represents the interest rate used to determine the present value of future cash flows currently expected to be required to settle the pension obligation. Management uses the Financial Times Stock Exchange ("FTSE") Pension Liability Index for discount rate assumptions. This index was designed to provide a market average discount rate to assist plan sponsors in valuing the liabilities associated with postretirement obligations. Additionally, we reviewed the changes in the general level of interest rates since the last measurement date noting that overall rates had decreased when compared to 2019.

Based upon this information, we used a 2.34% discount rate as of December 31, 2020, for the qualified defined benefit pension plan. This rate takes into consideration the participants in our pension plan and the anticipated payment stream as compared to the Above Median Double-A Curve. For the SERP, we used the same methodology as the pension plan and derived a discount rate of 1.78% in 2020 for the benefit obligation. The difference in the discount rates is primarily due to the expected duration of SERP payments, which is shorter than the anticipated duration of benefit payments to be made to the average participant in the pension plan. The qualified defined benefit pension plan and SERP used discount rates of 3.14% and 2.76% at December 31, 2019, respectively, for purposes of calculating the benefit obligation.

The expected long-term rate of return on plan assets represents the average rate of earnings expected on the funds invested to provide for anticipated benefit payments. The expected return on assets assumption is developed based upon several factors. Such factors include current and expected target asset allocation, our expected returns by asset class type and our expected investment performance. Beginning in 2020, the expected long-term rate of return on plan assets is 6.5%. Historically, the expected long-term rate of return on plan assets was 7.5%.

Effect if Actual Results Differ From Assumptions

During 2020, the pension plan generated net periodic benefit income and as a result, the sensitivity analysis calculates the change on pension income rather than on pension expense. A lower discount rate increases the present value of benefit obligations which increases pension expense; however, this is more than offset by a reduction in interest costs resulting in net pension income. A one percentage point decrease in the assumed discount rate would have increased pension income in 2020 by $1.3 million. A one percentage point increase in the assumed discount rate would have decreased pension income in 2020 by $0.8 million.

A lower expected rate of return on pension plan assets would increase pension expense. For 2020 and 2019, the expected rate of return on plan assets was 6.5% and 7.5%, respectively. A one-percentage point increase/decrease in the assumed return on pension plan assets would have changed pension income in 2020 by approximately $6.6 million. During 2020, the actual return on pension plan assets of 17.6% was higher than our expected long-term rate of return on pension plan assets of 6.5%.

Income Taxes

Methodology

Deferred tax assets and liabilities generally represent temporary differences between the recognition of tax benefits/expenses in our financial statements and the recognition of these tax benefits/expenses for tax purposes.

We establish reserves for deferred taxes when, despite our belief that our tax return positions are valid and defensible, we believe that certain positions may not prevail if challenged. We adjust these reserves in light of changing facts and circumstances, such as the progress of a tax audit or changes in tax legislation. Our effective tax rate includes the impact of reserve provisions and changes to reserves that we consider appropriate. This rate is then applied to our quarterly operating results. In the event that there is a significant unusual or one-time item recognized in our operating results, the tax attributable to that item would be separately calculated and recorded at the same time as the unusual or one-time item.

As of December 31, 2020, we had recorded $32.4 million of deferred tax assets, net of valuation allowances. The realization of these benefits is dependent in part on future taxable capital gains and tax planning strategies designed to realize the benefit associated with the capital loss. For those jurisdictions where the expiration of tax loss or credit carryforwards or the projection of operating results indicates that realization is not likely, a valuation allowance is provided.

Judgment and Uncertainties

Management believes that sufficient income will be earned in the future to realize deferred income tax assets, net of valuation allowances recorded. The realization of these deferred tax assets can be impacted by changes to tax laws or statutory tax rates and future taxable income levels.

Our effective tax rate on earnings was 9.9% for 2020. This rate was unfavorably impacted by the impairment charge on the UK Composites business as a result of the anticipated sale, for which no associated tax benefit was recognized in the current period. Due to an entity classification election in 2019 related to the investment in the Company's UK business, which had the effect of treating the subsidiary as a disregarded entity for U.S. tax purposes, a loss was recorded, resulting in a significant tax benefit recognized by the Company in 2019. Additionally, the Company recognized additional benefits from research and development credits relating to research completed in the three prior years. Our effective tax rate is based on expected or reported income or loss, statutory tax rates and tax planning opportunities available to us in the various jurisdictions in which we operate. Significant judgment is required in determining our effective tax rate and in evaluating our tax positions.

Effect if Actual Results Differ From Assumptions

We do not anticipate a significant change in our unrecognized tax benefits within the next twelve months. We file tax returns in numerous U.S. and foreign jurisdictions, with returns subject to examination for varying periods, but generally back to and including 2015. It is our policy to record interest and penalties on unrecognized tax benefits as income taxes. A one percentage point increase/decrease in our tax rate would have affected our 2020 earnings by $0.8 million.

RECENT ACCOUNTING STANDARDS

A summary of recent accounting standards is included in Note 1, *Summary of Significant Accounting Policies*, in the Notes to Consolidated Financial Statements, included in Item 8, Financial Statements and Supplementary Data, of this Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have various market risk exposures that arise from our ongoing business operations. Market risk is the potential economic loss that may result from adverse changes in the fair value of financial instruments. Our financial results are impacted by changes in interest rates, certain foreign currency exchange rates and commodity prices.

Foreign Currencies

We have manufacturing and sales facilities in various locations throughout the world. As a result, we make investments and conduct business transactions denominated in various currencies, including the U.S. dollar, the British pound, the European euro, the Czech koruna, the Japanese yen, the Hong Kong dollar and the Indian rupee. Total annual foreign sales, including foreign export sales, averaged approximately $336.7 million over the last three years. Foreign sales represented 50.0% of consolidated net sales in 2020; however, a significant portion of our foreign sales are denominated in the U.S. dollar. We estimate a hypothetical 10% adverse change in foreign currency exchange rates relative to the U.S. dollar for 2020 would have had an unfavorable impact of $10.6 million on sales and a favorable impact of $3.5 million on operating income. We manage foreign currency exposures that are associated with committed foreign currency purchases and sales and other assets and liabilities created in the normal course of business at the subsidiary operations level. Sometimes we may, through the use of forward contracts or other derivative contracts, hedge the price risk associated with committed and forecasted foreign denominated payments and rates. Historically the use of these forward contracts has been minimal. We do not use derivatives for speculative or trading purposes.

Interest Rates

Our primary exposure to interest rate risk results from our outstanding debt obligations. The level of fees and interest charged on revolving credit commitments and borrowings are based upon leverage levels and market interest rates.

Our principal debt facilities are contained within a variable rate credit agreement that provides a $800.0 million revolving credit facility. This agreement was amended and restated on December 13, 2019 (as amended), and expires on December 13, 2024. Total average bank borrowings for 2020 were $111.9 million. The impact of a hypothetical 100 basis point increase in the interest rates on our average bank borrowings would have resulted in a $1.1 million increase in interest expense.

During the fiscal quarter ended June 30, 2017, we issued $200.0 million aggregate principal of convertible unsecured senior notes, due May 2024, in a private placement offering. These notes bear 3.25% interest per annum on the principal amount, payable semiannually in arrears on May 1 and November 1 of each year, beginning on November 1, 2017, and have an effective interest rate of 5.0%.

From time to time we will enter into interest rate swap contracts for the purpose of securing a fixed interest rate on our variable interest rate borrowings. These contracts allow us to create certainty with respect to future cash flows associated with our variable rate debt that would otherwise be impacted by fluctuations in LIBOR rates.

Commodity Prices

We are exposed to volatility in the price of raw materials used in certain manufacturing operations. These raw materials include, but are not limited to, aluminum, titanium, nickel, copper and other specialty metals. We manage our exposure related to these price changes through strategic procurement practices.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Kaman Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Kaman Corporation and its subsidiaries (the "Company") as of December 31, 2020 and 2019, and the related consolidated statements of operations, of comprehensive income (loss), of shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2020, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2020 appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2020, 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019 and changed the manner in which it accounts for revenues from contracts with customers in 2018.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management's Report on Internal Control Over Financial Reporting, management has excluded Bal Seal Engineering, Inc. from its assessment of internal control over financial reporting as of December 31, 2020 because it was acquired by the Company in a purchase business combination during 2020. We have also excluded Bal Seal Engineering, Inc. from our audit of internal control over financial reporting. Bal Seal Engineering, Inc. is a wholly-owned subsidiary whose total assets and total revenues excluded from management's assessment and our audit of internal control over financial reporting represent approximately 10% and 10%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2020.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Acquisition of Bal Seal Engineering, Inc. – Valuation of Intangible Assets

As described in Note 3 to the consolidated financial statements, on January 3, 2020, the Company acquired all of the equity interests of Bal Seal Engineering, Inc. at a purchase price of $317.5 million, which resulted in recording $70.1 million of customer relationships, $25.5 million of developed technologies, and $11.9 million of trade name intangible assets. Management determined the fair value of the identifiable intangible assets using the income approach, specifically a multi-period, excess earnings method for the customer relationships and the relief-from-royalty method for the trade name and developed technologies intangible assets. As disclosed by management, the determination of the fair value of the customer relationship intangible assets involved significant estimates and assumptions related to the estimated revenue growth rates, the estimated profit rates and the discount rate. Management's determination of the fair value of the trade name and developed technology intangible assets involved significant estimates and assumptions related to the estimated revenue growth rates and the discount rate.

The principal considerations for our determination that performing procedures relating to the valuation of acquired intangible assets in the Bal Seal Engineering, Inc. acquisition is a critical audit matter are the significant judgment by management in determining the fair value of the customer relationships, developed technologies, and trade name intangible assets; this in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to the estimated revenue growth rates, the estimated profit rates, and the discount rate used in the valuation of the customer relationships, developed technologies, and trade name intangible assets. In addition, the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to acquisition accounting, including controls over management's valuation of the customer relationships, developed technologies, and trade name intangible assets and controls over the development of significant assumptions related to the estimated revenue growth rates, the estimated profit rates, and the discount rate. These procedures also included, among others, reading the purchase agreement and testing management's process for determining the fair value of the customer relationships, developed technologies, and trade name intangible assets. Testing management's process included evaluating the appropriateness of the multi-period, excess earnings method and the relief-from-royalty method, testing the completeness and accuracy of the underlying data used in estimating the fair values, and evaluating the reasonableness of the significant assumptions used by management related to the estimated revenue growth rates, the estimated profit rates, and the discount rate. Evaluating the reasonableness of the estimated revenue growth rates and the estimated profit rates involved considering the past performance of the acquired business, consistency with economic and industry forecasts, and whether these assumptions were consistent with evidence obtained in other areas of the audit. Evaluating the reasonableness of the discount rate involved considering the cost of capital of comparable businesses and other industry factors. Professionals with specialized skill and knowledge were

used to assist in evaluating the appropriateness of the multi-period, excess earnings method and the relief-from-royalty method and evaluating the reasonableness of the discount rate significant assumption.

Interim Goodwill Impairment Assessment - Aerosystems Reporting Unit

As described in Notes 1 and 12 to the consolidated financial statements, management evaluates goodwill for impairment at least annually during the fourth quarter or whenever changes in conditions indicate that the fair value of a reporting unit is more likely than not below its carrying value. During the third quarter of 2020, management identified a triggering event for possible impairment for the Aerosystems reporting unit based on a decline in earnings compared to the forecasts used in prior periods and updated forecasts. Management performed a quantitative analysis on the Aerosystems reporting unit and concluded that the fair value of the Aerosystems reporting unit was below its carrying value and recorded a goodwill impairment charge of $50.3 million, which represents the entire goodwill balance for the reporting unit. The fair value of the Aerosystems reporting unit was determined using both an income methodology and a market-based valuation method, and weighting the fair value determined under each method in estimating the fair value of the Aerosystems reporting unit. As disclosed by management, fair value using the income methodology is based on management's estimates of forecasted cash flows for the Aerosystems reporting unit which included significant judgments and assumptions relating to forecasted cash flows, the terminal growth rate, excess net working capital and the discount rate. Fair value using the market-based valuation method involves analysis of market multiples of revenues and earnings before interest, taxes, depreciation and amortization for (i) a group of comparable public companies and (ii) recent transactions, if any, involving comparable companies.

The principal considerations for our determination that performing procedures relating to the interim goodwill impairment assessment of the Aerosystems reporting unit is a critical audit matter are the significant judgment by management when determining the fair value measurement of the reporting unit; this in turn led to a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating management's significant assumptions related to forecasted cash flows, terminal growth rate, excess net working capital, and the discount rate used in the determination of the fair value using the income methodology. In addition, the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the Aerosystems reporting unit. These procedures also included, among others, testing management's process for determining the fair value estimate, which included evaluating the appropriateness of the income and market-based valuation methods and the weighting of the methods, testing the completeness, accuracy and relevance of underlying data used in the methods, and evaluating the significant assumptions used by management related to forecasted cash flows, terminal growth rate, excess net working capital, and the discount rate. Evaluating management's assumptions related to forecasted cash flows and the terminal growth rate involved evaluating whether the assumptions used by management were reasonable considering the past performance and significant changes in contracts of the reporting unit and whether these assumptions were consistent with evidence obtained in other areas of the audit. Evaluating management's excess net working capital assumption involved evaluating management's identification of specific contract-related assets which will generate cash flows in the future. Evaluating the reasonableness of the discount rate involved considering the cost of capital of comparable businesses and other industry factors. Professionals with specialized skill and knowledge were used to assist in the evaluating of the appropriateness of the income and market-based valuation methods, including the weighting of estimated fair value between the two methods and evaluating the reasonableness of significant assumptions related to the excess net working capital and the discount rate.

Estimated Costs at Completion for Certain Aerospace Contracts

As described in Notes 1 and 4 to the consolidated financial statements, for long-term aerospace contracts, management generally recognizes sales and income over time because of continuous transfer of control to the customer. The Company's net sales for the year ended December 31, 2020 were $784.5 million, of which approximately 31% is recognized over time. Revenue is generally recognized using the cost-to-cost measure of progress for its over time performance obligations because this recognition best depicts the transfer of assets to the customer which occurs as cost is incurred under the contracts. Under the cost-to-cost method, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenues, including estimated fees or profits, are recorded proportionally as costs are incurred.

The principal considerations for our determination that performing procedures relating to estimated costs at contract completion for certain aerospace contracts is a critical audit matter are the significant judgment by management when determining the estimated costs at completion for certain of these contracts; this in turn led to a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating evidence related to the estimated costs at completion for certain of these contracts.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to revenue recognition, including controls over the determination of estimated costs at contract completion for long-term aerospace contracts. The procedures also included, among others, evaluating and testing management's process for determining the estimated costs at contract completion for long-term aerospace contracts, which included evaluating the reasonableness of assumptions considered by management specific to each contract, and testing the accuracy of the revenue recognized based on these underlying contract estimates. Evaluating the reasonableness of significant assumptions involved assessing management's ability to reasonably estimate costs at contract completion by (i) testing the basis and underlying support for the cost estimate, (ii) evaluating the consistent application of accounting policies, and (iii) evaluating the timely identification of circumstances which may warrant a modification to a previous estimate.

/s/ PricewaterhouseCoopers LLP

Hartford, Connecticut
February 25, 2021

We have served as the Company's auditor since 2013.

CONSOLIDATED BALANCE SHEETS
KAMAN CORPORATION AND SUBSIDIARIES
(In thousands, except share and per share amounts)

	December 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 104,377	$ 471,540
Restricted cash	25,121	—
Accounts receivable, net	153,806	156,492
Contract assets	108,645	121,614
Contract costs, current portion	3,511	6,052
Inventories	185,072	156,353
Income tax refunds receivable	5,269	8,069
Other current assets	12,173	16,368
Total current assets	597,974	936,488
Property, plant and equipment, net of accumulated depreciation of $228,984 and $210,549, respectively	210,852	140,450
Operating right-of-use asset, net	12,880	15,159
Goodwill	247,244	195,314
Other intangible assets, net	150,198	53,439
Deferred income taxes	39,809	35,240
Contract costs, noncurrent portion	8,311	6,099
Other assets	39,125	36,754
Total assets	$ 1,306,393	$ 1,418,943

CONSOLIDATED BALANCE SHEETS (CONTINUED)
KAMAN CORPORATION AND SUBSIDIARIES
(In thousands, except share and per share amounts)

	December 31, 2020	December 31, 2019
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable – trade	$ 60,200	$ 70,884
Accrued salaries and wages	70,552	43,220
Contract liabilities, current portion	39,073	42,942
Operating lease liabilities, current portion	4,305	4,306
Income taxes payable	19	4,722
Liabilities held for sale, current portion	18,086	—
Other current liabilities	36,177	37,918
Total current liabilities	228,412	203,992
Long-term debt, excluding current portion, net of debt issuance costs	185,401	181,622
Deferred income taxes	7,381	6,994
Underfunded pension	69,610	97,246
Contract liabilities, noncurrent portion	11,019	37,855
Operating lease liabilities, noncurrent portion	9,325	11,617
Liabilities held for sale, noncurrent portion	1,171	—
Other long-term liabilities	47,636	56,415
Commitments and contingencies (Note 19)		
Shareholders' equity:		
Preferred stock, $1 par value, 200,000 shares authorized; none outstanding	—	—
Common stock, $1 par value, 50,000,000 shares authorized; voting; 30,278,668 and 30,058,455 shares issued, respectively	30,279	30,058
Additional paid-in capital	238,829	228,153
Retained earnings	728,764	820,666
Accumulated other comprehensive income (loss)	(130,821)	(150,893)
Less 2,555,785 and 2,219,332 shares of common stock, respectively, held in treasury, at cost	(120,613)	(104,782)
Total shareholders' equity	746,438	823,202
Total liabilities and shareholders' equity	$ 1,306,393	$ 1,418,943

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS
KAMAN CORPORATION AND SUBSIDIARIES
(In thousands, except per share amounts)

	For the Year Ended December 31,		
	2020	**2019**	**2018**
Net sales	$ 784,459	$ 761,608	$ 735,994
Cost of sales	538,877	520,803	508,677
Gross profit	245,582	240,805	227,317
Selling, general and administrative expenses	199,906	177,187	172,271
Goodwill and other intangibles impairment (Note 12)	50,307	—	10,039
Impairment on assets held for sale (Note 2)	36,285	—	—
Costs from transition services agreement (Note 2)	12,515	4,673	—
Cost of acquired retention plans (Note 3)	22,814	—	—
Restructuring costs (Note 5)	8,359	1,558	7,353
(Gain) loss on sale of business (Note 5)	(493)	3,739	5,722
Net loss (gain) on sale of assets	200	237	(1,031)
Operating (loss) income	(84,311)	53,411	32,963
Interest expense, net	19,270	17,202	20,046
Non-service pension and post retirement benefit income, net	(16,250)	(396)	(12,127)
Income from transition services agreement (Note 2)	(8,439)	(3,673)	—
Other income, net	(728)	(309)	(92)
(Loss) earnings from continuing operations before income taxes	(78,164)	40,587	25,136
Income tax (benefit) expense	(7,730)	(15,859)	9,259
(Loss) earnings from continuing operations, net of tax	(70,434)	56,446	15,877
Earnings from discontinued operations before gain on disposal, net of tax	—	29,027	38,292
Gain on disposal of discontinued operations, net of tax	692	124,356	—
Total earnings from discontinued operations, net of tax	692	153,383	38,292
Net (loss) earnings	$ (69,742)	$ 209,829	$ 54,169
Earnings per share:			
Basic (loss) earnings per share from continuing operations	$ (2.54)	$ 2.02	$ 0.57
Basic earnings per share from discontinued operations	0.02	5.49	1.37
Basic (loss) earnings per share	$ (2.52)	$ 7.51	$ 1.94
Diluted (loss) earnings per share from continuing operations	$ (2.54)	$ 2.01	$ 0.56
Diluted earnings per share from discontinued operations	0.02	5.46	1.36
Diluted (loss) earnings per share	$ (2.52)	$ 7.47	$ 1.92
Weighted average shares outstanding:			
Basic	27,723	27,936	27,945
Diluted	27,723	28,092	28,223

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
KAMAN CORPORATION AND SUBSIDIARIES
(In thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Net (loss) earnings	$ (69,742)	$ 209,829	$ 54,169
Other comprehensive income, net of tax:			
Foreign currency translation adjustments and other	15,634	(1,772)	(7,525)
Pension plan adjustments, net of tax expense (benefit) of $1,315, $2,619, and $(3,701), respectively	4,438	8,871	(11,559)
Other comprehensive income (loss)	$ 20,072	$ 7,099	$ (19,084)
Total comprehensive (loss) income	$ (49,670)	$ 216,928	$ 35,085

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
KAMAN CORPORATION AND SUBSIDIARIES
(In thousands, except share amounts)

	Common Stock		Additional Paid-In	Retained	Accumulated Other Comprehensive	Treasury Stock		Total Shareholders'
	Shares	$	Capital	Earnings	Income (Loss)	Shares	$	Equity
Balance at December 31, 2017	29,141,467	$ 29,141	$ 185,332	$587,877	$ (115,814)	1,325,975	$ (50,880)	$ 635,656
Net earnings	—	—	—	54,169	—	—	—	54,169
Impact of change in revenue accounting standard	—	—	—	(9,584)	—	—	—	(9,584)
Other comprehensive loss	—	—	—	—	(19,084)	—	—	(19,084)
Dividends (per share of common stock, $0.80)	—	—	—	(22,359)	—	—	—	(22,359)
Changes due to convertible notes transactions	114,778	115	(123)	—	—	—	—	(8)
Purchase of treasury shares	—	—	—	—	—	313,330	(19,489)	(19,489)
Employee stock plans	226,722	227	8,813	—	—	25,069	(1,689)	7,351
Share-based compensation expense	61,747	62	6,452	—	—	8,543	(9)	6,505
Balance at December 31, 2018	29,544,714	$ 29,545	$ 200,474	$610,103	$ (134,898)	1,672,917	$ (72,067)	$ 633,157
Net earnings	—	—	—	209,829	—	—	—	209,829
Other comprehensive income	—	—	—	—	7,099	—	—	7,099
Reclassification of stranded tax effects resulting from Tax Reform	—	—	—	23,094	(23,094)	—	—	—
Dividends (per share of common stock, $0.80)	—	—	—	(22,360)	—	—	—	(22,360)
Changes due to convertible notes transactions	—	—	(18)	—	—	—	—	(18)
Purchase of treasury shares	—	—	—	—	—	522,622	(31,785)	(31,785)
Employee stock plans	449,937	449	20,151	—	—	17,609	(924)	19,676
Share-based compensation expense	63,804	64	7,546	—	—	6,184	(6)	7,604
Balance at December 31, 2019	30,058,455	$ 30,058	$ 228,153	$820,666	$ (150,893)	2,219,332	$(104,782)	$ 823,202
Net loss	—	—	—	(69,742)	—	—	—	(69,742)
Other comprehensive income	—	—	—	—	20,072	—	—	20,072
Dividends (per share of common stock, $0.80)	—	—	—	(22,160)	—	—	—	(22,160)
Purchase of treasury shares	—	—	—	—	—	302,778	(14,209)	(14,209)
Employee stock plans	164,149	164	5,752	—	—	32,150	(1,620)	4,296
Share-based compensation expense	56,064	57	4,924	—	—	1,525	(2)	4,979
Balance at December 31, 2020	30,278,668	$ 30,279	$ 238,829	$728,764	$ (130,821)	2,555,785	$(120,613)	$ 746,438

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS
KAMAN CORPORATION AND SUBSIDIARIES
(In thousands)

	For the Year Ended December 31,		
	2020	2019	2018
Cash flows from operating activities:			
Net (loss) earnings	$ (69,742)	$ 209,829	$ 54,169
Less: Total earnings from discontinued operations, net of tax	692	153,383	38,292
(Loss) earnings from continuing operations, net of tax	(70,434)	56,446	15,877
Adjustments to reconcile earnings from continuing operations, net of tax to net cash provided by operating activities:			
Depreciation and amortization	43,899	25,854	27,875
Amortization of debt issuance costs	1,746	1,996	1,806
Accretion of convertible notes discount	2,860	2,760	2,596
Provision for doubtful accounts	1,381	788	767
Impairment on assets held for sale	36,285	—	—
(Gain) loss on sale of business	(493)	3,971	5,722
Net loss (gain) on sale of assets	200	237	(1,031)
Goodwill and other intangible assets impairment	50,307	—	10,039
Net (gain) loss on derivative instruments	(466)	302	829
Stock compensation expense	4,979	4,669	5,484
Non-cash consideration received for aircraft sale	—	(3,100)	—
Deferred income taxes	(6,055)	182	7,834
Changes in assets and liabilities, excluding effects of acquisitions/divestitures:			
Accounts receivable	7,042	(8,173)	(6,020)
Contract assets	12,629	(21,994)	(24,294)
Contract costs	294	4,506	(5,834)
Inventories	(18,485)	(25,129)	7,135
Income tax refunds receivable	2,763	(6,296)	1,136
Operating right-of-use assets	1,513	3,390	—
Other assets	2,490	(6,108)	(2,944)
Accounts payable - trade	(9,227)	14,034	10,807
Contract liabilities	(29,555)	(26,638)	96,430
Operating lease liabilities	(1,560)	(3,423)	—
Other current liabilities	16,955	6,085	(374)
Income taxes payable	(4,885)	7,888	(2,393)
Pension liabilities	(21,550)	4,170	(38,179)
Other long-term liabilities	(6,164)	6,071	5,446
Net cash provided by operating activities from continuing operations	16,469	42,488	118,714
Net cash (used in) provided by operating activities of discontinued operations	—	(50,288)	43,654
Net cash provided by (used in) operating activities	16,469	(7,800)	162,368

CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
KAMAN CORPORATION AND SUBSIDIARIES
(In thousands)

	For the Year Ended December 31,		
	2020	**2019**	**2018**
Cash flows from investing activities:			
Proceeds from sale of assets	352	196	2,138
Proceeds from sale of discontinued operations	5,223	655,030	—
Proceeds from sale of business	493	—	—
Expenditures for property, plant & equipment	(17,783)	(22,447)	(21,504)
Acquisition of businesses including earn out adjustments, net of cash acquired	(304,661)	—	—
Other, net	(2,346)	(4,463)	(3,172)
Net cash (used in) provided by investing activities of continuing operations	(318,722)	628,316	(22,538)
Net cash used in investing activities of discontinued operations	—	(9,838)	(7,423)
Net cash (used in) provided by investing activities	(318,722)	618,478	(29,961)
Cash flows from financing activities:			
Net repayments under revolving credit agreements	—	(38,500)	(98,087)
Debt repayment	—	(76,875)	(7,500)
Repayment of convertible notes	—	(500)	—
Net change in bank overdraft	(12)	886	(279)
Proceeds from exercise of employee stock awards	4,296	19,676	7,351
Purchase of treasury shares	(14,210)	(30,060)	(19,278)
Dividends paid	(22,210)	(22,343)	(22,349)
Debt and equity issuance costs	—	(3,584)	—
Other	(1,399)	(1,413)	(1,003)
Net cash used in financing activities of continuing operations	(33,535)	(152,713)	(141,145)
Net cash provided by (used in) financing activities of discontinued operations	—	7,967	(217)
Net cash used in financing activities	(33,535)	(144,746)	(141,362)
Net (decrease) increase in cash and cash equivalents	(335,788)	465,932	(8,955)
Cash and cash equivalents of discontinued operations and liabilities held for sale	—	(21,834)	(1,816)
Effect of exchange rate changes on cash and cash equivalents	337	(269)	(238)
Cash and cash equivalents and restricted cash at beginning of period	471,540	27,711	36,904
Cash and cash equivalents and restricted cash at end of period (See Note 2)	$ 136,089	$ 471,540	$ 25,895

See accompanying notes to consolidated financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Kaman Corporation, headquartered in Bloomfield, Connecticut, was incorporated in 1945 and is a diversified company that conducts business in the aerospace, medical and industrial markets. Kaman Corporation reports information for itself and its subsidiaries (collectively, the "Company") in one business segment.

Basis of Presentation

The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. Certain amounts in prior year financial statements and notes thereto have been reclassified to conform to current year presentation.

During the third quarter of 2019, the Company completed the sale of its Distribution business for total cash consideration of $700.0 million, excluding certain working capital adjustments and transaction costs. The Distribution business' results of operations and the related cash flows have been reclassified to earnings from discontinued operations in the Consolidated Statements of Operations and cash flows from discontinued operations in the Consolidated Statements of Cash Flows, respectively, for all periods presented. See Note 2, *Discontinued Operations and Liabilities Held for Sale*, to the Consolidated Financial Statements for further information.

During the fourth quarter of 2020, the Company committed to a plan and received approval from its Board of Directors to sell its United Kingdom ("UK") Composites division. As a result of the approved plan, the UK Composites division met the criteria set forth in ASC 205-20 for held for sale. At December 31, 2020, the assets of the UK Composites business were considered impaired as the estimated fair value of the disposal group was lower than the estimated carrying value of the UK Composites business. As a result, $24.3 million in assets were written off and the remaining loss related to the anticipated sale of the disposal group of $12.0 million was accrued for in liabilities held for sale, current portion on the Company's Consolidated Balance Sheets, resulting in a total loss of $36.3 million recorded to impairment on assets held for sale on the Company's Consolidated Statements of Operations in the year ended December 31, 2020. The related liabilities of the UK division to be sold were reclassified to liabilities held for sale, respectively, as of December 31, 2020 on the Company's Consolidated Balance Sheets. See Note 2, *Discontinued Operations and Liabilities Held for Sale*, to the Consolidated Financial Statements for further information.

In August 2020, the Company announced the retirement of Neal J. Keating as President and Chief Executive Officer ("CEO") of the Company and the appointment of Ian K. Walsh as President and CEO of the Company as of September 8, 2020. Mr Walsh, the Chief Operating Decision Maker ("CODM"), reviews operating results for the purposes of allocating resources and assessing performance based on one segment. The Company has not aggregated operating segments for purposes of identifying reportable segments.

During the year ended December 31, 2020, the Company recorded a correction of certain prior-period errors. The errors primarily resulted in revenue being overstated and cost of sales being understated, resulting in income before taxes being overstated for the years ended December 31, 2019 and December 31, 2018 by approximately $1.1 million and $0.8 million, respectively. The corresponding correction, totaling $1.9 million, was recorded in fiscal year 2020. This correction is not material to the current and prior period financial statements.

Use of Estimates

The preparation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Significant items subject to such estimates and assumptions include the carrying amount of property, plant and equipment, goodwill and other intangible assets; valuation allowances for receivables, inventories and income taxes; valuation of share-based compensation; assets and obligations related to employee benefits; and accounting for long-term contracts including claims. Actual results could differ from those estimates.

Foreign Currency Translation

The Company has certain operations outside the United States that prepare financial statements in currencies other than the U.S. dollar. For these operations, results of operations and cash flows are translated using the average exchange rate throughout the period. Assets and liabilities are generally translated at end of period rates. The gains and losses associated with these translation adjustments are included as a component of accumulated other comprehensive income (loss) in shareholders’ equity.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of trade accounts receivable. The carrying amounts of these items, as well as trade accounts payable and notes payable, approximate fair value due to the short-term maturity of these instruments. At December 31, 2020 and December 31, 2019, one individual customer accounted for more than 10% of consolidated accounts receivable. In the years ended December 31, 2020 and December 31, 2019, three individual customers, the U.S. Government, The Boeing Company and a Joint Programmable Fuze ("JPF") direct commercial sales ("DCS") customer, accounted for more than 10% of consolidated net sales. Foreign sales were approximately 50.0%, 44.4% and 37.9% of the Company’s net sales in 2020, 2019 and 2018, respectively, and are concentrated in the Middle East, United Kingdom, Germany, Canada, Poland, France, Japan, Switzerland, Liechtenstein and New Zealand.

Additional Cash Flow Information

Non-cash financing activities in 2020 include an adjustment to other comprehensive income related to the underfunding of the pension and SERP plans. The total net adjustment was $4.4 million, net of tax of $1.3 million. Additionally, non-cash financing activities in 2020 include $5.5 million of dividends declared but not yet paid.

Non-cash investing activities in 2019 include an accrual of $0.8 million for purchases of property and equipment (including finance lease obligations), $4.0 million in working capital adjustments associated with the sale of the Distribution business and the write-off of the $4.0 million note receivable associated with the sale of the UK Tooling business as it was deemed not likely to be collected. Additionally, in 2019, the Company repurchased a K-MAX® aircraft from a customer who was simultaneously purchasing a new aircraft to support the development of the Company's unmanned aircraft system. The repurchased aircraft was used to settle a portion ($3.1 million) of the purchase price on the customer's new K-MAX® aircraft. Non-cash financing activities in 2019 include an adjustment to other comprehensive income related to the underfunding of the pension and SERP plans. The total net adjustment was $8.9 million, net of tax of $2.6 million. Additionally, non-cash financing activities in 2019 include $5.6 million of dividends declared but not yet paid and an accrual of $1.7 million for purchases of treasury shares.

Non-cash investing activities in 2018 include an accrual of $2.9 million for purchases of property and equipment (including capital lease obligations) and a note receivable with a present value of $2.5 million for the amounts to be collected associated with the sale of the UK Tooling business. Non-cash financing activities in 2018 include 114,778 common shares issued for the unwind of warrant transactions associated with the 2017 Notes during the first half of 2018 that had a value of approximately $7.6 million. Other non-cash financing activities in 2018 include an adjustment to other comprehensive income related to the underfunding of the pension and SERP plans and changes in the fair value of derivative financial instruments that qualified for hedge accounting. The total net adjustment was $11.6 million, net of tax of $3.7 million. Additionally, non-cash financing activities in 2018 include $5.6 million of dividends declared but not yet paid.

The Company describes its pension obligations in more detail in Note 17, *Pension Plans*. The Company describes the convertible notes transactions in more detail in Note 14, *Debt.*

Revenue Recognition

Under Accounting Standard Codification ("ASC") 606, the amount of revenue recognized for any goods or services reflects the consideration that the Company expects to be entitled to receive in exchange for these goods or services. To achieve this core principle, the Company applies the following five step approach: (1) identify the contract with a customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to performance obligations in the contract; and (5) recognize revenue when or as a performance obligation is satisfied.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Revenue Recognition - continued

A contract is accounted for when there has been approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable. Performance obligations under a contract are identified based on the goods or services that will be transferred to the customer that are both capable of being distinct and are distinct in the context of the contract. In certain instances, the Company has concluded distinct goods or services should be accounted for as a single performance obligation when they are a series of distinct goods or services that have the same pattern of transfer to the customer. To the extent a contract includes multiple promised goods or services, the Company must apply judgment to determine whether the customer can benefit from the goods or services either on their own or together with other resources that are readily available to the customer (the goods or services are distinct) and if the promise to transfer the goods or services to the customer is separately identifiable from other promises in the contract (the goods or services are distinct in the context of the contract). If these criteria are not met, the promised services are accounted for as a single performance obligation. The transaction price is determined based on the consideration that the Company will be entitled to in exchange for transferring goods or services to the customer. To the extent the transaction price includes variable consideration, the Company estimates the amount of variable consideration that should be included in the transaction price, generally utilizing the most likely amount method. Determining the transaction price requires significant judgment. If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price basis. Standalone selling price is determined by the price at which the performance obligation is sold separately. If the standalone selling price is not observable through past transactions, the Company estimates the standalone selling price by taking into account available information such as market conditions and internally approved pricing guidelines related to the performance obligations. Performance obligations are satisfied either over time or at a point in time as discussed in further detail below. In addition, the Company's contracts with customers generally do not include significant financing components or non-cash consideration.

In certain instances, the Company has accounted for contracts using the portfolio approach, a practical expedient permissible under the standard. The determination of when the use of the portfolio approach is appropriate requires judgment from management based on consideration of all the facts and circumstances. The Company uses the portfolio approach when the effect of accounting for a group of contracts or a group of performance obligations would not differ materially from considering each contract or performance obligation separately. This determination requires the use of estimates and assumptions that reflect the size and composition of the portfolio. The Company primarily uses the portfolio approach for its commercial and defense bearings and structures businesses. The Company's primary criteria considered when using the portfolio approach is the commonality of economic factors, which generally follow the product type based on consistent production costs and standard pricing for the products.

The majority of long-term contracts were historically accounted for under the percentage-of-completion method using units-of-delivery as a measurement basis. Many of these contracts moved to an over time revenue model under ASC 606. For example, revenue for the Company's JPF program with the U.S. Government ("USG") moved from percentage-of-completion using units-of-delivery as the measurement basis to the over time revenue recognition model using input costs as the basis for recognizing progress to completion. Conversely, revenue for the K-MAX® program moved from cost-to-cost revenue recognition under percentage-of-completion accounting to the point-in-time method, with revenue on these aircraft being recognized upon acceptance by the end customer. For certain programs, early-contract unit costs in excess of the average expected cost over the life of the contract and contractually recoverable general and administrative costs were previously capitalized and amortized over the period of performance of the contract. With the adoption of ASC 606, $32.5 million of previously capitalized deferred costs in excess of the contract average and previously contractually recoverable general and administrative costs were adjusted within the cumulative effect to retained earnings and have not been amortized into earnings after January 1, 2018.

To determine the appropriate revenue recognition model for long-term contracts, the Company evaluates whether a contract exists, considering whether multiple contracts should be combined as one single contract and then whether the contract should be accounted for as more than one performance obligation. This evaluation requires significant judgment, as these decisions could change the amount of revenue and profit recorded in a given period. For certain programs, the Company may promise to provide distinct goods or services within a contract, in which case these are separated into more than one performance obligation.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Revenue Recognition - continued

For certain programs, the Company recognizes revenue over time because of continuous transfer of control to the customer. For USG contracts, this continuous transfer of control to the customer is supported by clauses in the contract that provide lien rights to the customer over the work in progress, thereby control transfers as costs are incurred. For non-USG contracts, the customer typically controls the work in progress because the Company is producing products that do not have an alternative use to the Company and where contractual termination clauses provide the Company rights to payment for work performed to date plus a reasonable profit.

Revenue is recognized based on the extent of progress towards completion of the performance obligation. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. The Company generally uses the cost-to-cost measure of progress for its contracts because it best depicts the transfer of assets to the customer which occurs as cost is incurred under the contracts. Under the cost-to-cost method, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenues, including estimated fees or profits, are recorded proportionally as costs are incurred. Total estimated contract costs generally include labor, materials and subcontractors' costs, other direct costs and related overhead costs. These estimates also include the estimated cost of satisfying offset obligations, as required under certain contracts. The complexity of certain programs as well as technical risks and uncertainty as to the future availability of materials and labor resources could affect the Company's ability to accurately estimate future contract costs.

For contracts that recognize revenue over time, the Company performs detailed quarterly reviews of the progress and execution of its performance obligations under these contracts. As part of this process, management reviews information including, but not limited to, any outstanding key contract matters, progress towards completion and the related program schedule, identified risks and opportunities and the related changes in estimates of revenues and costs. The risks and opportunities include management's judgment about the ability and cost to achieve the schedule (e.g. the number and type of milestone events), technical requirements (e.g., a newly-developed product versus a mature product) and other contract requirements. Management must make assumptions and estimates regarding labor productivity and availability, the complexity of the work to be performed, the availability of materials, the length of time to complete the performance obligation (e.g. to estimate increases in wages and prices for materials and related support cost allocations), execution by subcontractors, the availability and timing of funding from customers and overhead cost rates, among other variables. Based upon these reviews, the Company will record the effects of adjustments in profit estimates each period. If at any time management determines that in the case of a particular contract total costs will exceed total contract revenue, a provision for the entire anticipated contract loss is recorded at that time. The Company recognized a reduction in revenue of $7.0 million in the year ended December 31, 2020 due to a change in profit estimates. This decrease was primarily related to cost growth on a certain legacy fuzing contract and certain structures contracts, partially offset by favorable cost performance on the JPF contract with the USG. The Company recognized a reduction in revenue in the year ended December 31, 2019 of $4.6 million due to a change in profit estimates. This decrease was primarily related to cost growth on the SH-2G program with Peru, a certain legacy fuzing contract and certain structures contracts, partially offset by favorable cost performance on the JPF contract with the USG. The amount of revenue recognized in the year ended December 31, 2018 from performance obligations satisfied (or partially satisfied) in previous periods was $6.7 million. This amount primarily related to changes in the estimates of the stages of completion of certain contracts, more specifically the JPF contract with the USG and the AH-1Z contract.

Due to the nature of the work required to be performed on many of the Company's performance obligations, the estimation of total revenue and cost at completion is complex, subject to many variables and requires significant judgment. From time-to-time the Company enters into long-term contracts with the USG and other customers that contain award fees, incentive fees or other provisions that can either increase or decrease the transaction price. These variable amounts generally are awarded upon achievement of certain performance metrics, program milestones or cost targets and can be based upon customer discretion. The Company estimates variable consideration at the most likely amount to which it expects to be entitled. Estimated amounts are included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the Company's anticipated performance and all information (historical, current and forecasted) that is reasonably available. The Company does not include financing components as variable consideration if less than one year. At December 31, 2020, the Company did not have any significant financing components.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Revenue Recognition - continued

Contracts are often modified to account for changes in contract specifications and requirements. The Company considers contract modifications to exist when the modification either creates new or makes changes to the existing enforceable rights and obligations. Contract modifications for goods or services that are not distinct from the existing contract are accounted for as if they were part of that existing contract. In these cases, the effect of the contract modification on the transaction price and the measure of progress for the performance obligation to which it relates is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis, except when such modifications relate to a performance obligation that is a series of substantially the same distinct goods or services. If the modification relates to a performance obligation for a series of substantially the same distinct goods or services, the modification is treated prospectively. Contract modifications for goods or services that are considered distinct from the existing contract are accounted for as separate contracts. The Company applied the practical expedient for any contracts that were modified prior to January 1, 2018; therefore, the contracts were not restated retrospectively for those modifications.

For other contracts, excluding the long-term contracts discussed above, the method of revenue recognition remained substantially the same under ASC 606. For these contracts, revenue is primarily recognized at the point in time when the title transfers to the customer, as this is when the performance obligation is controlled by the customer. Additionally, a small percentage of revenue related to certain contracts for repairs and overhauls is accounted for over time under ASC 606. Under these contracts, revenue is generally recognized as work is performed in proportion to the actual costs incurred as compared to total estimated contract costs.

Cost of Sales and Selling, General and Administrative Expenses

Cost of sales includes costs of products and services sold (i.e., purchased product, raw material, direct labor, engineering labor, outbound freight charges, depreciation and amortization, indirect costs and overhead charges). Selling expenses primarily consist of advertising, promotion, bid and proposal, employee payroll and corresponding benefits and commissions paid to sales and marketing personnel. General and administrative expenses primarily consist of employee payroll including executive, administrative and financial personnel and corresponding benefits, incentive compensation, independent research and development, consulting expenses, warehousing costs, depreciation and amortization. Legal costs are expensed as incurred and are generally included in general and administrative expenses. The Company previously included general and administrative expenses as an element of program cost and inventory for certain government contracts prior to the adoption of ASC 606.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, demand deposits and short-term cash investments. These investments are liquid in nature and have original maturities of three months or less. The Company's cash and cash equivalents at December 31, 2020 and 2019 included $51.5 million and $443.2 million of Level 1 (quoted prices in active markets for identical assets or liabilities) money market funds.

On January 3, 2020, the Company acquired all of the equity interests of Bal Seal. Upon closing, the Company funded $24.7 million associated with Bal Seal's employee retention plans into escrow accounts. This amount and related interest was included in restricted cash on the Company's Consolidated Balance Sheets as of December 31, 2020. Eligible participants received an allocation of the escrow balance one year following the acquisition date.

Bank overdraft positions, which occur when total outstanding issued checks exceed available cash balances at a single financial institution at the end of a reporting period, are reclassified to other current liabilities within the consolidated balance sheets. At December 31, 2020 and 2019, the Company had bank overdrafts of $1.6 million included in other current liabilities.

Accounts Receivable

The Company has three types of accounts receivable: (a) Trade receivables, which consist of amounts billed and currently due from customers; (b) USG contracts, which consist of (1) amounts billed, and (2) costs and accrued profit – not billed; and (c) Commercial and other government contracts, which consist of (1) amounts billed, and (2) costs and accrued profit – not billed. The Company's receivables, net, consist of amounts billed and currently due from customers. The amounts due are stated at their net estimated realizable value.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Accounts Receivable - continued

The allowance for doubtful accounts reflects management's best estimate of probable losses inherent in the trade accounts receivable and billed contracts balance. Management performs ongoing evaluations of its customers' current creditworthiness, as determined by the review of their credit information to determine if events have occurred subsequent to the recognition of revenue and the related receivable that provide evidence that such receivable will be realized in an amount less than that recognized at the time of sale. Estimates of credit losses are based on historical losses, current economic conditions, geographic considerations, and in some cases, evaluating specific customer accounts for risk of loss.

Contract Assets

The Company's contract assets include unbilled amounts typically resulting from sales under long-term contracts when the cost-to-cost method of revenue recognition is applied and revenue recognized exceeds the amount billed to the customer, and right to payment is not just subject to the passage of time. Amounts do not exceed their net realizable value. Contract assets are generally classified as current as such amounts are billable and collectible within twelve months.

Contract Costs

Contract costs consist of costs to obtain and fulfill a contract. Costs to fulfill a contract primarily consist of nonrecurring engineering costs incurred at the start of a new program for which such costs are expected to be recovered under existing and future contracts. Such costs are amortized over the estimated revenue amount of the contract. Costs to obtain a contract consist of commissions and agent fees paid in connection with the award of a contract. If these costs are determined to have an amortization period of less than one year, the Company applies the practical expedient and the related costs are expensed as incurred. If the amortization period is determined to be greater than a year and the incremental costs to obtaining the contract qualify as an asset, then the contract costs are recorded and amortized over the estimated contract revenue.

Inventories

The Company has the following types of inventory: (a) raw materials, (b) contracts in process and other work in process, and (c) finished goods. Raw material includes certain general stock materials but primarily relates to purchases that were made in anticipation of specific programs for which production has not been started as of the balance sheet date. Raw materials are stated at the lower of the cost of the inventory or its fair market value. Contracts in process and other work in process and finished goods are valued at production cost represented by raw material, labor and overhead. Contracts in process and other work in process and finished goods are not reported at amounts in excess of net realizable values.

Property, Plant and Equipment

Property, plant and equipment is recorded at cost. Depreciation is computed primarily on a straight-line basis over the estimated useful lives of the assets. The estimated useful lives for buildings generally range from 15 to 40 years and for leasehold improvements range from 1 to 20 years, whereas machinery, office furniture and equipment generally have useful lives ranging from 3 to 15 years. At the time of retirement or disposal, the acquisition cost of the asset and related accumulated depreciation are eliminated and any gain or loss is credited to or charged against income.

Long-lived assets, such as property, plant and equipment and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by an asset to the carrying value of the asset. If the carrying value of the long-lived asset is not recoverable on an undiscounted cash flow basis, impairment is recognized to the extent that the carrying value exceeds its fair value. Fair value is determined through various valuation techniques including discounted cash flow models, quoted market values and third-party independent appraisals, as considered necessary.

Maintenance and repair items are charged against income as incurred, whereas renewals and betterments are capitalized and depreciated.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Leasing

On January 1, 2019, the Company adopted ASC 842, Leases. Under ASC 842, the Company determines if a contract contains a lease at the inception date of the contract. To determine if the contract contains a lease, the Company evaluates if there is an identified asset in the contract and if the Company has control over the use of the identified asset. There is an identified asset in the contract if the asset is explicitly or implicitly specified in the contract, the asset is physically distinct or the Company has the right to receive substantially all of the asset's capacity, and if the supplier does not have substantive substitution rights. The Company has control over the use of the identified asset if the Company obtains substantially all economic benefits from the use of the asset and can direct the use of the asset. The Company applied the practical expedient for any contracts that existed prior to January 1, 2019; therefore, the contracts were not reassessed to determine if they contain leases.

The Company must classify each lease as a finance lease or an operating lease. A lease is classified as a finance lease if the Company will own the asset by the end of the lease term, the Company is reasonably certain to exercise the purchase option, the lease term covers a major part of the asset's economic life, the sum of the present value of the lease payments and the present value of the residual value guarantee not included in the lease payments equal or exceed substantially all of the fair value of the underlying asset at lease commencement or if the lessor has no alternative use for the asset. If any of these criteria are not met, the lease is classified as an operating lease. The Company applied the practical expedient for any leases that existed prior to January 1, 2019; therefore, the lease classifications of existing leases were not reassessed (all existing leases classified as operating leases under ASC 840 were classified as operating leases under ASC 842 on January 1, 2019 and all existing leases classified as capital leases under ASC 840 were classified as finance leases under ASC 842 on January 1, 2019).

The Company's operating leases consist of rent commitments under various leases for office space, warehouses, land and buildings at varying dates from January 2021 to December 2024. The terms of most of these leases are in the range of 3 to 8 years, with certain leases renewable for varying periods and certain leases including options to terminate the leases. While some of the Company's leases include options allowing early termination of the lease, the Company historically has not terminated its lease agreements early unless there is an economic, financial or business reason to do so. It is expected that in the normal course of business leases that expire will be renewed or replaced by leases on other similar property. Some of the Company's leases have fixed amount rent escalations or contingent rent that are recognized on a straight-line basis over the entire lease term. Material leasehold improvements and other landlord incentives are amortized over the shorter of their economic lives or the lease term, including renewal periods, if reasonably assured. Substantially all real estate taxes, insurance and maintenance expenses associated with leased facilities are obligations of the Company. The terms for most machinery and equipment leases range from 3 to 5 years.

The Company's finance leases are included in machinery, office furniture and equipment and construction in process. The terms of these leases are 5 years. Amortization of these assets is included in depreciation and amortization expense.

At the commencement date, the right-of-use asset and lease liability are recorded to the Company's Consolidated Balance Sheets when the Company obtains control of the use of the asset. Right-of-use assets represent the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make payments upon entering into a lease agreement. The initial measurement of the lease liability is equal to the present value of the unpaid lease payments. Subsequent to the initial measurement, the lease liability continues to be measured at the present value of unpaid lease payments throughout the lease term. The lease liability is remeasured if the lease is modified and the modification is not accounted for as a separate contract, there is a change in the assessment of the lease term, the assessment of a purchase option exercise or the amount probable of being owed under a residual value guarantee, or a contingency is resolved resulting in some or all of the variable lease payments becoming fixed payments. The initial measurement of the right-of-use asset is equal to the total of the initial measurement of the lease liability, incremental costs to obtain the lease and prepaid lease payments, less any lease incentives received. Subsequent to the initial measurement, the right-of-use asset for a finance lease is equivalent to the initial measurement less accumulated amortization and any accumulated impairment losses. Generally, amortization of finance leases is recorded to cost of sales on a straight-line basis over the lease term. Subsequent to initial measurement, the right-of-use asset for an operating lease is equivalent to initial measurement less accumulated amortization (the difference between the straight-line lease cost for the period and the accretion of the lease liability using the effective interest method). The Company has elected not to apply the recognition requirements of ASC 842 to short-term leases (leases that, at the commencement date, have a lease term of twelve months or less and do not include an option to purchase the underlying asset that the lessee is reasonably certain to exercise) as permissible under the standard. For short-term leases, the Company recognizes lease payments on a straight-line basis and variable payments in the period in which the obligation for those payments is incurred.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Leasing - continued

Leasing contracts can be separated into lease components, non-lease components and items that are not components of the contract (items that do not transfer a good or service to the Company). Two or more contracts may be combined if at least one of which is or contains a lease entered into or near the same time with the same counterparty and consider the contracts as a single transaction if the contracts are negotiated as a package with the same objective, the amount of consideration to be paid in one contract depends on the price of performance of the other contract or the rights to use the underlying assets conveyed in the contracts are a single lease component. Lease components are considered separate if the Company can benefit from the right to use either on its own or together with other resources readily available to the Company and the right to use is not highly dependent or highly interrelated with the other rights to use the underlying assets in the contract. Consideration in the contract is allocated only to lease and non-lease components of a contract. The Company has elected the practical expedient allowing the Company to combine lease and non-lease components by class as a single lease component for its real estate leases. Nonlease components for the Company's vehicles and other equipment leases are not material.

The lease term is the noncancellable period for which a lessee has the right to use an underlying asset, including periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option and periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. For renewal options, the Company performs an assessment at commencement if it is reasonably likely to exercise the option. The assessment is based on the Company's intentions, past practices, estimates and factors that create an economic incentive for the Company. Generally, the Company is not reasonably certain to exercise the renewal option in a lease contract as it performs an assessment for most real estate leases within six months prior to termination comparing the renewal rents under the option with the fair market returns for equivalent property under similar terms and conditions. Although the Company does not historically change locations often, it is not reasonably certain the Company will exercise the renewal option; therefore, the periods covered by the renewal option are not typically included in the lease term at commencement. While some of the Company's leases include options allowing early termination of the lease, the Company historically has not terminated its lease agreements early unless there is an economic, financial or business reason to do so; therefore, the Company does not typically consider the termination option in its lease term at commencement.

Consideration in the contract is the sum of lease payments relating to the use of the underlying asset, fixed payments and other in-substance fixed payments, less any incentives received. Remeasurement of variable lease payments based on an index is only required if remeasurement is required for another reason, such as a change in lease term or change in estimates of probable payments under residual value guarantees. If remeasured, the remeasurement date becomes the new date for updating the payments based on the index.

The Company uses the discount rate implicit in a lease contract, if available. As most of the Company's leases do not provide an implicit rate, the Company uses the incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. For any leases that existed prior to the adoption of the standard, the Company used the incremental borrowing rate as of January 1, 2019 based on the type of asset and term of the lease. The Company separated its real estate leases by classes of lease terms and used the incremental borrowing rate consistent with its lease term class to determine the present value of lease payments. As most of the Company's vehicles had a four-year lease term at the point of the adoption of the standard, the Company used the incremental borrowing rate consistent with a four-year lease term for all vehicles. For all other equipment leases, the Company used the incremental borrowing rate consistent with a five-year lease term as the majority of the Company's leases for other equipment had a five-year lease term at the point of the adoption of the standard.

Goodwill and Other Intangible Assets

Goodwill represents the excess of the aggregate purchase price over the fair value of the net identifiable assets acquired in a purchase business combination and is reviewed for impairment at least annually.

ASC Topic 350, "Intangibles - Goodwill and Other," ("ASC 350") permits the assessment of qualitative factors to determine whether events and circumstances lead to the conclusion that it is necessary to perform the quantitative goodwill impairment test required under ASC 350. The qualitative assessment management performs takes into consideration the following factors: general economic conditions, industry specific performance, changes in carrying values of the reporting units or asset groups, the assessment of assumptions used in the previous fair value calculation and changes in transaction multiples.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Goodwill and Other Intangible Assets - continued

In the quantitative goodwill impairment test, the fair value of the reporting unit is compared with its carrying value (including goodwill). If the fair value of the reporting unit is less than its carrying value, an impairment charge is recognized for the amount by which the carrying amount exceeds the reporting unit's fair value, assuming the loss recognized does not exceed the total amount of goodwill for the reporting unit. Fair value of the reporting unit is determined using an income methodology based on management's estimates of forecasted cash flows for each reporting unit, with those cash flows discounted to present value using rates commensurate with the risks associated with those cash flows. In addition, management uses a market-based valuation method involving analysis of market multiples of revenues and earnings before interest, taxes, depreciation and amortization ("EBITDA") for (i) a group of comparable public companies and (ii) recent transactions, if any, involving comparable companies.

Goodwill and intangible assets with indefinite lives are evaluated annually for impairment in the fourth quarter, based on annual forecast information. Intangible assets with finite lives are amortized over their estimated period of benefit. Goodwill and other intangible assets are reviewed for possible impairment whenever changes in conditions indicate that the fair value of a reporting unit is more likely than not below its carrying value. During the third quarter of 2020, the Company identified a triggering event for possible impairment for the Aerosystems reporting unit based on a decline in earnings compared to forecasts used in prior periods and updated forecasts, which indicated the forecasted cash flows for this reporting unit were lower than amounts previously forecasted. Management performed a quantitative analysis on the Aerosystems reporting unit using an income methodology based on estimates of forecasted cash flows, with those cash flows discounted to present value using rates commensurate with the risks associated with those cash flows. In addition, management used a market-based valuation method involving analysis of market multiples of revenues and earnings before interest, taxes, depreciation and amortization ("EBITDA") for (i) a group of comparable companies and (ii) recent transactions, if any, involving comparable companies. The quantitative analysis resulted in a conclusion that the fair value of the Aerosystems reporting unit was $56.1 million below its carrying value. In the year ended December 31, 2020, the Company recorded a goodwill impairment charge of $50.3 million for the Aerosystems reporting unit, which represented the entire goodwill balance for the reporting unit. No such charges were recorded in 2019 or 2018.

In the fourth quarter of 2020, the Company committed to a plan and received approval from its Board of Directors to sell its UK Composites division. At December 31, 2020, the assets of the UK Composites business were considered impaired as the estimated fair value of the disposal group was lower than the estimated carrying value of the UK Composites business. As a result, $24.3 million in assets were written off and the remaining loss related to the anticipated sale of the disposal group of $12.0 million was accrued for in liabilities held for sale, current portion on the Company's Consolidated Balance Sheets, resulting in a total loss of $36.3 million recorded to impairment on assets held for sale on the Company's Consolidated Statements of Operations in the year ended December 31, 2020. Of this amount, $22.9 million relates to the cumulative translation adjustment balance for the UK Composites division. Subsequent to the end of the year, the Company sold its UK Composites business in a transaction that closed on February 2, 2021.

During the third quarter of 2018, management identified a triggering event for possible impairment at a certain asset group in its UK business based on a review of historical performance, the current forecast for the remainder of the year and the loss of future orders from one of its significant customers, requiring the Company to evaluate the intangible assets for impairment. The Company performed a recoverability test by comparing the undiscounted cash flows of the asset group to its carrying value, and the estimated future cash flows of the business did not exceed the carrying value of the assets. Based on these results, the Company calculated the fair value of the asset group using an income approach, which resulted in an other intangible assets impairment charge of $10.0 million, or the remaining balance of the customer lists/relationships at a certain asset group within the U.K. business. No such charges were recorded in 2019.

Debt

The Company relies on bank financing as an important source of liquidity for its business activities. Outstanding debt is classified as current or long-term based on the maturity of the Company's financing arrangements. Current and long-term debt balances are reported net of debt issuance costs. See Note 14, *Debt*, for further information on the Company's financing arrangements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Contract Liabilities

The Company's contract liabilities consist of advance payments and billings in excess of revenue recognized and deferred revenue. Advance payments and billings in excess of revenue recognized are classified as current or noncurrent based on the timing of when recognition of revenue is expected.

Unfulfilled Performance Obligations

Unfulfilled performance obligations ("backlog") represents the transaction price of firm orders for which work has not been performed and excludes unexercised contract options and potential orders under ordering-type contracts. As of December 31, 2020, the aggregate amount of the transaction price allocated to backlog was $631.2 million. The Company expects to recognize revenue on approximately $449.4 million of this amount over the next 12 months, with the remaining amount to be recognized thereafter. At December 31, 2019, the aggregate amount of the transaction price allocated to backlog was $806.9 million.

Self-Insured Retentions

To limit exposure to losses related to group health, workers' compensation, auto and product general liability claims, the Company obtains third-party insurance coverage. The Company has varying levels of deductibles for these claims. The total liability/deductible for group health is limited to $0.3 million per claim, workers' compensation is limited to $0.4 million per claim and for product/general liability the limit is $0.3 million per claim. The Company pays a fixed premium for its auto liability policy; therefore, there is no deductible on claims. The cost of such benefits is recognized as expense based on claims filed in each reporting period and an estimate of claims incurred but not reported ("IBNR") during such period. The estimates for the IBNR are based upon historical trends and information provided to us by the claims administrators, and are periodically revised to reflect changes in loss trends. These amounts are included in other current liabilities on the Consolidated Balance Sheets.

Liabilities associated with these claims are estimated in part by considering historical claims experience, severity factors and other actuarial assumptions. Projections of future losses are inherently uncertain because of the random nature of insurance claim occurrences and the potential for differences between actual developments and actuarial assumptions. Such self-insurance accruals will likely include claims for which the ultimate losses will be settled over a period of years.

Research and Development

Customer funded research expenditures (which are included in cost of sales) were $0.1 million in 2020, $0.6 million in 2019 and $1.8 million in 2018. Research and development costs not specifically covered by contracts are recognized as expense as incurred and included in selling, general and administrative expenses. Such costs amounted to $14.1 million, $11.6 million and $9.1 million in 2020, 2019 and 2018, respectively.

Income Taxes

Income taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss, capital loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates was recognized in income in the period that includes the enactment date. The deferred income taxes were significantly impacted by the enactment of the Tax Cuts and Jobs Act of 2017 ("Tax Reform"), as further discussed in Note 16, *Income Taxes*. The adjustments to deferred income taxes resulted in stranded tax effects of items within accumulated other comprehensive income. In 2019, the Company elected to reclassify the stranded tax effects to retained earnings from accumulated other comprehensive income using the item-by-item approach.

The Company records a benefit for uncertain tax positions in the financial statements only when it determines it is more likely than not that such a position will be sustained upon examination by taxing authorities based on the technical merits of the position. Unrecognized tax benefits represent the difference between the position taken in the tax return and the benefit reflected in the financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Share-Based Payment Arrangements

The Company records compensation expense for share-based awards based upon an assessment of the grant date fair value of the awards. The fair value of each option award is estimated on the date of grant using the Black-Scholes option valuation model. A number of assumptions are used to determine the fair value of options granted. These include expected term, dividend yield, volatility of the options and the risk free interest rate. See Note 22, *Share-Based Arrangements,* for further information.

Environmental Remediation

The Company is subject to environmental regulation by federal, state and local authorities in the United States and regulatory authorities with jurisdiction over its foreign operations. When the Company becomes aware of environmental risk, it performs a site study to ascertain the potential magnitude of contamination and the estimated cost of remediation. Environmental costs are accrued when it is probable that a liability has been incurred and the amount can be reasonably estimated. The most likely cost to be incurred is accrued based on an evaluation of currently available facts with respect to each individual site. Conditions of the site must be monitored throughout the remediation process as numerous factors could affect the estimated liability. The Company evaluates the identified environmental issues to ensure the time to complete the remediation and the total cost of remediation are consistent with the initial estimate. If there is any change in the cost and/or timing of remediation, the accrual is adjusted accordingly. See Note 13, *Environmental Costs*, and Note 19, *Commitments and Contingencies*, for further information.

Derivative Financial Instruments

The Company is exposed to certain risks relating to its ongoing business operations, including market risks relating to fluctuations in foreign currency exchange rates and interest rates. Derivative financial instruments are recognized on the Consolidated Balance Sheets as either assets or liabilities and are measured at fair value. Changes in the fair values of derivatives are recorded each period in earnings or accumulated other comprehensive income, depending on whether a derivative is effective as part of a hedged transaction. Gains and losses on derivative instruments reported in accumulated other comprehensive income are subsequently included in earnings in the periods in which earnings are affected by the hedged item. The Company does not offset fair value amounts of derivative instruments. The Company does not use derivative instruments for speculative purposes. See Note 9, *Derivative Financial Instruments*, for further information.

Pension Accounting

The Company accounts for its defined benefit pension plan by recognizing the overfunded or underfunded status of the plan, calculated as the difference between the plan assets and the projected benefit obligation, as an asset or liability on the balance sheet, with changes in the funded status recognized in comprehensive income in the year in which they occur.

Expenses and liabilities associated with the plan are determined based upon actuarial valuations. Integral to the actuarial valuations are a variety of assumptions including expected return on plan assets and discount rate. The Company regularly reviews the assumptions, which are updated at the measurement date, December 31st. The impact of differences between actual results and the assumptions are accumulated and generally amortized over future periods, which will affect expense recognized in future periods. The service cost component of net benefit cost is recorded in cost of sales and selling, general and administrative expenses separately from the other components of net benefit cost, which are recorded to non-service pension and postretirement benefit income. See Note 17, *Pension Plans*, for further information.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Recent Accounting Standards

Recent Accounting Standards Adopted

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("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 objective of the standard update is to provide additional guidance on the accounting for costs of implementation activities performed in a cloud computing arrangement that is a service contract to address the diversity in practice. The ASU requires an entity in a hosting arrangement that is a service arrangement to determine which costs to capitalize as an asset related to a service contract and which costs to expense, and to determine which project stage implementation activities relate to. Costs for implementation activities in the application development stage are capitalized depending on the nature of the costs, while costs incurred during the preliminary project and post-implementation stages are expensed as the activities are performed. Capitalized implementation costs of a hosting arrangement are expensed over the term of the hosting arrangement in the same line item in the statement of operations as the fees associated with the hosting element of the arrangement. The standard update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2019. Early adoption was permitted. The amendments in this standard update should be applied either retrospectively or prospectively to all implementation costs incurred after the inception date. The Company has elected to adopt the standard update prospectively. The adoption of this standard update did not have a material impact on the Company's consolidated financial statements.

In August 2018, the FASB issued ASU 2018-14, "Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20) - Disclosure Framework - Changes to Disclosure Requirements for Defined Benefit Plans". The objective of the standard update is to improve the effectiveness of disclosure requirements for defined benefit pension and other post-retirement plans. This standard update removes disclosures that are no longer considered cost beneficial, clarifies specific requirements of disclosures and adds new disclosure requirements identified as relevant. The standard update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2020. The Company early adopted this standard update, which is permissible under the ASU. The adoption of this standard update did not have a material impact on the Company's consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, "Fair Value Measurement (Topic 820) - Disclosure Framework - Changes to Disclosure Requirements for Fair Value Measurement". The objective of this standard update is to improve the effectiveness of disclosures for recurring and nonrecurring fair value measurements. This standard update removes certain disclosure requirements that are no longer considered cost beneficial, modifies existing disclosure requirements and adds new disclosure requirements identified as relevant. The standard update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2019. Early adoption was permitted. An entity was permitted to early adopt any removed or modified disclosures upon issuance of the ASU and delay adoption of the additional disclosures until the effective date. The adoption of this standard update 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 objective of this standard update is to simplify the subsequent measurement of goodwill, eliminating Step 2 from the goodwill impairment test. Under this ASU, an entity should perform its annual goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity would recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, assuming the loss recognized does not exceed the total amount of goodwill for the reporting unit. The standard update is effective for fiscal years beginning after December 15, 2019. Early adoption was permitted. The Company adopted this accounting standard for the year ended December 31, 2020. During the third quarter of 2020, the Company recognized a goodwill impairment charge for its Aerosystems reporting unit. The carrying amount exceeded the reporting unit's fair value by $56.1 million; therefore, the Company recorded a goodwill impairment charge of $50.3 million, which represented the entire goodwill balance for the reporting unit.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Recent Accounting Standards - continued

Recent Accounting Standards Adopted - continued

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments". The objective of this standard update is to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. The amendments in this ASU replace the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The standard update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2019. Early adoption was permitted. An entity will apply the amendments in this ASU through a cumulative-effect adjustment to retained earnings as of the first reporting period in which the guidance is effective. The adoption of this standard update did not have a material impact on the Company's consolidated financial statements.

Subsequent to the issuance of ASU 2016-13, the FASB has issued the following updates: ASU 2018-19, "Codification Improvements to Topic 326, Financial Instruments - Credit Losses", ASU 2019-04, "Codification Improvements to Topic 326, Financial Instruments - Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments", ASU 2019-05, "Financial Instruments - Credit Losses (Topic 326) - Targeted Transition Relief", ASU 2020-02, "Financial Instruments - Credit Losses (Topic 326) and Leases (Topic 842)" and ASU 2020-03, "Codification Improvements to Financial Instruments". The amendments in these updates affect the guidance within ASU 2016-13 and have been assessed with ASU 2016-13.

Recent Accounting Standards Yet to be Adopted

In August 2020, the FASB issued ASU 2020-06, "Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity’s Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity". The objective of this standard update is to simplify the accounting for certain financial instruments with characteristics of liabilities and equity. The update removes certain separation models between a debt component and equity or derivative component for certain convertible instruments, adds new disclosure requirements for convertible instruments to improve the decision usefulness and relevance of the information being provided to users of financial statements, clarifies the guidance for determining whether a contract qualifies for a scope exception from derivative accounting, and amends EPS guidance to improve consistency. The standard update is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2021. Early adoption of the standard is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. An entity should adopt the guidance as of the beginning of its annual fiscal year and can do so using a modified retrospective method or fully retrospective method of transition. The Company is currently assessing the potential impact this standard update could have on its consolidated financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Recent Accounting Standards - continued

Recent Accounting Standards Yet to be Adopted - continued

In March 2020, the FASB issued ASU 2020-04, "Reference Rate Reform (Topic 848) - Facilitation of the Effects of Reference Rate Reform on Financial Reporting". The objective of the standard is to address operational challenges likely to arise in accounting for contract modifications and hedge accounting due to reference rate reform. The amendments in this ASU provide optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. The standard update is effective for all entities as of March 12, 2020 through December 31, 2022. An entity may elect to apply the amendments for contract modifications by topic or industry subtopic as of any date from the beginning of an interim period that includes or is subsequent to March 12, 2020, or prospectively from a date within an interim period that includes or is subsequent to March 12, 2020. Once elected for a topic or industry subtopic, the amendments in this standard update must be applied prospectively for all eligible contract modifications for that topic or industry subtopic. An entity may elect to apply the amendments for eligible hedging relationships existing as of the beginning of the interim period that includes March 12, 2020 and to new eligible hedging relationships entered into after the beginning of the interim period that includes March 12, 2020. If an entity elects to apply any of the amendments for an eligible hedging relationship existing as of the beginning of the interim period that includes March 12, 2020, any adjustments as a result of those elections must be reflected as of the beginning of that interim period. If an entity elects to apply any of the amendments for a new hedging relationship entered into between the beginning of the interim period that includes March 12, 2020 and March 12, 2020, any adjustments as a result of those elections must be reflected as of the beginning of the hedging relationship. The impact of the adoption of this standard update is dependent on the Company's contracts modifications as a result of reference rate reform; however, the Company does not expect the adoption of the amendments associated with hedging relationships to have a material impact on the Company's consolidated financial statements.

Subsequent to the issuance of ASU 2020-04, the FASB has issued the following update: ASU 2021-01, "Reference Rate Reform (Topic 848) - Scope". The amendments in this update affect the guidance within ASU 2020-04 and are being assessed with ASU 2020-04.

In December 2019, the FASB issued ASU 2019-12, "Income Taxes (Topic 740) - Simplifying the Accounting for Income Taxes". The objective of the standard is to simplify the accounting for income taxes by removing certain exceptions and to improve consistent application of Topic 740 by clarifying and amending existing guidance. The standard update is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. Early adoption of the standard is permitted, including adoption in any interim period for which financial statements have not yet been issued. If early adopted in an interim period, the adjustments should be reflected as of the beginning of the annual period that includes that interim period. All amendments under the standard must be adopted in the same period. The Company is currently assessing the potential impact this standard update could have on its consolidated financial statements.

2. DISCONTINUED OPERATIONS AND LIABILITIES HELD FOR SALE

Discontinued Operations

On August 26, 2019, the Company completed the sale of its Distribution business for total cash consideration of $700.0 million, excluding certain working capital adjustments. The sale of the Distribution business was a result of the Company's shift in strategy to be a highly focused, technologically differentiated aerospace and engineered products company. As a result of the sale, the Distribution segment met the criteria set forth in ASC 205-20, *Presentation of Financial Statements - Discontinued Operations* ("ASC 205-20") for discontinued operations.

2. DISCONTINUED OPERATIONS AND LIABILITIES HELD FOR SALE (CONTINUED)

Discontinued Operations - continued

Upon closing, the Company entered into a transition services agreement ("TSA") with the buyer, pursuant to which the Company agreed to support the information technology, human resources and benefits, tax and treasury functions of the Distribution business for six to twelve months. The buyer has exercised the option to extend the support period for up to a maximum of an additional year for certain IT services. The buyer has the right to terminate individual services at any point over the renewal term and began to terminate certain services in the third quarter of 2020. All services are expected be terminated by the end of the first quarter of 2021. Since the sale of the Distribution business, costs associated with the TSA were $17.2 million through December 31, 2020. The Company incurred $12.5 million and $4.7 million in costs associated with the TSA in 2020 and 2019, respectively, which was included in costs from transition services agreement on the Company's Consolidated Statement of Operations. Since the sale of the Distribution business, the Company earned $12.1 million in income associated with the TSA through December 31, 2020. The Company earned $8.4 million and $3.7 million in income associated with the TSA in 2020 and 2019, respectively, which was included in income from transition services agreement on the Company's Consolidated Statement of Operations.

Since the sale of the Distribution business, cash outflows from the Company to its former Distribution business totaled $8.1 million through December 31, 2020, which primarily related to Distribution employee and employee-related costs incurred prior to the sale. Cash outflows from the Company to its former Distribution business after the sale totaled $0.3 million and $7.8 million for the years ended December 31, 2020 and 2019, respectively. Since the sale of the Distribution business, cash inflows from the Company's former Distribution business to the Company totaled $16.9 million through December 31, 2020, which primarily related to cash received for services performed under the TSA and the $5.2 million working capital adjustment settled in the first quarter of 2020. Cash inflows from the Company's former Distribution business after the sale totaled $13.3 million and $3.6 million for the years ended December 31, 2020 and 2019, respectively.

The results of operations for the Company's former Distribution business were included in discontinued operations on the Company's Consolidated Statement of Operations. The following table provides information regarding the results of discontinued operations:

	For the Year Ended December 31,		
In thousands	2020	2019	2018
Net sales from discontinued operations	$ —	$ 748,451	$ 1,139,431
Cost of sales from discontinued operations	—	536,749	816,711
Gross profit from discontinued operations	—	211,702	322,720
Selling, general and administrative expenses from discontinued operations	—	177,475	272,633
Restructuring costs from discontinued operations	—	—	655
Net loss (gain) on sale of assets from discontinued operations	—	8	(669)
Operating income from discontinued operations	—	34,219	50,101
Interest expense, net from discontinued operations	—	25	51
Other income, net from discontinued operations	—	(12)	(51)
Earnings from discontinued operations before income taxes	—	34,206	50,101
Income tax expense	—	5,179	11,809
Earnings from discontinued operations before gain on disposal	—	29,027	38,292
Gain on disposal of discontinued operations, pretax	925	167,757	—
Income tax expense on gain on disposal	233	43,401	—
Gain on disposal of discontinued operations, net of tax	692	124,356	—
Earnings from discontinued operations, net of tax	$ 692	$ 153,383	$ 38,292

In the year ended December 31, 2020, the Company recorded a gain on disposal of discontinued operations as a result of the final settlement of the working capital adjustment, partially offset by transaction costs.

2. DISCONTINUED OPERATIONS AND LIABILITIES HELD FOR SALE (CONTINUED)

Discontinued Operations - continued

The following table provides information on the gain recorded on the sale of the Company's former Distribution business for 2019. These amounts reflect the closing balance sheet of its Distribution business upon the closing of the sale on August 26, 2019.

Net proceeds received from sale of Distribution[1]	$	659,934
Distribution assets		
Cash and cash equivalents	$	21,834
Accounts receivable, net		150,317
Contract assets		9,128
Inventories		163,995
Other current assets		20,289
Property plant and equipment, net of accumulated depreciation of $73,795		51,039
Operating right-of-use assets, net		68,049
Goodwill		149,204
Other intangible assets, net		28,361
Deferred income taxes		133
Other assets		195
Total Distribution assets	$	662,544
Distribution liabilities		
Accounts payable - trade	$	67,975
Accrued salaries and wages		12,916
Operating lease liabilities, current portion		19,981
Other current liabilities		22,024
Deferred income taxes		78
Operating lease liabilities, noncurrent portion		48,130
Other long-term liabilities		188
Total Distribution liabilities	$	171,292
Gain on sale of Distribution before income taxes	$	168,682

[1] The proceeds received from the sale of the Distribution business were included in net cash provided by (used in) investing activities of continuing operations on the Company's Consolidated Statement of Cash Flows. These proceeds were net of transaction costs of $33.4 million and working capital adjustments. The final consideration and gain on sale was settled in the first quarter of 2020.

2. DISCONTINUED OPERATIONS AND LIABILITIES HELD FOR SALE (CONTINUED)

Liabilities Held for Sale

In the fourth quarter of 2020, the Company received approval from its Board of Directors to sell its UK Composites division. Subsequent to the end of the year, the Company sold its UK Composites division in a transaction that closed on February 2, 2021.

The following table provides information on the accrued loss recorded on the anticipated sale of the UK Composites business for the year ended December 31, 2020. These amounts reflect the balance sheet of the UK Composites business as of December 31, 2020, prior to the impairment recorded on the assets and the reclassification of liabilities to liabilities held for sale, discussed below.

Estimated fair value	$	3,600
Assets		24,284
Liabilities		7,255
Net book value of business		17,029
UK cumulative foreign currency translation adjustment balance		22,856
Impairment on assets held for sale	$	36,285

At December 31, 2020, the assets of the UK Composites business were considered impaired as the estimated fair value of the disposal group was lower than the estimated carrying value of the UK Composites business. As a result, $24.3 million in assets were written off and the remaining loss of $12.0 million was accrued for in liabilities held for sale, current portion on the Company's Consolidated Balance Sheets at December 31, 2020, resulting in a total loss of $36.3 million recorded to impairment on assets held for sale on the Company's Consolidated Statements of Operations in the year ended December 31, 2020. Transaction costs associated with the anticipated sale are not expected to be material.

The sale of the UK Composites business did not meet the criteria set forth in ASC 205-20*,* for discontinued operations as it does not reflect a shift in the Company's strategy. As a result of the approved plan, the UK Composites division met the criteria set forth in ASC 205-20 for held for sale presentation. The related liabilities of the UK division to be sold were reclassified to liabilities held for sale, as of December 31, 2020 on the Company's Consolidated Balance Sheets. The following table is a summary of the liabilities held for sale:

In thousands		**December 31, 2020**
Liabilities		
Accounts payable – trade	$	2,977
Accrued salaries and wages		140
Operating lease liabilities, current portion		496
Contract liabilities, current portion		1,212
Other current liabilities[1]		13,261
Total liabilities held for sale, current portion		18,086
Operating lease liabilities, noncurrent portion		912
Other long-term liabilities		259
Total liabilities held for sale	$	19,257

[1] Other current liabilities primarily reflects the residual loss on the business related to the anticipated release of the cumulative translation adjustment upon disposal.

Cash and cash equivalents and restricted cash at the end of the period on the Company’s Consolidated Statement of Cash Flows for the year ended December 31, 2020 includes $6.6 million of cash that is included in the UK Composites business disposal group. However, given the assets of the disposal group are recognized net of the impairment charge, such amounts are not reflected on the Company’s Consolidated Balance Sheet at December 31, 2020.

3. BUSINESS COMBINATIONS

Bal Seal

On January 3, 2020, the Company acquired all of the equity interests of Bal Seal, of Foothill Ranch, California, at a purchase price of $317.5 million. Bal Seal is a leader in the design, development, and manufacturing of highly engineered products, including precision springs, seals, and contacts. With this acquisition, the Company has significantly expanded its portfolio of engineered products and offerings while creating new opportunities to reach customers in medical technology, aerospace and defense, and industrial end markets.

This acquisition was accounted for as a purchase transaction. The assets acquired and liabilities assumed were recorded based on their fair values at the date of acquisition as follows (in thousands):

Cash	$	10,953
Restricted cash		1,932
Accounts receivable		9,525
Contract assets		784
Inventories		13,500
Property, plant and equipment		81,997
Operating right-of-use asset		653
Other tangible assets		2,492
Goodwill		95,089
Other intangible assets		110,300
Liabilities		(9,679)
Net assets acquired		317,546
Less cash received		(12,885)
Net consideration	$	304,661

The goodwill associated with this acquisition is tax deductible and is the result of expected synergies from combining the operations of the acquired business with the Company's operations and intangible assets that do not qualify for separate recognition, such as an assembled workforce.

The fair value of the identifiable intangible assets of $110.3 million, consisting of customer relationships, developed technologies, trade name and acquired backlog, was determined using the income approach. Specifically, a multi-period, excess earnings method was utilized for the customer relationships and backlog and the relief-from-royalty method was utilized for the trade name and developed technologies. The fair value of the customer relationships, $70.1 million, is being amortized based on the economic pattern of benefit over periods ranging from 30 to 38 years; the fair value of the developed technologies, $25.5 million, is being amortized on a straight-line basis over periods ranging from 7 to 13 years; the fair value of the trade name, $11.9 million, is being amortized on a straight-line basis over a 40 year term; and the fair value of the acquired backlog, $2.8 million, was amortized on a straight-line basis over a period of 1 year. These amortization periods represent the estimated useful lives of the assets.

As of the acquisition date, Bal Seal had $1.9 million in costs accrued for its employee retention plans in other long term liabilities. Upon closing, the Company funded $24.7 million associated with these employee retention plans into escrow accounts. This amount and related interest was included in restricted cash on the Company's Consolidated Balance Sheets as of December 31, 2020. Eligible participants received an allocation of the escrow balance one year following the acquisition date. In addition to the purchase price of $317.5 million, the Company incurred $22.8 million in compensation expense associated with these retention plans in the year ended December 31, 2020.

3. BUSINESS COMBINATIONS (CONTINUED)

Bal Seal - continued

Bal Seal's results of operations have been included in the Company's financial statements for the period subsequent to the completion of the acquisition on January 3, 2020. Bal Seal contributed $77.0 million of revenue and $30.8 million of operating loss for the year ended December 31, 2020. The following table reflects the unaudited pro forma operating results of the Company for the twelve-month fiscal periods ended December 31, 2020 and 2019, which gives effect to the acquisition of Bal Seal as if the Company had been acquired on January 1, 2019. The pro forma results are based on assumptions that the Company believes are reasonable under the circumstances. The pro forma results are not necessarily indicative of the operating results that would have occurred had the acquisitions been effective January 1, 2019, nor are they intended to be indicative of results that may occur in the future. The underlying pro forma information includes the historical financial results of the Company and the acquired business adjusted for certain items discussed below. The pro forma information does not include the effects of any synergies, cost reduction initiatives or anticipated integration costs related to the acquisitions.

	For the year ended December 31,	
In thousands	**2020**	**2019**
Net sales	$ 784,459	$ 853,192
(Loss) earnings from continuing operations	$ (35,681)	$ 27,126
Net (loss) earnings	$ (34,989)	$ 180,509

Adjustments to pro forma earnings for the year ended December 31, 2020, include a $22.8 million reduction in compensation expense associated with Bal Seal's employee retention plans, the absence of $8.5 million in acquisition-related costs, a $2.4 million reduction in costs associated with the inventory step-up, $5.3 million in lower amortization of intangible assets and $4.1 million in higher income tax expense. Adjustments to pro forma earnings for the year ended December 31, 2019, include a $4.2 million reduction in net expenses associated with buildings purchased by the Company that were previously leased by Bal Seal, $11.1 million in incremental amortization of intangible assets, $22.8 million in incremental compensation expense associated with Bal Seal's employee retention plans, $8.5 million of acquisition-related costs, a $3.7 million reduction in transaction costs incurred by Bal Seal associated with the acquisition, $2.4 million in additional costs associated with the inventory step-up and $2.6 million in lower income tax expense.

4. REVENUE AND GEOGRAPHIC INFORMATION

Disaggregation of Revenue

The following table disaggregates total revenue by major product line.

	For the year ended December 31,		
In thousands	**2020**	**2019**	**2018**
Defense	$ 180,400	$ 178,289	$ 190,264
Safe and Arm Devices	248,482	227,846	195,751
Commercial, Business, & General Aviation	220,263	280,987	274,835
Medical	70,010	28,652	28,962
Industrial & Other	65,304	45,834	46,182
Total revenue[(1)(2)(3)]	$ 784,459	$ 761,608	$ 735,994

(1) Service revenue was not material for the years ended December 31, 2020, 2019 and 2018.
(2) Sales of the Company's formerly owned Distribution business were included in earnings from discontinued operations, net of tax, on the Company's Consolidated Statements of Operations in the years ended December 31, 2019 and 2018. See Note 2, *Discontinued Operations and Liabilities Held for Sale*, for further information on the Company's sale of the Distribution business.
(3) Net sales under contracts with USG agencies (including sales to foreign governments through foreign military sales contracts with USG agencies) totaled $220.8 million, $244.3 million and $281.3 million in 2020, 2019 and 2018, respectively, and represent direct and indirect sales to the USG and related agencies.

4. REVENUE AND GEOGRAPHIC INFORMATION (CONTINUED)

Disaggregation of Revenue - continued

The following table illustrates the approximate percentage of revenue recognized by product types.

	For the year ended December 31,		
	2020	2019	2018
Original Equipment Manufacturer	56 %	58 %	56 %
Aftermarket	12 %	12 %	17 %
Safe and Arm Devices	32 %	30 %	27 %
Total revenue	100 %	100 %	100 %

The following table illustrates the approximate percentage of revenue recognized for performance obligations satisfied over time versus the amount of revenue recognized for performance obligations satisfied at a point in time:

	For the year ended December 31,		
	2020	2019	2018
Revenue recognized for performance obligations satisfied:			
Over time	31 %	39 %	48 %
Point-in-time	69 %	61 %	52 %
Total revenue	100 %	100 %	100 %

The timing related to the satisfaction of performance obligations and the typical timing of payment could vary between military, safe and arm devices and commercial contracts. For military and safe and arm device contracts with the USG, payment terms typically include progress payments, and the satisfaction of these performance obligations does not vary significantly from timing of payment. For firm-fixed price military and safe and arm device contracts with foreign militaries, the satisfaction of performance obligations could occur at a point in time or over time, depending on the nature of the performance obligations and the right to payment terms in the contracts. Generally, payment terms for these types of contracts range from 30 to 60 days from delivery; however, at times, the Company may negotiate advance payments to cover a portion of the initial costs. Payment terms for firm-fixed price commercial contracts generally range from 30 to 90 days from delivery. The satisfaction of these performance obligations could occur at a point in time or over time, depending on the nature of the performance obligations and the right to payment terms in the contracts. For certain commercial contracts, the Company may negotiate advance payments for long-lead materials.

Geographic Information

Sales are attributed to geographic regions based on the location to which the product is shipped. Geographic distribution of sales recorded is as follows:

	For the year ended December 31,		
	2020	2019	2018
In thousands			
North America	$ 412,025	$ 438,638	$ 485,856
Europe	148,473	164,921	167,176
Middle East	170,835	114,110	51,565
Asia	34,424	19,326	16,998
Oceania	11,156	14,598	8,739
Other	7,546	10,015	5,660
Total revenue	$ 784,459	$ 761,608	$ 735,994

4. REVENUE AND GEOGRAPHIC INFORMATION (CONTINUED)

Geographic Information - continued

Geographic distribution of long-lived assets is as follows:

	At December 31,	
In thousands	2020	2019
United States	$ 493,490	$ 249,935
Germany	167,939	157,504
United Kingdom[1]	—	32,834
Czech Republic	5,747	5,753
Mexico	796	1,189
Netherlands	339	—
Switzerland	235	—
Hong Kong	64	—
Total long-lived assets[2]	$ 668,610	$ 447,215

[1] As a result of the estimated fair value of the UK Composites business being lower than its estimated carrying value, the assets were considered impaired and written off in the year ended December 31, 2020. Refer to Note 2, *Discontinued Operations and Liabilities Held for Sale*, for further information on the sale of the UK Composites business.
[2] For the purpose of this disclosure the Company excluded deferred tax assets of $39.8 million and $35.2 million as of December 31, 2020 and 2019, respectively.

5. RESTRUCTURING COSTS

General & Administration Expense Reduction Initiative

Following the sale of the Company's former Distribution business, the Company announced it would undertake a comprehensive review of its general and administrative functions in order to improve operational efficiency and to align the Company's costs with its revenues. The objective of the initiative is to ensure that the Company has a lean organizational structure that provides a scalable infrastructure that facilitates future growth opportunities. The Company has identified information technology functions to be outsourced, workforce reductions and other reductions in certain general and administrative expenses to be completed in 2020 to support the cost savings initiative discussed above. In accordance with ASC 712-10, Compensation - Nonretirement Postemployment Benefits, the Company recorded $4.0 million and $0.9 million in severance costs associated with these workforce reductions in the years ended December 31, 2020 and December 31, 2019, respectively, which were included in restructuring costs on the Company's Consolidated Statements of Operations. The Company does not anticipate additional severance costs associated with these actions. The accrual balance associated with these severance costs were included in other current liabilities on the Company's Consolidated Balance Sheets as of December 31, 2020 and December 31, 2019.

Workforce Reductions in Response to COVID-19

During 2020, the Company implemented workforce reductions, including temporary furloughs, and elected to eliminate certain open positions as a response to the unprecedented hardships brought on by COVID-19. For the year ended December 31, 2020, the Company recorded severance costs of $3.5 million related to workforce reductions, which were included in restructuring costs on the Company's Consolidated Statements of Operations.

Composites Businesses Restructuring

During the third quarter of 2017, the Company initiated restructuring activities at certain businesses to support the ongoing effort of improving capacity utilization and operating efficiency to better position the Company for increased profitability and growth. Such actions include workforce reductions and the consolidation of operations, beginning in the third quarter of 2017, with the majority completed by the end of 2019. The Company has begun realizing total cost savings in excess of $8.0 million annually as a result of these restructuring activities.

5. RESTRUCTURING COSTS (CONTINUED)

Composites Businesses Restructuring - continued

Since the announcement of these restructuring activities, restructuring expense related to these activities as of December 31, 2020 was $9.6 million. At December 31, 2019, the Company had an accrual balance of $0.4 million included in other current liabilities related to costs associated with the consolidation of facilities. In the year ended December 31, 2020, the Company recorded additional restructuring expense associated with the consolidation of facilities, totaling $0.3 million, which was included in restructuring costs on the Company's Consolidated Statements of Operations. In the year ended December 31, 2020, the Company made payments of $0.7 million associated with the accrual; therefore, there was no remaining accrual at December 31, 2020.

For the year ended December 31, 2019, restructuring expense, totaling $0.6 million, was included in restructuring costs on the Company's Consolidated Statements of Operations. Included in this expense was approximately $0.3 million of cost that primarily related to the write-off of inventory for various small order programs that the Company no longer continued to manufacture as a result of the consolidation of operations and $0.1 million in depreciation expense associated with an enterprise resource planning ("ERP") system that will no longer be utilized as a result of the restructuring activities.

For the year ended December 31, 2018, restructuring expense, totaling $6.0 million, was included in restructuring costs on the Company's Consolidated Statements of Operations. Included in this expense was approximately $0.8 million of cost that primarily related to the write-off of inventory for various small order programs that the Company no longer continued to manufacture as a result of the consolidation of operations and $0.4 million associated with the acceleration of stock compensation for management impacted by the restructuring activities.

As part of the restructuring activities discussed above, the Company sold its UK Tooling business and substantially all of the assets and liabilities of its Engineering Services business in the fourth quarter of 2018. These divestitures did not qualify for the reporting of discontinued operations within the consolidated financial statements. In the year ended December 31, 2018, the Company incurred a loss of $5.7 million associated with the sale of the UK Tooling business, which was included in loss on the sale of business on the Company's Consolidated Statements of Operations. Of the $5.7 million loss on the sale of the UK Tooling business, $1.7 million related to the foreign currency translation reclassified from accumulated other comprehensive income (loss) to net income. In the year ended December 31, 2019, the Company incurred an additional loss of $3.7 million associated with the write-off of note receivables recorded in 2018 for the remaining amounts to be collected on the sale of the UK Tooling business as this balance was deemed not likely to be collected. In the year ended December 31, 2020, the Company collected $0.5 million of the note receivables written off in 2019. These charges were included in (gain) loss on the sale of business on the Company's Consolidated Statements of Operations.

In the year ended December 31, 2018, the Company incurred a loss of $0.7 million associated with the sale of substantially all of the assets and liabilities of its Engineering Services business, which was included in net (gain) loss on the sale of assets on the Company's Consolidated Statements of Operations.

Other Matters

In the year ended December 31, 2020, the Company incurred $0.5 million in severance costs as it integrated the acquisition of Bal Seal in the year ended December 31, 2020.

For the year ended December 31, 2018, the Company incurred $1.4 million in costs associated with the termination of certain distributor agreements and separation costs for certain employees not covered by restructuring activities noted above.

6. ACCOUNTS RECEIVABLE, NET

Accounts receivable consist of the following:

	At December 31,	
In thousands	**2020**	**2019**
Trade receivables	$ 19,945	$ 13,794
U.S. Government contracts:		
Billed	18,854	15,136
Costs and accrued profit – not billed	1,080	894
Commercial and other government contracts:		
Billed	111,794	120,427
Costs and accrued profit – not billed	4,141	7,487
Less allowance for doubtful accounts	(2,008)	(1,246)
Accounts receivable, net	$ 153,806	$ 156,492

Of the accounts receivable on the Company's Consolidated Balance Sheet as of December 31, 2020, approximately $64.0 million relates to delays in payments on outstanding receivables related to a customer contract. Of this amount, $32.4 million in outstanding receivables were over twelve months past due. The Company continues to receive payments from this customer for recent shipments under this contract and expects to receive payment on the outstanding receivables. While the Company has determined that these receivable amounts continue to be collectible, to the extent these balances are not collected, this would have a material impact on the Company's liquidity, financial position and results of operations.

The Company performs ongoing evaluations of its customers' current creditworthiness, as determined by the review of their credit information to determine if events have occurred subsequent to the recognition of revenue and the related receivable that provide evidence that such receivable will be realized in an amount less than that recognized at the time of sale. Estimates of credit losses are based on historical losses, current economic conditions, geographic considerations, and in some cases, evaluating specific customer accounts for risk of loss.

The following table summarizes the activity in the allowance for doubtful accounts in the year ended December 31, 2020:

In thousands	
Balance at December 31, 2019	$ (1,246)
Provision	(1,391)
Additions attributable to acquisitions	(82)
Amounts written off	722
Changes in foreign currency exchange rates	(11)
Balance at December 31, 2020	$ (2,008)

COVID-19

The Company anticipates that the disruptions and delays resulting from the spread of COVID-19 and the measures instituted by governments and businesses to mitigate its spread will impact the Company's liquidity in the next twelve months. The Company continues to closely monitor the collectability of its receivables from commercial aerospace customers as it recognizes there may be delays in payments due to the impacts of COVID-19 on its customers. As of the date of this filing, the Company does not believe there has been any material impact on the collectability of these receivables.

6. ACCOUNTS RECEIVABLE, NET (CONTINUED)

Accounts receivable, net includes amounts for matters such as contract changes, negotiated settlements and claims for unanticipated contract costs. These amounts are as follows:

In thousands	At December 31, 2020	At December 31, 2019
Contract changes, negotiated settlements and claims for unanticipated contract costs	$ 900	$ 900
Total	$ 900	$ 900

7. CONTRACT ASSETS, CONTRACT COSTS AND CONTRACT LIABILITIES

Contract assets consist of unbilled amounts typically resulting from sales under long-term contracts when the cost-to-cost method of revenue recognition is utilized and revenue recognized exceeds the amount billed to the customer. Contract costs consist of costs to obtain and fulfill a contract. Costs to fulfill a contract primarily consist of nonrecurring engineering costs incurred at the start of a new program for which such costs are expected to be recovered under existing and future contracts. Such costs are amortized over the estimated revenue amount of the contract. Costs to obtain a contract consist of commissions and agent fees paid in connection with the award of a contract. Contract liabilities consist of advance payments and billings in excess of costs incurred and deferred revenue.

Activity related to contract assets, contract costs and contract liabilities is as follows:

In thousands	December 31, 2020[2]	December 31, 2019	$ Change	% Change
Contract assets[1]	$ 108,645	$ 121,614	$ (12,969)	(10.7)%
Contract costs, current portion	$ 3,511	$ 6,052	$ (2,541)	(42.0)%
Contract costs, noncurrent portion	$ 8,311	$ 6,099	$ 2,212	36.3 %
Contract liabilities, current portion	$ 39,073	$ 42,942	$ (3,869)	(9.0)%
Contract liabilities, noncurrent portion	$ 11,019	$ 37,855	$ (26,836)	(70.9)%

[1] The Company's contract assets were net of unliquidated progress payments, primarily from the U.S. Government, of $32.4 million and $30.2 million at December 31, 2020 and December 31, 2019, respectively.
[2] Contract liabilities attributable to the Company's UK Composites business were included in liabilities held for sale, current portion as of December 31, 2020 on the Company's Balance Sheets. See Note 2, *Discontinued Operations and Liabilities Held for Sale*, for further information on the Company's anticipated sale of the UK Composites business.

Contract Assets

The decrease in contract assets was primarily due to amounts billed on the JPF program with the USG, the AH-1Z program and the impairment on the contract assets of the UK Composites business during the year ended December 31, 2020. These decreases were partially offset by the recognition of revenue related to the satisfaction or partial satisfaction of performance obligations, particularly on a JPF DCS contract, certain fuzing contracts and the Sikorsky Combat Rescue Helicopter contract. As discussed above, the company recorded a $36.3 million impairment loss, inclusive of $1.2 million of impaired contract assets, associated with its UK Composites business in the year ended December 31, 2020. Refer to Note 2, *Discontinued Operations and Liabilities Held for Sale*, for further information on the impairment. There were no significant impairment losses related to the Company's contract assets during the year ended December 31, 2019.

7. CONTRACT ASSETS, CONTRACT COSTS AND CONTRACT LIABILITIES (CONTINUED)

Contract Assets - continued

Contract assets includes amounts for matters such as contract changes, negotiated settlements and claims for unanticipated contract costs. These amounts are as follows:

	At December 31,	
	2020	**2019**
In thousands		
Contract changes, negotiated settlements and claims for unanticipated contract costs	$ 3,178	$ 3,745

Contract Costs

At December 31, 2020, costs to fulfill a contract and costs to obtain a contract were $9.3 million and $2.5 million, respectively. At December 31, 2019, costs to fulfill a contract and costs to obtain a contract were $6.6 million and $5.6 million, respectively. These amounts are included in contract costs, current portion and contract costs, noncurrent portion on the Company's Consolidated Balance Sheets at December 31, 2020 and December 31, 2019.

Contract costs, current portion at December 31, 2020 decreased when compared to December 31, 2019. This was primarily the result of the amortization of contract costs, partially offset by the reclassification of a portion of costs to obtain a JPF DCS contract and costs to fulfill certain structures programs from contract costs, noncurrent portion. For the years ended December 31, 2020 and December 31, 2019, amortization of contract costs was $11.5 million and $11.6 million, respectively.

The increase in contract costs, noncurrent portion was primarily attributable to the addition of costs to fulfill unmanned K-MAX® contracts and costs to obtain a JPF DCS contract, partially offset by the reclassification of a portion of costs to obtain a JPF DCS contract and costs to fulfill certain structures programs to contract costs, current portion.

Contract Liabilities

The decrease in contract liabilities, current portion was primarily due to revenue recognized on a JPF DCS contract and certain fuzing programs. These decreases were partially offset by the reclassification of a portion of the advance payments received for a JPF DCS contract from contract liabilities, noncurrent portion. For the years ended December 31, 2020 and December 31, 2019, revenue recognized related to contract liabilities, current portion was $58.1 million and $48.5 million, respectively.

The decrease in contract liabilities, noncurrent portion was due to the reclassification of advance payments received for a JPF DCS contract to contract liabilities, current portion, partially offset by advances received on the JPF DCS contract. For the years ended December 31, 2020 and December 31, 2019, the Company did not recognize revenue against contract liabilities, noncurrent portion.

8. FAIR VALUE MEASUREMENTS

Fair value is defined as the exchange price that would be received for an asset or the price paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date.

The Company uses a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires us to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

- Level 1 — Quoted prices in active markets for identical assets or liabilities.
- Level 2 — Observable inputs other than quoted prices included in Level 1, such as quoted prices for markets that are not active or other inputs that are observable or can be corroborated by observable market data.
- Level 3 — Unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

8. FAIR VALUE MEASUREMENTS (CONTINUED)

The following table provides the carrying value and fair value of financial instruments that are not carried at fair value at December 31, 2020 and 2019:

	2020		2019	
	Carrying Value	Fair Value	Carrying Value	Fair Value
In thousands				
Debt[1]	$ 188,919	$ 230,093	$ 186,060	$ 237,381

[1] These amounts are classified within Level 2.

The above fair values were computed based on quoted market prices and discounted future cash flows (observable inputs), as applicable. Differences from carrying values are attributable to interest rate changes subsequent to when the transactions occurred. The fair values of cash and cash equivalents, accounts receivable, net, and accounts payable - trade approximate their carrying amounts due to the short-term maturities of these instruments. The Company's cash and cash equivalents at December 31, 2020 and 2019 included $51.5 million and $443.2 million, respectively, of Level 1 money market funds.

Recurring Fair Value Measurements

The Company holds derivative instruments for foreign exchange contracts that are measured at fair value using observable market inputs such as forward rates and our counterparties' credit risks. Based on these inputs, the derivative instruments are classified within Level 2 of the valuation hierarchy and have been included in other current assets and other current liabilities on the Consolidated Balance Sheets at December 31, 2020 and December 31, 2019. Based on the continued ability to trade and enter into forward contracts and interest rate swaps, the Company considers the markets for the fair value instruments to be active.

The Company evaluated the credit risk associated with the counterparties to these derivative instruments and determined that as of December 31, 2020, such credit risks have not had an adverse impact on the fair value of these instruments.

Nonrecurring Fair Value Measurements

During the third quarter of 2020, the Company incurred a $50.3 million impairment charge for its Aerosystems reporting unit. During the third quarter of 2018, the Company incurred a $10.0 million impairment charge for a certain asset group at its U.K. business. Refer to *Note 12, Goodwill and Other Intangible Assets, Net* for further information regarding the calculation of fair value.

9. DERIVATIVE FINANCIAL INSTRUMENTS

The Company is exposed to certain risks relating to its ongoing business operations, including market risks relating to fluctuations in foreign currency exchange rates and interest rates. Derivative financial instruments are reported on the Consolidated Balance Sheets at fair value. Changes in the fair values of derivatives are reported each period in earnings or accumulated other comprehensive income, depending on whether a derivative is effective as part of a hedged transaction. Gains and losses on derivative instruments reported in accumulated other comprehensive income are subsequently included in earnings in the periods in which earnings are affected by the hedged item. The Company does not use derivative instruments for speculative purposes.

The Company held forward exchange contracts designed to hedge forecasted transactions denominated in foreign currencies and to minimize the impact of foreign currency fluctuations on the Company's earnings and cash flows. Some of those contracts were designated as cash flow hedges. The Company will include in earnings amounts currently included in accumulated other comprehensive income upon recognition of cost of sales related to the underlying transaction.

Forward Exchange Contracts

From time to time, the Company will enter into foreign exchange contracts that are not designated as hedging instruments. These contracts are entered into in order to minimize the impact of foreign currency fluctuations on the Company's earnings and cash flows. The Company reports expense related to these contracts in other income, net on the Consolidated Statements of Operations.

9. DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

Forward Exchange Contracts - continued

In addition to the forward exchange contract mentioned above, the Company held forward exchange contracts to mitigate the risk associated with foreign currencies that were not designated as hedging instruments as of December 31, 2020 and 2019. The balances associated with the contracts and the gains or losses reported in other income, net were not material for the years ended December 31, 2020, 2019 or 2018.

10. INVENTORIES

Inventories consist of the following:

	At December 31,	
In thousands	**2020**	**2019**
Raw materials	$ 19,502	$ 15,012
Contracts in process:		
US Government	5,439	6,217
Commercial and other government contracts	59,565	74,035
Contracts and other work in process (including certain general stock materials)	64,237	36,130
Finished goods	36,329	24,959
Inventories	$ 185,072	$ 156,353

Inventories include amounts associated with matters such as contract changes, negotiated settlements and claims for unanticipated contract costs, which totaled $0.5 million and $0.4 million at December 31, 2020 and 2019, respectively.

At December 31, 2020 and 2019, $60.4 million and $43.6 million, respectively, of K-MAX® inventory was included in contracts and other work in process inventory and finished goods on the Company's Consolidated Balance Sheets. Management believes that approximately $19.9 million of the K-MAX® inventory will be sold after December 31, 2021, based upon the anticipation of additional aircraft manufacturing and supporting the fleet for the foreseeable future.

At December 31, 2020 and 2019, $6.3 million and $3.6 million, respectively, of SH-2G(I) inventory was included in contracts and other work in process inventory on the Company's Consolidated Balance Sheets. Management believes that approximately $5.3 million of the SH-2G(I) inventory will be sold after December 31, 2021. This balance represents spares requirements and inventory to be used in SH-2G programs.

11. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment, net is summarized as follows:

	At December 31,	
In thousands	**2020**	**2019**
Land	$ 36,683	$ 16,319
Buildings	134,995	101,562
Leasehold improvements	15,590	14,904
Machinery, office furniture and equipment	241,027	200,466
Construction in process	11,541	17,748
Total	439,836	350,999
Less accumulated depreciation	(228,984)	(210,549)
Property, plant and equipment, net	$ 210,852	$ 140,450

Depreciation expense was $28.0 million, $21.3 million and $20.9 million for 2020, 2019 and 2018, respectively.

11. PROPERTY, PLANT AND EQUIPMENT, NET (CONTINUED)

Finance Leases

For the year ended December 31, 2020, $6.7 million of assets included in machinery, office furniture and equipment and construction in process were accounted for as finance leases. At December 31, 2020, the Company had accumulated depreciation of $2.1 million associated with these assets. For the year ended December 31, 2019, $10.9 million of assets included in machinery, office furniture and equipment were accounted for as finance leases. At December 31, 2019, the Company had accumulated depreciation of $2.4 million associated with these assets. Depreciation expense associated with the finance leases (capital leases in 2018) was $0.9 million, $0.9 million and $0.7 million for 2020, 2019 and 2018, respectively.

12. GOODWILL AND OTHER INTANGIBLE ASSETS, NET

Goodwill

The following table sets forth the change in the carrying amount of goodwill for the Company:

	At December 31,	
	2020	2019
In thousands		
Gross balance at beginning of period	$ 211,566	$ 212,413
Accumulated impairment	(16,252)	(16,252)
Net balance at beginning of period	195,314	196,161
Additions[(1)]	95,089	—
Impairments	(50,307)	—
Foreign currency translation	7,148	(847)
Net balance at end of period	$ 247,244	$ 195,314
Accumulated impairment at end of period	$ (66,559)	$ (16,252)

[(1)] The additions to goodwill in the year ended December 31, 2020 were attributable to the acquisition of Bal Seal. Refer to Note 3, *Business Combinations*, for further information on this acquisition.

2020 Analysis

In accordance with ASC 350 - Intangibles - Goodwill and Other, the Company evaluates goodwill for possible impairment on at least an annual basis. The Company is required to evaluate goodwill for possible impairment testing if an event occurs or circumstances change that indicate that the fair value of the reporting entity may be below its carrying amount. The spread of COVID-19 and the precautionary measures instituted by governments and businesses to mitigate the risk of its spread have contributed to the general slowdown in the global economy and significant volatility in financial markets, which resulted in a significant decrease in the Company's stock price and market capitalization in the first quarter. As COVID-19 continued to impact the organization throughout 2020 and the Company’s stock price remained at a similar level, management assessed each reporting unit for triggering events for potential impairment on a quarterly basis.

12. GOODWILL AND OTHER INTANGIBLE ASSETS, NET (CONTINUED)

Goodwill - continued

2020 Analysis - continued

As part of management's evaluation of triggering events in the third quarter of 2020, the assessment of the Company's operating results identified a decline in earnings compared to forecasts used in prior periods for its Aerosystems reporting unit. The Company considered this decline, as well as the updated forecasts for the reporting unit, which indicated the forecasted cash flows for this reporting unit were lower than amounts previously forecasted. As a result, management identified a triggering event for possible goodwill impairment in its Aerosystems reporting unit. Management performed a quantitative analysis on the Aerosystems reporting unit using an income methodology based on management's estimates of forecasted cash flows, with those cash flows discounted to present value using rates commensurate with the risks associated with those cash flows. In addition, management used a market-based valuation method involving analysis of market multiples of revenues and earnings before interest, taxes, depreciation and amortization ("EBITDA") for (i) a group of comparable companies and (ii) recent transactions, if any, involving comparable companies. In estimating the fair value of the reporting unit, a weighting of 80% to the income approach and 20% to the market-based valuation method was selected, consistent with quantitative analyses performed in prior periods. The estimated fair value of the reporting unit was adjusted based on an assumption of excess working capital, which represents management's identification of specific contract-related assets that will generate cash flows in the future. The quantitative analysis resulted in a conclusion that the fair value of the Aerosystems reporting unit was $56.1 million below its carrying value; therefore, goodwill was impaired. In the year ended December 31, 2020, the Company recorded a goodwill impairment charge of $50.3 million for the Aerosystems reporting unit, which represented the entire goodwill balance for the reporting unit. This impairment charge was included in goodwill and other intangibles impairment on the Company's Statement of Operations.

Upon completion of the annual 2020 qualitative assessment of events and circumstances affecting recorded goodwill as described in Note 1, *Summary of Significant Accounting Policies*, the Company concluded that a quantitative assessment should be performed on the Bal Seal reporting unit. The Company also elected to perform a quantitative assessment on its Specialty Bearings and Engineered Products reporting unit. A qualitative assessment was performed on the KPP-Orlando reporting unit.

The qualitative assessment performed for KPP-Orlando took into consideration the following factors: general economic conditions, industry specific performance, changes in carrying values of the reporting unit, the assessments of assumptions used in the previous fair value calculation and changes in transaction multiples. The results of this analysis indicated that it is more likely than not that goodwill is not impaired and this reporting unit did not need to proceed to a quantitative assessment.

A quantitative assessment was performed for the Specialty Bearings and Engineered Products and Bal Seal reporting units. The results of these analyses indicated that the fair values of the reporting units exceeded the respective carrying values. The Company performed a sensitivity analysis relative to the discount rates and growth rates selected and determined a decrease of one percentage point in the terminal growth rate or an increase of one percentage point in the discount rate would not result in a fair value calculation less than the carrying value for each reporting unit.

2019 Analysis

In accordance with ASC 350, the Company evaluates goodwill for possible impairment on at least an annual basis. The Company elected to perform a Step 1 analysis on the Aerosystems, Specialty Bearings and Engineered Products and KPP - Orlando reporting units. The results of the Step 1 analyses indicated that the Company did not need to proceed to Step 2, as the fair values of the reporting units exceeded the respective carrying values. The Company performed a sensitivity analysis relative to the discount rates and growth rates selected and determined a decrease of one percentage point in the terminal growth rates or an increase of one percentage point in the discount rates would not result in a fair value calculation less than the carrying value for each reporting unit.

12. GOODWILL AND OTHER INTANGIBLE ASSETS, NET (CONTINUED)

Other Intangible Assets

Other intangible assets consisted of:

		At December 31, 2020		At December 31, 2019	
In thousands	Amortization Period	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Customer lists / relationships	6-38 years	$ 128,882	$ (30,094)	$ 56,789	$ (21,415)
Developed technologies	7-20 years	45,798	(9,665)	19,552	(5,217)
Trademarks / trade names	15-40 years	17,353	(2,149)	5,012	(1,368)
Non-compete agreements and other	1-15 years	5,290	(5,276)	2,338	(2,321)
Patents	17 years	523	(464)	523	(454)
Total		$ 197,846	$ (47,648)	$ 84,214	$ (30,775)

The increase in the other intangible assets, net balance at December 31, 2020, as compared to December 31, 2019, was attributable to the acquisition of Bal Seal, partially offset by amortization. Intangible asset amortization expense was $15.7 million, $4.5 million and $7.0 million in 2020, 2019 and 2018, respectively. Refer to Note 3, *Business Combinations*, for further information on this acquisition.

In accordance with ASC 360 - Property, Plant, and Equipment ("ASC 360"), the Company is required to evaluate long-lived assets for possible impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. In 2018, management identified a triggering event for possible impairment at a certain asset group in its U.K. business based on a review of its historical performance, the current forecast for the remainder of the year and the loss of future orders from one of its significant customers, requiring the Company to evaluate the intangible assets for impairment. The Company performed a recoverability test as defined under ASC 360 by comparing the undiscounted cash flows of the asset group to its carrying value. The estimated undiscounted cash flows of the business did not exceed the carrying value of the assets. Based on these results, the Company calculated the fair value of the asset group, using an income approach based on the estimated future cash flows, discounted to present value using a rate commensurate with the risks associated with the asset group's weighted average cost of capital. This calculation resulted in a write-off of $10.0 million for a certain asset group at the UK business, which was included in goodwill and other intangible assets impairment on the Company's Consolidated Statements of Operations. Other intangible assets, gross, and accumulated amortization decreased by $21.0 million and $11.0 million, respectively, as a result of the $10.0 million impairment of customer lists/relationships at the asset group within the Company's UK business incurred in the year ended December 31, 2018. At December 31, 2020, the remaining assets of the UK Composites business were considered impaired as the estimated fair value of the business based on the anticipated sale was lower than the estimated carrying value of the UK Composites business. Refer to Note 2, *Discontinued Operations and Liabilities Held for Sale*, for further information on the anticipated sale and the impairment charge recorded in the year ended December 31, 2020. No such triggering events were identified in the year ended December 31, 2019.

Estimated amortization expense for the next five years associated with intangible assets existing as of December 31, 2020 is as follows:

In thousands		
2021	$	10,341
2022	$	9,870
2023	$	9,589
2024	$	9,231
2025	$	9,190

12. GOODWILL AND OTHER INTANGIBLE ASSETS, NET (CONTINUED)

Other Intangible Assets - continued

In order to determine the useful life of acquired intangible assets, the Company considers numerous factors, most importantly the industry considerations associated with the acquired entities. The Company determines the amortization period for acquired intangible assets, such as customer relationships, based primarily on an analysis of their historical customer sales attrition information and the period over which the assets are expected to deliver meaningful cash flow generation in support of the fair value of the asset.

13. ENVIRONMENTAL COSTS

The following table displays the activity and balances associated with accruals related to environmental costs included in other current liabilities and other long-term liabilities:

In thousands	2020	2019
Balance at January 1	$ 6,078	$ 5,531
Net additions to accrual	141	1,122
Payments	(165)	(569)
Changes in foreign currency exchange rates	(5)	(6)
Balance at December 31	$ 6,049	$ 6,078

Bloomfield

In August 2008, the Company completed its purchase of the portion of the Bloomfield campus that Kaman Aerospace Corporation had leased from NAVAIR for many years. In connection with the purchase, the Company has assumed responsibility for environmental remediation at the facility as may be required under the Connecticut Transfer Act (the “Transfer Act”) and it continues the effort to define the scope of the remediation that will be required by the Connecticut Department of Environmental Protection (“CTDEP”). The transaction was recorded by taking the undiscounted estimated remediation liability of $20.8 million and discounting it at a rate of 8% to its present value. The fair value of the Navy Property asset, which at that time approximated the discounted present value of the assumed environmental liability of $10.3 million, is included in property, plant and equipment, net. This remediation process will take many years to complete.

The following represents estimated future payments for the undiscounted environmental remediation liability related to the Bloomfield campus as of December 31, 2020:

In thousands	
2021	$ 700
2022	151
2023	184
2024	387
2025	—
Thereafter	4,883
Total	$ 6,305

Other

In 2014, the Company sold its former manufacturing facility in Moosup, Connecticut to TD Development, LLC ("TD"). In connection with the sale, the Company agreed to contribute $4.0 million in cash to an escrow account over a four-year period to fund a portion of TD's environmental remediation work performed on the site. The Company funded $1.6 million to the escrow account between 2014 and 2015. TD stopped work on the site in 2016 and defaulted on its obligations under the sale agreements. From 2016 to 2018, the Company funded $2.4 million to a separate environmental escrow account due to TD's work stoppage.

13. ENVIRONMENTAL COSTS (CONTINUED)

Other - continued

In December 2016, the Company filed a summons and civil complaint against TD, which was subsequently amended in April 2017. The amended complaint alleged breach of contract, default by TD and unjust enrichment, and sought damages and other equitable relief against TD, including the return to the Company of all amounts held in the environmental escrow accounts. On December 21, 2018, the court entered an order and judgment favorable to the Company, which granted its application to confirm an arbitration award. The judgment provides that TD is not entitled to any of the amounts held in the escrow accounts nor any accrued interest, and the funds held in the escrow accounts shall be released to the Company. Additionally, the court awarded the Company compensatory damages, including reasonable legal fees, costs and expenses, and interest on the amounts awarded, but unpaid. In February 2019, the Company received the remaining balance of the escrow account ($0.7 million), which was added to the Company's accrual related to this matter. As of December 31, 2020, the Company has not recorded any amounts for compensatory damages, reasonable legal fees and costs and expenses from the arbitration award. The accrual related to the Moosup facility was $3.1 million as of December 31, 2020.

The Company's environmental accrual also includes estimated environmental remediation costs that the Company expects to incur at the former Music segment’s New Hartford, CT facility. The Company continues to assess the work that may be required at each of these facilities, which may result in a change to this accrual. For further discussion of these matters, see Note 19, *Commitments and Contingencies*.

14. DEBT

Long-Term Debt

The Company has long-term debt as follows:

In thousands	At December 31, 2020	At December 31, 2019
Revolving credit agreement	$ —	$ —
Convertible notes	188,919	186,060
Total	188,919	186,060
Less current portion	—	—
Total excluding current portion	$ 188,919	$ 186,060

At December 31, 2020 and 2019, the current and long-term debt balances on the Company's Consolidated Balance Sheets were net of debt issuance costs of $3.5 million and $4.4 million, respectively.

The weighted average interest rate on long-term borrowings outstanding as of December 31, 2020 and 2019 was 3.25% in both periods.

For the years ended December 31, 2020 and 2019, $4.3 million and $5.6 million, respectively, of liabilities associated with our finance leases are included in other long-term liabilities. See Note 20, *Leases,* for further information.

The aggregate annual maturities of long-term debt for each of the next five years are approximately as follows:

In thousands	
2021	$ —
2022	$ —
2023	$ —
2024	$ 199,500
2025	$ —

14. DEBT (CONTINUED)

Convertible Notes

Overview

During May 2017, the Company issued $200.0 million aggregate principal amount of convertible senior unsecured notes due May 2024 (the "2024 Notes") pursuant to an indenture (the "Indenture"), dated May 12, 2017, between the Company and U.S. Bank National Association, as trustee. In connection therewith, the Company entered into certain capped call transactions that cover, collectively, the number of shares of the Company's common stock underlying the 2024 Notes. In a separate transaction, the Company repurchased $103.5 million aggregate principal amount of its existing convertible senior unsecured notes due November 15, 2017 (the "2017 Notes"). In connection with the repurchase and conversion transactions of the 2017 Notes, the Company settled the associated outstanding bond hedge transactions and a portion of the associated warrant transactions it entered into in 2010 in connection with their issuance.

The remaining portion of the 2017 Notes were convertible at the option of the noteholders until the close of business on the second Scheduled Trading Day (as defined in the 2017 Notes indenture) immediately preceding the maturity date. On November 10, 2017 and November 13, 2017, the Company received conversion notices from bondholders, totaling the remaining $11.5 million principal amount outstanding under the 2017 Notes. The Company also settled the remaining portion of the bond hedge. During the first half of 2018, the remaining warrant transactions were settled with 114,778 shares of the Company's common stock.

2024 Notes

On May 12, 2017, the Company issued $175.0 million in principal amount of 2024 Notes, in a private placement offering. On May 24, 2017, the Company issued an additional $25.0 million in principal amount of 2024 Notes pursuant to the initial purchasers' exercise of their overallotment option, resulting in the issuance of an aggregate $200.0 million principal amount of 2024 Notes. The 2024 Notes bear 3.25% interest per annum on the principal amount, payable semiannually in arrears on May 1 and November 1 of each year, beginning on November 1, 2017. The 2024 Notes will mature on May 1, 2024, unless earlier repurchased by the Company or converted. The Company will settle any conversions of the 2024 Notes in cash, shares of the Company's common stock or a combination of cash and shares of common stock, at the Company's election.

The sale of the Distribution business in the third quarter of 2019 was deemed to be a "Fundamental Change" and a "Make-Whole Fundamental Change" pursuant to the terms and conditions of the indenture governing the 2024 Notes. As a result, the sale triggered the right of the holders of our 2024 Notes to require us to repurchase all of the 2024 Notes, or any portion thereof that is a multiple of $1,000 principal amount on September 27, 2019. The aggregate principal amount of the 2024 Notes validly tendered and not validly withdrawn was $0.5 million, representing 0.25% of all outstanding notes. Holders of such notes receive the purchase price equal to 100% of the principal amount of the 2024 Notes being purchased, plus accrued and unpaid interest.

14. DEBT (CONTINUED)

Convertible Notes - continued

2024 Notes - continued

The following table illustrates the conversion rate at the date of issuance of the 2024 Notes:

2024 Notes		
Conversion Rate per $1,000 principal amount [1]		15.3227
Conversion Price [2]	$	65.2626
Contingent Conversion Price [3]	$	84.8413
Aggregate shares to be issued upon conversion [4]		3,056,879

[1] Represents the number of shares of Common Stock hypothetically issuable per each $1,000 principal amount of 2024 Notes, subject to adjustments upon the occurrence of certain specified events in accordance with the terms of the Indenture.

[2] Represents $1,000 divided by the conversion rate as of such date. The conversion price reflects the strike price of the embedded option within the 2024 Notes. If the Company's share price exceeds the conversion price at conversion, the noteholders would be entitled to receive additional consideration either in cash, shares or a combination thereof, the form of which is at the sole discretion of the Company.

[3] Prior to November 1, 2023, the notes are convertible only in the following circumstances: (1) during any fiscal quarter commencing after July 1, 2017, and only during any such fiscal quarter, if the last reported sale price of the Company's common stock was greater than or equal to 130% of the applicable conversion price for at least 20 trading days (whether or not consecutive) during the 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding fiscal quarter, (2) during the five consecutive business day period following any ten consecutive trading day period (the "measurement period") in which the trading price per $1,000 principal amount of 2024 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day or (3) upon the occurrence of specified corporate events. On or after November 1, 2023, until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert their notes at any time, regardless of the foregoing circumstances. If the Company undergoes a fundamental change (as defined in the Indenture), holders of the notes may require the Company to repurchase all or a portion of their notes for cash at a repurchase price equal to 100% of the principal amount to be repurchased, plus any accrued and unpaid interest. As of December 31, 2020, none of the conditions permitting the holders of the 2024 Notes to convert had been met. Therefore, the 2024 Notes are classified as long-term debt.

[4] This represents the number of shares hypothetically issuable upon conversion of 100% of the outstanding aggregate principal amount of the 2024 Notes at each date; however, the terms of the 2024 Notes state that the Company may pay or deliver, as the case may be, cash, shares of the Company's common stock or a combination of cash and shares of common stock, at the Company's election. The Company currently intends to settle the aggregate principal amount in cash. Amounts due in excess of the principal, if any, also may be settled in cash, shares of the Company's common stock or a combination of cash and shares of common stock, at the Company's election.

In connection with the 2024 Notes offering, the Company entered into capped call transactions with certain of the initial purchasers or their respective affiliates. These transactions are intended to reduce the potential dilution to the Company's shareholders and/or offset the cash payments the Company is required to make in excess of the principal amount upon any future conversion of the notes in the event that the market price per share of the Company's common stock is greater than the strike price of the capped call transactions, with such reduction and/or offset subject to a cap based on the cap price of the capped call transactions. Under the terms of the capped call transactions, the strike price ($65.2626) and the cap price ($88.7570) are each subject to adjustment in certain circumstances. In connection with establishing their initial hedges of the capped call transactions, the option counterparties or their respective affiliates entered into various derivative transactions with respect to the Company’s common stock concurrently with or shortly after the pricing of the notes. The capped call transactions, which cost an aggregate $20.5 million, were recorded as a reduction of additional paid-in capital.

ASC Topic 815 - Derivatives and Hedging ("ASC 815") provides that contracts are initially classified as equity if (1) the contract requires physical settlement or net-share settlement, or (2) the contract gives the company a choice of net-cash settlement or settlement in its own shares (physical settlement or net-share settlement). The settlement terms of our capped call transactions require net-share settlement. Based on the guidance in ASC 815, the capped call transactions were recorded as a reduction of equity as of the trade date. ASC 815 states that a reporting entity shall not consider contracts to be derivative instruments if the contract issued or held by the reporting entity is both indexed to its own stock and classified in shareholders' equity in its balance sheet. The Company concluded the capped call transactions should be accounted for in shareholders' equity and are, therefore, not to be considered a derivative instrument.

14. DEBT (CONTINUED)

Convertible Notes - continued

2024 Notes - continued

ASC 470-20 "Debt with Conversion and Other Options" ("ASC 470-20") clarifies the accounting for convertible debt instruments that may be settled in cash upon conversion, including partial cash settlement. ASC 470-20 specifies that an issuer of such instruments should separately account for the liability and equity components of the instruments in a manner that reflects the issuer's non-convertible debt borrowing rate which interest costs are to be recognized in subsequent periods. The note payable principal balance for the 2024 Notes at the date of issuance of $200.0 million was bifurcated into the debt component of $179.5 million and the equity component of $20.5 million. The difference between the note payable principal balance and the fair value of the debt component representing the debt discount is being accreted to interest expense over the term of the 2024 Notes. The fair value of the debt component was recognized using a 5.0% discount rate, representing the Company's borrowing rate at the date of issuance for a similar debt instrument without a conversion feature with an expected life of seven years.

The Company incurred $7.4 million of debt issuance costs in connection with the sale of the 2024 Notes, which was allocated between the debt and equity components of the instrument. Of the total amount, $0.7 million was recorded as an offset to additional paid-in capital. The balance, $6.7 million, was recorded as a contra-debt balance and is being amortized over the term of the 2024 Notes. Total amortization expense for the years ended December 31, 2020, 2019 and 2018 was $0.9 million, $0.9 million and $0.8 million.

The carrying amount of the equity component and the principal amount of the liability component, the unamortized discount and the net carrying value of the liability are as follows:

	2024 Notes	
	December 31, 2020	December 31, 2019
In thousands		
Principal amount of liability	$ 199,500	$ 199,500
Unamortized discount	10,581	13,440
Carrying value of liability	$ 188,919	$ 186,060
Equity component	$ 20,408	$ 20,408

Because the embedded conversion option is indexed to the Company's own stock and would be classified in shareholders' equity, it does not meet the criterion under ASC 815 that would require separate accounting as a derivative instrument.

As of December 31, 2020, the "if converted value" did not exceed the principal amount of the 2024 Notes since the closing sales price of the Company's common stock was less than the conversion price of the 2024 Notes.

Interest expense associated with the 2024 Notes consisted of the following:

	For the year ended December 31,		
	2020	2019	2018
In thousands			
Contractual coupon rate of interest	$ 6,484	$ 6,503	$ 6,500
Accretion of convertible notes discount	2,860	2,753	2,596
Interest expense - convertible notes	$ 9,344	$ 9,256	$ 9,096

14. DEBT (CONTINUED)

Revolving Credit and Term Loan Agreements

On December 13, 2019, the Company closed an amended and restated $800.0 million Credit Agreement (the "Credit Agreement") with JPMorgan Chase Bank, N.A., as Administrative Agent and as Collateral Agent. The Credit Agreement amends and restates the Company's previously existing credit facility in its entirety to, among other things: (i) extend the maturity date to December 13, 2024; (ii) increase the aggregate amount of revolving commitments from $600.0 million to $800.0 million; (iii) remove the existing term loan credit facility; (iv) modify the affirmative and negative covenants set forth in the facility; and (v) effectuate a number of additional modifications to the terms and provisions of the facility, including its pricing. Capitalized terms used but not defined within this Note 14, *Debt*, have the meanings ascribed thereto in the Credit Agreement.

The Credit Agreement permits the Company to pay cash dividends. The Lenders have been granted a security interest in substantially all of the Company’s and its domestic subsidiaries’ personal property and other assets (including intellectual property but excluding real estate), including a pledge of 66% of the Company’s equity interest in certain foreign subsidiaries and 100% of the Company’s equity interest in its domestic subsidiaries, as collateral for the Company’s obligations under the Credit Agreement.

The following table shows the amounts available for borrowing under the Company's revolving credit facility:

	At December 31,	
In thousands	2020	2019
Total facility	$ 800,000	$ 800,000
Amounts outstanding, excluding letters of credit	—	—
Amounts available for borrowing, excluding letters of credit	800,000	800,000
Letters of credit under the credit facility[1][2]	165,373	152,614
Amounts available for borrowing	$ 634,627	$ 647,386
Amounts available for borrowing subject to EBITDA, as defined by the Credit Agreement[3]	$ 363,997	$ 322,900

[1] The Company has entered into standby letters of credit issued on the Company's behalf by financial institutions, and directly issued guarantees to third parties primarily related to advances received from customers and the guarantee of future performance on certain contracts. Letters of credit generally are available for draw down in the event the Company does not perform its obligations.
[2] Of these amounts, $146.2 million letters of credit relate to a certain JPF DCS contract in both periods.
[3] Amounts available for borrowing subject to EBITDA as of December 31, 2019 reflect the minimum borrowing capacity under EBITDA, subject to adjustments.

Debt issuance costs in connection with the Credit Agreement have been capitalized and are being amortized over the term of the agreement. The Company incurred $3.6 million of debt issuance costs in connection with the amendment and restatement of the Credit Agreement in the year ended December 31, 2019. Total amortization expense for the years ended December 31, 2020, 2019 and 2018 was $0.7 million, $1.0 million and $1.0 million, respectively.

Interest rates on amounts outstanding under the Credit Agreement are variable, and are determined based on the Senior Secured Net Leverage Ratio, as defined in the Credit Agreement. In addition, the Company is required to pay a quarterly commitment fee on the unused revolving loan commitment amount at a rate ranging from 0.150% to 0.250% per annum, based on the Senior Secured Net Leverage Ratio. Fees for outstanding letters of credit range from 1.125% to 1.625%, based on the Senior Secured Net Leverage Ratio.

At December 31, 2020 and December 31, 2019, there were no outstanding amounts on the revolving credit facility; therefore, the interest rate was 0% at both dates.

14. DEBT (CONTINUED)

Revolving Credit and Term Loan Agreements - continued

The financial covenants associated with the Credit Agreement include a requirement that (i) the Consolidated Total Net Leverage Ratio, as defined in the Credit Agreement, cannot be greater than 4.00 to 1.00, with an election to increase the maximum to 4.50 to 1.00 for four consecutive quarters, in connection with a Material Permitted Investment; (ii) the Interest Coverage Ratio cannot be less than 3.00 to 1.00; and (iii) Liquidity: (a) as of the last day of the fiscal quarter ending on or about September 30, 2023 cannot be less than an amount equal to 50% of the aggregate principal amount of the 2024 Convertible Notes as of such date, and (b) as of the last day of the fiscal quarter ending on December 31, 2023 and ending on or about March 29, 2024, to be less than the amount equal to 100% of the aggregate principal amount of the 2024 Convertible Notes as of such day. The Company was in compliance with those financial covenants as of and for the quarter ended December 31, 2020, and management does not anticipate noncompliance in the foreseeable future.

Interest Payments

Cash payments for interest were $20.8 million, $15.7 million and $16.0 million in 2020, 2019 and 2018, respectively.

15. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The components of accumulated other comprehensive income (loss) are shown below:

In thousands	2020	2019
Foreign currency translation and other:		
Beginning balance	$ (16,351)	$ (14,579)
Net gain (loss) on foreign currency translation	15,634	(1,772)
Other comprehensive loss, net of tax	15,634	(1,772)
Ending balance	$ (717)	$ (16,351)
Pension and other post-retirement benefits [1]:		
Beginning balance	$ (134,542)	$ (120,319)
Reclassification to net income		
Amortization of net loss, net of tax expense of $1,314 and $3,534, respectively	4,434	11,971
Change in net loss (gain), net of tax expense (benefit) of $1 and $(915), respectively	4	(3,100)
Other comprehensive (loss) gain, net of tax	4,438	8,871
Reclassification of stranded tax effects resulting from Tax Reform to retained earnings balance[2]	—	(23,094)
Ending balance	$ (130,104)	$ (134,542)
Total accumulated other comprehensive income (loss)	$ (130,821)	$ (150,893)

[1] These accumulated other comprehensive income components are included in the computation of net periodic pension cost (see Note 17, *Pension Plans* for additional information).

[2] See Note 1, *Summary of Significant Accounting Policies*, of the Annual Report on Form 10-K for the year ended December 31, 2019 for additional information regarding the reclassification of stranded tax effects resulting from Tax Reform to retained earnings.

16. INCOME TAXES

The components of income tax (benefit) expense from continuing operations are as follows:

In thousands	For the twelve months ended December 31, 2020	2019	2018
Current:			
Federal	$ 1,693	$ (19,432)	$ 351
State	(3,143)	1,996	104
Foreign	168	585	1,191
	(1,282)	(16,851)	1,646
Deferred:			
Federal	(5,650)	719	7,145
State	899	277	841
Foreign	(1,697)	(4)	(373)
	(6,448)	992	7,613
Total	$ (7,730)	$ (15,859)	$ 9,259

The Company's tax benefit of $7.7 million in the year ended December 31, 2020 was impacted by the goodwill impairment charge and impairment on assets held for sale associated with the anticipated sale of the Company's UK Composites business as neither charge had associated tax benefits. In the year ended December 31, 2019, the Company filed an entity classification election with regard to the investment in the Company's UK business, which had the effect of treating the subsidiary as a disregarded entity for U.S. tax purposes, but had no impact on operations or taxation in the UK. This election resulted in a loss for U.S tax purposes and a significant tax benefit was recognized by the Company in 2019. The loss was based on the tax basis of the Company's investment in the subsidiary and was not impacted by the carrying value of the Company's investment in the subsidiary for financial statement purposes. As such, the tax loss associated with this investment was recognized in 2019, while the financial statement loss was recorded in 2020. Additionally, in 2019, the Company recognized benefits relating to research and development credits associated with research completed in the three prior years. The credits were based upon the increases in qualified research expenditures over a base period. The Company also recognized credits in 2020, and based on the Company’s level of research, additional credits would be expected in future years.

The tax effects of temporary differences that give rise to deferred tax assets and liabilities of continuing operations are presented below:

In thousands	At December 31, 2020	2019
Deferred tax assets:		
Deferred employee benefits	$ 30,701	$ 36,678
Tax loss and credit carryforwards	33,065	19,449
Accrued liabilities and other items	17,420	14,044
Total deferred tax assets	81,186	70,171
Deferred tax liabilities:		
Property, plant and equipment	(5,379)	(6,410)
Intangibles	(32,398)	(27,147)
Other items	(765)	(226)
Total deferred tax liabilities	(38,542)	(33,783)
Net deferred tax assets before valuation allowance	42,644	36,388
Valuation allowance	(10,216)	(8,142)
Net deferred tax assets after valuation allowance	$ 32,428	$ 28,246

16. INCOME TAXES (CONTINUED)

The increase in the valuation allowance from December 31, 2019 to December 31, 2020, primarily relates to restrictions on the deductibility of accrued expenses, as well as the additional losses incurred by the Kaman UK entities for which no tax benefit could be recorded. Valuation allowances reduced the deferred tax asset attributable to these state and foreign loss and credit carryforwards to an amount that, based upon all available information, is more likely than not to be realized. Reversal of the valuation allowance is contingent upon the recognition of future taxable income in the respective jurisdictions or changes in circumstances which cause the realization of the benefits of carryforwards to become more likely than not.

Tax loss and credit carryforwards associated with approximately $24.3 million of deferred tax assets have no expiration period. The remainder of the loss and credit carryforwards have varying expiration periods; however, most will expire prior to 2035.

Pre-tax losses from foreign operations amounted to $36.9 million, $4.0 million and $27.1 million in 2020, 2019, and 2018 respectively. The significant losses in 2020 and 2018 were largely attributable to the goodwill impairment charge and other intangible asset impairment charge for the Company's UK business, respectively. Tax Reform required the Company to effectively recognize all foreign earnings in U.S. taxable income in the year ended December 31, 2017. Due to this provision and foreign losses incurred in prior years, there were no accumulated earnings in foreign subsidiaries for which U.S income taxes were required to be provided in 2020.

The provision for income taxes from continuing operations differs from that computed at the federal statutory corporate tax rate as follows:

	For the twelve months ended December 31,		
	2020	2019	2018
In thousands			
Federal tax at 21% statutory rate	$ (16,415)	$ 8,523	$ 5,279
State income taxes, net of federal benefit[1]	(2,208)	1,839	773
Tax effect:			
Goodwill impairment charge	8,297	—	—
Impairment on business	7,620	—	—
Research and development credits	(821)	(3,480)	(100)
Impact of entity classification election	—	(24,813)	—
Foreign derived intangible income benefit	—	—	(2,186)
Provision to return adjustments	610	(1,466)	(1,612)
Foreign losses for which no tax benefit has been recorded	41	1,282	2,685
Change in valuation allowance	1,449	976	3,161
Equity compensation benefit	(209)	(482)	(910)
Nondeductible compensation	215	891	347
Nondeductible acquisition costs	—	546	—
Federal benefit of NOL Carryback	(3,885)	—	—
Other, net	(2,424)	325	1,822
Income tax (benefit) expense	$ (7,730)	$ (15,859)	$ 9,259

[1] Included in state income taxes, net of federal benefit was the state impact of the entity classification election of $0.9 million for the year ended December 31, 2019.

Due to the loss in the year ended December 31, 2020, the Company did not realize tax benefits associated with the foreign-derived intangible income ("FDII") deduction, which encourages U.S manufacturing by allowing for what equates to a 13% U.S. tax rate on export sales. The Company realized tax benefits of approximately $3.7 million for the year ended December 31, 2019 associated with the FDII deduction; however, based on U.S. GAAP reporting requirements, this benefit was recorded in earnings from discontinued operations due to the loss in continuing operations. While the amount of the benefit is dependent upon the volume and profitability of the Company's export sales, as well as consolidated taxable income, the Company would expect to have benefits relating to FDII recorded in continuing operations in the future.

16. INCOME TAXES (CONTINUED)

The Company records a benefit for uncertain tax positions in the financial statements only when it determines it is more likely than not that such a position will be sustained upon examination by taxing authorities. Unrecognized tax benefits represent the difference between the position taken and the benefit reflected in the financial statements. On December 31, 2020, 2019 and 2018, the total liability for unrecognized tax benefits was $3.6 million, $3.2 million and $3.5 million, respectively (including interest and penalties of $0.4 million in 2020, $0.2 million in 2019 and $0.4 million in 2018).

The change in the liability for 2020, 2019 and 2018 is explained as follows:

In thousands	2020	2019	2018
Balance at January 1	$ 3,214	$ 3,457	$ 3,423
Additions (reductions) based on current year tax positions	481	(378)	162
Changes for tax positions of prior years	3	135	(128)
Settlements	(86)	—	—
Balance at December 31	$ 3,612	$ 3,214	$ 3,457

Included in unrecognized tax benefits at December 31, 2020, were items approximating $3.1 million that, if recognized, would favorably affect the Company’s effective tax rate in future periods. The Company files tax returns in numerous U.S. and foreign jurisdictions, with returns subject to examination for varying periods, but generally back to and including 2014. During 2020, 2019 and 2018, $0.2 million or less of interest and penalties was recognized each year as a component of income tax expense. It is the Company’s policy to record interest and penalties on unrecognized tax benefits as income taxes.

Cash payments for income taxes, net of refunds, were $0.9 million, $47.8 million and $12.4 million in 2020, 2019 and 2018, respectively.

17. PENSION PLANS

The Company has a non-contributory qualified defined benefit pension plan (the “Qualified Pension Plan”). On February 23, 2010, the Company’s Board of Directors approved an amendment to the Qualified Pension Plan that, among other things, closed the Qualified Pension Plan to all new hires on or after March 1, 2010, and stipulated that years of service would continue to be added for purposes of the benefit calculations only through December 31, 2015, with no further accrual of benefits for service thereafter. As a result, effective December 31, 2015, the qualified pension plan was frozen with respect to future benefit accruals. Under U.S. Government Cost Accounting Standard (“CAS”) 413 the Company must determine the USG’s share of any pension curtailment adjustment calculated in accordance with CAS. During the fourth quarter of 2016, the Company accrued a $0.3 million liability representing our estimate of the amount due to the USG based on our pension curtailment adjustment calculation, which was submitted to the USG for review in December 2016. The Company has maintained its accrual at $0.3 million as of December 31, 2020. There can be no assurance that the ultimate resolution of this matter will not have a material adverse effect on the Company's results of operations, financial position and cash flows.

The Company also has a Supplemental Employees’ Retirement Plan (“SERP”), which is considered a non-qualified pension plan. The SERP provides certain key executives, whose compensation is in excess of the limitations imposed by federal law on the qualified defined benefit pension plan, with supplemental benefits based upon eligible earnings, years of service and age at retirement. During 2010, the Company's Board of Directors also approved an amendment to the SERP that made changes consistent with the pension plan amendment. The Board's Compensation Committee and the Board have not approved any new participants to the SERP since February 28, 2010, and do not intend to do so at any time in the future. The measurement date for both these plans is December 31.

17. PENSION PLANS (CONTINUED)

Obligations and Funded Status

The changes in the actuarial present value of the projected benefit obligation and fair value of plan assets are as follows:

	For the twelve months ended December 31,			
	Qualified Pension Plan		SERP	
	2020	2019	2020	2019
In thousands				
Projected benefit obligation at beginning of year	$ 777,388	$ 695,375	$ 7,336	$ 6,913
Service cost	5,234	5,100	—	—
Interest cost	21,020	26,422	165	237
Actuarial liability loss gain [1]	72,145	88,271	702	720
Benefit payments	(39,256)	(37,780)	(534)	(534)
Projected benefit obligation at end of year	$ 836,531	$ 777,388	$ 7,669	$ 7,336
Fair value of plan assets at beginning of year	$ 680,142	$ 590,387	$ —	$ —
Actual return on plan assets	116,035	127,535	—	—
Employer contributions	10,000	—	534	534
Benefit payments	(39,256)	(37,780)	(534)	(534)
Fair value of plan assets at end of year	$ 766,921	$ 680,142	$ —	$ —
Funded status at end of year	$ (69,610)	$ (97,246)	$ (7,669)	$ (7,336)
Accumulated benefit obligation	$ 836,531	$ 777,388	$ 7,669	$ 7,336

[1] The actuarial liability loss (gain) amount for the qualified pension plan for 2020 and 2019 is principally due to the effect of changes in the discount rate.

The Company has recorded liabilities related to our qualified pension plan and SERP as follows:

	At December 31,			
	Qualified Pension Plan		SERP	
	2020	2019	2020	2019
In thousands				
Current liabilities [1]	$ —	$ —	$ (2,771)	$ (528)
Noncurrent liabilities	(69,610)	(97,246)	(4,898)	(6,808)
Total	$ (69,610)	$ (97,246)	$ (7,669)	$ (7,336)

[1] The current liabilities are included in other current liabilities on the Consolidated Balance Sheets.

The following table presents amounts included in accumulated other comprehensive income on the Consolidated Balance Sheets that will be recognized as components of pension cost in future periods.

	At December 31,			
	Qualified Pension Plan		SERP	
	2020	2019	2020	2019
In thousands				
Unrecognized loss	$ 171,571	$ 177,083	$ 1,069	$ 1,311
Amount included in accumulated other comprehensive income	$ 171,571	$ 177,083	$ 1,069	$ 1,311

17. PENSION PLANS (CONTINUED)

Obligations and Funded Status - continued

The pension plan net periodic benefit costs on the Consolidated Statements of Operations and other amounts recognized in other comprehensive income (loss) on the Consolidated Statements of Comprehensive Income and Consolidated Statements of Shareholders' Equity were computed using the projected unit credit actuarial cost method and included the following components:

	For the twelve months ended December 31,					
	Qualified Pension Plan			SERP		
	2020	**2019**	**2018**	**2020**	**2019**	**2018**
In thousands						
Service cost for benefits earned during the year	$ 5,234	$ 5,100	$ 4,897	$ —	$ —	$ —
Interest cost on projected benefit obligation	21,020	26,422	23,804	165	237	246
Expected return on plan assets	(43,183)	(42,560)	(47,841)	—	—	—
Recognized net loss	4,804	15,260	11,370	944	245	248
Additional amount recognized due to curtailment/settlement	—	—	—	—	—	46
Net pension benefit cost (income)	$ (12,125)	$ 4,222	$ (7,770)	$ 1,109	$ 482	$ 540
Change in net gain or (loss)	(708)	3,295	27,203	703	720	(325)
Amortization of net loss	(4,804)	(15,260)	(11,370)	(944)	(245)	(248)
Total recognized in other comprehensive (loss) income	$ (5,512)	$ (11,965)	$ 15,833	$ (241)	$ 475	$ (573)
Total recognized in net periodic benefit cost and other comprehensive (loss) income	$ (17,637)	$ (7,743)	$ 8,063	$ 868	$ 957	$ (33)

The following tables show the amount of the contributions made to the Qualified Pension Plan and SERP during each period and the amount of contributions the Company expects to make during 2021:

	Qualified Pension Plan		**SERP**	
	2020	**2019**	**2020**	**2019**
In thousands				
Contributions	$ 10,000	$ —	$ 534	$ 534

	Qualified Pension Plan	**SERP**
In thousands		
Expected contributions during 2021	$ 10,000	$ 2,771

17. PENSION PLANS (CONTINUED)

Obligations and Funded Status - continued

Expected future benefit payments are as follows:

In thousands	Qualified Pension Plan	SERP
2021	$ 40,619	$ 2,771
2022	$ 41,892	$ 510
2023	$ 43,178	$ 489
2024	$ 44,130	$ 467
2025	$ 44,740	$ 442
2026-2030	$ 225,167	$ 1,779

Mortality is a key assumption in developing actuarial estimates, and therefore could significantly impact the valuation of the Company's obligations under the qualified pension plan and SERP. The Company reviewed the mortality data and based on the size and demographics of the plan's participant population, the Company determined the Pri-2012 Blue Collar with Scale MP-2020 mortality table was the most appropriate assumption.

The Company uses the Financial Times Stock Exchange ("FTSE") Pension Liability Index, as it is deemed to be the most appropriate basis for generating the Company's discount rate assumption, as the future cash flows of the plan are most closely aligned to the Above Median Double-A Curve. The discount rates used in determining benefit obligations of the pension plans are as follows:

	At December 31,			
	Qualified Pension Plan		SERP	
	2020	2019	2020	2019
Discount rate	2.34 %	3.14 %	1.78 %	2.76 %

The actuarial assumptions used in determining the net periodic benefit cost of the pension plans are as follows:

	For the twelve months ended December 31,			
	Qualified Pension Plan		SERP	
	2020	2019	2020	2019
Discount rate	3.14 %	4.17 %	2.76 %	3.88 %
Expected return on plan assets	6.50 %	7.50 %	N/A	N/A
Average rate of increase in compensation levels	N/A	N/A	N/A	N/A

Other

The Company utilizes a "spot rate approach" in the calculation of pension interest and service cost. The spot rate approach applies separate discount rates for each projected benefit payment in the calculation of pension interest and service cost.

17. PENSION PLANS (CONTINUED)

Qualified Pension Plan Assets

The expected return on plan assets rate was determined based upon historical returns adjusted for estimated future market fluctuations. For 2020 and 2019, the expected rate of return on plan assets was 6.5% and 7.5%, respectively. During 2020, the actual return on pension plan assets, net of expenses, was 17.6%.

Plan assets are invested in a diversified portfolio consisting of equity and fixed income securities. The investment goals for pension plan assets are to improve and/or maintain the Plan's funded status by generating long-term asset returns that exceed the rate of growth of the Plan's liabilities. The Plan invests assets in a manner that seeks to (a) maximize return within reasonable and prudent levels of risk of loss of funded status; and (b) maintain sufficient liquidity to meet benefit payment obligations and other periodic cash flow requirements on a timely basis. The return generation/liability matching asset allocation ratio is currently 42.3%/57.7%. As the plan's funded status changes, the pension plan's Administrative Committee (the management committee that is responsible for plan administration) will act through an immediate or gradual process, as appropriate, to reallocate assets.

Under the current investment policy, no Investment Manager may invest in investments deemed illiquid by the Investment Manager at the time of purchase, development programs, real estate, mortgages or private equities or securities of Kaman Corporation without prior written authorization from the Pension Administrative Committee. In addition, with the exception of USG securities, managers' holdings in the securities of any one issuer, at the time of purchase, may not exceed 7.5% of the total market value of that manager's account.

The pension plan assets are valued at fair value. The following is a description of the valuation methodologies used for the investments measured at fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

Short-term Investments – This investment category consists of cash and cash equivalents and futures and options contracts. Cash and cash equivalents are comprised of investments with maturities of three months or less when purchased, including certain short-term fixed-income securities, and are classified as Level 1 investments. Futures contracts and options contracts requiring the investment managers to receive from or pay to the broker an amount of cash equal to daily fluctuations are included in short-term investments and are classified as Level 2 investments.

Corporate Stock – This investment category consists primarily of domestic common stock issued by U.S. corporations. Common shares are traded actively on exchanges and price quotes for these shares are readily available. Holdings of corporate stock are classified as Level 1 investments.

Mutual Funds – Mutual funds are traded actively on public exchanges. The share prices for these mutual funds are published at the close of each business day. Holdings of mutual funds are classified as Level 1 investments.

Common Trust Funds – Common trust funds are comprised of shares or units in commingled funds that are not publicly traded. The values of the commingled funds are not publicly quoted and must trade through a broker. For equity and fixed-income commingled funds traded through a broker, the fund administrator values the fund using the net asset value ("NAV") per fund share, derived from the value of the underlying assets. The underlying assets in these funds (equity securities, fixed income securities and commodity-related securities) are publicly traded on exchanges and price quotes for the assets held by these funds are readily available. Holdings of common trust funds are not subject to leveling.

Fixed Income Securities - For fixed income securities, multiple prices and price types are obtained from pricing vendors whenever possible, which enables cross-provider validations. A primary price source is identified based on asset type, class or issue for each security. The fair values of fixed income securities are based on evaluated prices that reflect observable market information, such as actual trade information of similar securities, adjusted for observable differences, and are categorized as Level 2. These securities are primarily investment grade securities.

17. PENSION PLANS (CONTINUED)

Qualified Pension Plan Assets - continued

The fair values of the Company's qualified pension plan assets at December 31, 2020 and 2019, are as follows:

In thousands	Total Carrying Value at December 31, 2020	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Not subject to leveling
Short-term investments:					
Cash and cash equivalents	$ 26,951	$ 26,951	$ —	$ —	$ —
Futures contracts - assets	285	—	285	—	—
Futures contracts - liabilities	(15)	—	(15)	—	—
Fixed income securities	214,961	—	214,961	—	—
Mutual funds	130,490	130,490	—	—	—
Common trust funds[1]	362,288	—	—	—	362,288
Corporate stock	30,222	30,222	—	—	—
Subtotal	$ 765,182	$ 187,663	$ 215,231	$ —	$ 362,288
Accrued income/expense	1,739	17	1,722	—	—
Total	$ 766,921	$ 187,680	$ 216,953	$ —	$ 362,288

In thousands	Total Carrying Value at December 31, 2019	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Not subject to leveling
Short term investments:					
Cash and cash equivalents	$ 17,597	$ 17,597	$ —		$ —
Futures contracts - assets	—	—	—	—	—
Futures contracts - liabilities	(1,210)	—	(1,210)	—	—
Fixed income securities	195,133	—	195,133	—	—
Mutual funds	102,423	102,423	—	—	—
Common trust funds[1]	319,932	—	—	—	319,932
Corporate stock	44,124	44,124	—	—	—
Subtotal	$ 677,999	$ 164,144	$ 193,923	$ —	$ 319,932
Accrued income/expense	2,143	67	2,021	—	55
Total	$ 680,142	$ 164,211	$ 195,944	$ —	$ 319,987

[1] In accordance with ASU 2015-07, Fair Value Measurement (Topic 820), certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension plan assets.

Derivatives are primarily used to manage risk and gain asset class exposure while still maintaining liquidity. Derivative instruments mainly consist of equity futures and interest rate futures.

17. PENSION PLANS (CONTINUED)

Other Plans

The Company also maintains a Defined Contribution Plan that has been adopted by most of its U.S. subsidiaries. Employees of the adopting employers who meet the eligibility requirements of the plan may participate. Employer matching contributions are made to the plan based on a percentage of each participant’s pre-tax contribution. For each dollar that a participant contributes, up to 5% of compensation, participating subsidiaries make employer contributions of one dollar. Employer contributions to the plan for continuing operations totaled $6.7 million, $7.1 million and $6.8 million in 2020, 2019 and 2018, respectively. Employer contributions to the plan for discontinued operations totaled $4.5 million and $6.3 million in 2019 and 2018, respectively. No employer contributions were made to the plan for discontinued operations in 2020.

One of the Company's foreign subsidiaries maintains a defined benefit plan of its own for its local employees. The net pension liability associated with this plan was not material as of December 31, 2020 and 2019.

18. OTHER LONG-TERM LIABILITIES

Other long-term liabilities consist of the following:

	At December 31,	
In thousands	**2020**	**2019**
Supplemental employees' retirement plan ("SERP")	$ 4,898	$ 6,808
Deferred compensation	21,968	20,768
Long-term incentive plan	3,448	10,527
Noncurrent income taxes payable	3,625	3,390
Environmental remediation liability	5,313	5,525
Finance leases	4,315	5,559
Other	4,069	3,838
Total other long-term liabilities	$ 47,636	$ 56,415

The Company maintains a non-qualified deferred compensation plan for certain of its employees as well as a non-qualified deferred compensation plan for its Board of Directors. Generally, participants in these plans have the ability to defer a certain amount of their compensation, as defined in the agreement. The deferred compensation liability will be paid out either upon retirement or as requested based upon certain terms in the agreements and in accordance with Internal Revenue Code Section 409A.

Disclosures regarding the assumptions used in the determination of the SERP liabilities are included in Note 17, *Pension Plans*. Discussions of our environmental remediation liabilities are in Note 13, *Environmental Costs*, and Note 19, *Commitments and Contingencies*.

19. COMMITMENTS AND CONTINGENCIES

Asset Retirement Obligations

The Company has unrecorded Asset Retirement Obligation’s (“AROs”) that are conditional upon certain events. These AROs generally include the removal and disposition of non-friable asbestos. The Company has not recorded a liability for these conditional AROs at December 31, 2020, because the Company does not currently believe there is a reasonable basis for estimating a date or range of dates for major renovation or demolition of these facilities. In reaching this conclusion, the Company considered the historical performance of each facility and has taken into account factors such as planned maintenance, asset replacements and upgrades, which, if conducted as in the past, can extend the physical lives of the facilities indefinitely. The Company also considered the possibility of changes in technology and risk of obsolescence in arriving at its conclusion.

19. COMMITMENTS AND CONTINGENCIES (CONTINUED)

Asset Retirement Obligations - continued

The Company currently leases various properties under leases that give the lessor the right to make the determination as to whether the lessee must return the premises to their original condition, except for normal wear and tear. The Company does not normally make substantial modifications to leased property, and many of the Company's leases either require lessor approval of planned improvements or transfer ownership of such improvements to the lessor at the termination of the lease. Historically the Company has not incurred significant costs to return leased premises to their original condition.

Other Matters

Pension Freeze

Effective December 31, 2015, the Company's qualified pension plan was frozen with respect to future benefit accruals. Under CAS 413 the Company must determine the USG's share of any pension curtailment adjustment calculated in accordance with CAS. Such adjustments can result in an amount due to the USG for pension plans that are in a surplus position or an amount due to the contractor for plans that are in a deficit position. During the fourth quarter of 2016, the Company accrued a $0.3 million liability representing our estimate of the amount due to the USG based on the Company's pension curtailment adjustment calculation, which was submitted to the USG for review in December 2016. The Company has maintained its accrual at $0.3 million as of December 31, 2020. There can be no assurance that the ultimate resolution of this matter will not have a material adverse effect on the Company's results of operations, financial position and cash flows.

Offset Agreement

During January 2018, the Company entered into an offset agreement as a condition to obtaining orders from a foreign customer for the Company's JPF product. This agreement is designed to return economic value to the foreign country by requiring the Company to engage in activities supporting local defense or commercial industries, promoting a balance of trade, developing in-country technology capabilities or addressing other local development priorities. The offset agreement may be satisfied through activities that do not require a direct cash payment, including transferring technology, providing manufacturing, training and other consulting support to in-country projects and the purchase by third parties of supplies from in-country vendors. This agreement may also be satisfied through the Company's use of cash for activities, such as subcontracting with local partners, purchasing supplies from in-country vendors, providing financial support for in-country projects and making investments in local ventures. At December 31, 2020, the offset agreement had an outstanding notional value of approximately $194.0 million, which is equal to sixty percent of the contract value of $324.0 million as defined by the agreement between the customer and the Company. The amount ultimately applied against the offset agreement is based on negotiations with the customer and may require cash outlays that represent only a fraction of the notional value in the offset agreement.

The Company continues to work with the customer to further define the requirements to satisfy the offset agreement. The satisfaction of the offset requirements will be determined by the customer and is expected to occur over a seven-year period. Deliveries under the contract are expected to be completed prior to satisfaction of the offset requirements. In the event the offset requirements of the contract are not met, the Company could be liable for potential penalties up to $16.5 million payable to the customer. The Company began recognizing revenue associated with this contract in the third quarter of 2019 and has considered the potential penalties of $16.5 million as a reduction to the transaction price in its determination of the value of the contract. At December 31, 2020, $11.0 million in contract liabilities associated with the potential penalties of the offset requirements were included on the Company's Consolidated Balance Sheets. At the point the Company has an approved plan to satisfy the offset requirements, the Company will update its contract estimates with respect to any costs or penalties associated with the plan to satisfy the offset obligation.

19. COMMITMENTS AND CONTINGENCIES (CONTINUED)

Other Matters - continued

Employee-Related Tax Matter

During 2018, the Company identified certain individuals at one of its foreign subsidiaries who were potentially misclassified as self-employed persons performing services for the subsidiary, as opposed to being classified as employees of the subsidiary. The Company investigated the misclassification of these individuals and the potential liability for any associated social contributions, interest and fines and/or penalties as a result of the misclassification. Following the internal investigation, the foreign subsidiary made a voluntary disclosure of the matter to the appropriate legal and regulatory authorities. At December 31, 2019, the Company had accrued $2.5 million, which represented the Company's best estimate of potentially unpaid social security contributions, related interest and possible penalties. During the first quarter of 2020, the Company received written notification of an assessment for the unpaid social security contributions and related interest. As a result, the Company reduced its accrual to $1.3 million in the first quarter of 2020 and subsequently paid $0.7 million for the unpaid social security contributions and related interest in the second quarter. During the third quarter of 2020, the Company was notified that no penalties would be assessed for the misclassification. As such, the Company reduced its accrual and no amounts are outstanding related to this matter as of December 31, 2020.

Guarantee

During 2020, the Company and the USG entered into a Guaranty Agreement, pursuant to which the Company agreed to guarantee the full, complete and satisfactory performance of its subsidiary, Kaman Precision Products, Inc. ("KPPI") under all current and future contracts with the USG. As of the date of this filing, the only contract in place between KPPI and the USG relates to the production and sale of the JPF. KPPI is currently fulfilling the requirements of Option 14 and has completed pricing negotiations on Options 15 and 16. The guarantee was provided in lieu of a periodic financial capability review by the Financial Capacity Team ("FCT") of the Defense Contract Management Agency ("DCMA"). The Company is unable to estimate the maximum potential amount of future payments under the guarantee as it is dependent on costs incurred by the USG in the event of default. Although the Company believes the risk of default is low given the maturity and operational performance of the JPF program, there can be no assurance that the guarantee will not have a material adverse effect on the Company's results of operations, financial position and cash flows.

New Hartford

In connection with sale of the Company’s Music segment in 2007, the Company assumed responsibility for meeting certain requirements of the Transfer Act that applied to our transfer of the New Hartford, Connecticut, facility leased by that segment for guitar manufacturing purposes (“Ovation”). Under the Transfer Act, those responsibilities essentially consist of assessing the site's environmental conditions and remediating environmental impairments, if any, caused by Ovation's operations prior to the sale. The site is a multi-tenant industrial park, in which Ovation and other unrelated entities lease space. The environmental assessment, which began in 2008, has been completed and site remediation is in process.

The Company's estimate of its portion of the cost to assess the environmental conditions and remediate this site is $2.3 million, all of which has been accrued. The total amount paid to date in connection with these environmental remediation activities is $1.7 million. At December 31, 2020, the Company had $0.6 million accrued for these environmental remediation activities. A portion ($0.1 million) of the accrual related to this property is included in other current liabilities and the balance is included in other long-term liabilities. The remaining balance of the accrual reflects the total anticipated cost of completing these environmental remediation activities. Although it is reasonably possible that additional costs will be paid in connection with the resolution of this matter, the Company is unable to estimate the amount of such additional costs, if any, at this time.

19. COMMITMENTS AND CONTINGENCIES (CONTINUED)

Other Matters - continued

Bloomfield

In connection with the Company's 2008 purchase of the portion of the Bloomfield campus that Kaman Aerospace Corporation had leased from NAVAIR, the Company assumed responsibility for environmental remediation at the facility as may be required under the Transfer Act and is currently remediating the property under the guidance of the CTDEP. The assumed environmental liability of $10.3 million was determined by taking the undiscounted estimated remediation liability of $20.8 million and discounting it at a rate of 8%. This remediation process will take many years to complete. The total amount paid to date in connection with these environmental remediation activities is $14.5 million. At December 31, 2020, the Company had $2.3 million accrued for these environmental remediation activities. A portion ($0.7 million) of the accrual related to this property is included in other current liabilities, and the balance is included in other long-term liabilities. Although it is reasonably possible that additional costs will be paid in connection with the resolution of this matter, the Company is unable to estimate the amount of such additional costs, if any, at this time.

20. LEASES

The Company's operating leases consist of rent commitments under various leases for office space, warehouses, land and buildings at varying dates from January 2021 to December 2024. The terms of most of these leases are in the range of 3 to 8 years, with certain leases renewable for varying periods. It is expected that in the normal course of business leases that expire will be renewed or replaced by leases on other similar property. Some of the Company's lease obligations have rent escalations or contingent rent that are recognized on a straight-line basis over the entire lease term. Material leasehold improvements and other landlord incentives are amortized over the shorter of their economic lives or the lease term, including renewal periods, if reasonably assured. Substantially all real estate taxes, insurance and maintenance expenses associated with leased facilities are obligations of the Company. The terms for most machinery and equipment leases range from 3 to 5 years.

The Company's finance leases are included in machinery, office furniture and equipment and construction in process and amortization of these assets is included in depreciation and amortization expense. The terms of these leases are 5 years. At December 31, 2020, $6.7 million of assets included in property, plant and equipment were accounted for as finance leases. At December 31, 2020, the Company had accumulated depreciation of $2.1 million associated with these assets. At December 31, 2019, $8.2 million of assets included in property, plant and equipment were accounted for as finance leases. At December 31, 2019, the Company had accumulated depreciation of $2.4 million associated with these assets. Additionally, $2.7 million of assets included in construction in process in property, plant and equipment, net of accumulated depreciation related to finance leases.

At the commencement date of a contract containing a lease, a right-of-use asset and lease liability are recorded to the Company's Consolidated Balance Sheets when the Company obtains control of the use of the asset. Right-of-use assets represent the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make payments upon entering into a lease agreement.

Right-of-use assets, net consisted of the following:

	Classification	December 31, 2020	December 31, 2019
In thousands			
Assets			
Operating lease right of use assets	Operating lease right-of-use assets, net	$ 12,880	$ 15,159
Finance lease right of use assets	Property, plant and equipment, net of accumulated depreciation	4,618	5,840
Total leased assets		$ 17,498	$ 20,999

20. LEASES (CONTINUED)

The lease liability and future rental payments are required under leases that have initial or remaining non-cancellable lease terms in excess of one year as of December 31, 2020. Lease liabilities consisted of the following:

In thousands	Classification	December 31, 2020	December 31, 2019
Liabilities			
Current			
Operating lease liability, current portion	Operating lease liabilities, current portion	$ 4,305	$ 4,306
Finance lease liability, current portion	Other current liabilities	1,899	1,838
Noncurrent			
Operating lease liability, noncurrent portion	Operating lease liabilities, noncurrent portion	9,325	11,617
Finance lease liability, noncurrent portion	Other long-term liabilities	4,315	5,559
Total lease liabilities[(1)]		$ 19,844	$ 23,320

[(1)] Total leased liabilities attributable to the Company's UK Composites business were included in liabilities held for sale, current portion and liabilities held for sale, noncurrent portion as of December 31, 2020 on the Company's Consolidated Balance Sheets. See Note 2, *Discontinued Operations and Liabilities Held for Sale*, for further information.

Future rental payments for continuing operations consisted of the following:

In thousands	December 31, 2020
Operating leases	
2021	$ 4,738
2022	3,845
2023	3,184
2024	2,507
2025	285
Thereafter	—
Total future operating lease payments	$ 14,559
Interest	(929)
Present value of future operating lease payments	$ 13,630
Finance leases	
2021	2,030
2022	1,769
2023	1,253
2024	775
2025	669
Thereafter	—
Total future finance lease payments	$ 6,496
Interest	(282)
Present value of future finance lease payments	$ 6,214
Present value of total future lease payments	$ 19,844

20. LEASES (CONTINUED)

The following table illustrates the components of lease expense for the Company's leases.

	For the Years Ended December 31,	
	2020	**2019**
In thousands		
Finance lease cost		
Amortization of right-of-use assets	$ 880	$ 941
Interest on lease liabilities	196	297
Operating lease cost	5,465	5,064
Short-term lease cost	443	177
Variable lease cost	96	83
Total lease expense	$ 7,080	$ 6,562

The following table segregates cash paid for the Company's leases from continuing operations.

	For the Years Ended December 31,	
	2020	**2019**
In thousands		
Operating cash flows from operating leases	$ (5,556)	$ (4,950)
Operating cash flows from finance leases	(1,533)	(1,609)
Financing cash flows from finance leases	(196)	(297)
Total cash flows from leasing activities	$ (7,285)	$ (6,856)

During the twelve-month fiscal period ended December 31, 2020, $4.0 million in right-of-use assets were obtained in exchange for new operating lease liabilities. No right-of-use assets were obtained in exchange for new finance lease liabilities in the year ended December 31, 2020.

Other information related to leases is as follows:

	December 31, 2020
Weighted-average remaining lease term (years)	
Operating leases	3.51
Finance leases	3.81
Weighted-average discount rate	
Operating leases	3.87 %
Finance leases	2.75 %

21. COMPUTATION OF EARNINGS PER SHARE

The computation of basic earnings per share is based on net earnings divided by the weighted average number of shares of common stock outstanding for each year. The computation of diluted earnings per share includes the common stock equivalency of dilutive options granted to employees under the Company's stock incentive plan and shares issuable on redemption of its Convertible Notes.

	For the Year Ended December 31,		
	2020	2019	2018
In thousands, except per share amounts			
(Loss) earnings from continuing operations	$ (70,434)	$ 56,446	$ 15,877
Total earnings from discontinued operations	692	153,383	38,292
Net (loss) earnings	$ (69,742)	$ 209,829	$ 54,169
Basic:			
Weighted average number of shares outstanding	27,723	27,936	27,945
(Loss) earnings per share from continuing operations	$ (2.54)	$ 2.02	$ 0.57
Earnings per share from discontinued operations	0.02	5.49	1.37
Basic (loss) earnings per share	$ (2.52)	$ 7.51	$ 1.94
Diluted:			
Weighted average number of shares outstanding	27,723	27,936	27,945
Weighted average shares issuable on exercise of dilutive stock options	—	156	208
Weighted average shares issuable on exercise of convertible notes	—	—	37
Weighted average shares issuable on redemption of warrants related to 2017 Notes	—	—	33
Total	27,723	28,092	28,223
(Loss) earnings per share from continuing operations	$ (2.54)	$ 2.01	$ 0.56
Earnings per share from discontinued operations	0.02	5.46	1.36
Diluted (loss) earnings per share	$ (2.52)	$ 7.47	$ 1.92

Equity awards

Excluded from the diluted earnings per share calculation for the years ended December 31, 2020, 2019 and 2018, respectively, are 597,904, 339,961 and 186,115 shares associated with equity awards granted to employees that are anti-dilutive based on the average stock price.

All outstanding stock awards were excluded in the computation of diluted earnings per share in the year ended December 31, 2020 because their effect was antidilutive due to the loss from continuing operations. For the year ended December 31, 2020, respectively, an additional 40,979 shares issuable under equity awards, which would have been dilutive if exercised based on the average market price being higher than the exercise price, were excluded from the computation of diluted earnings per share as their effect was antidilutive due to the loss from continuing operations.

2024 Convertible Notes

For the years ended December 31, 2020, 2019 and 2018, shares issuable under the 2024 Notes were excluded from the calculation of diluted earnings per share as the conversion price for the Convertible Notes was more than the average share price of the Company's stock.

22. SHARE-BASED ARRANGEMENTS

General

The Company accounts for stock options, restricted stock awards, restricted stock units and performance shares as equity awards and measures the cost of all share-based payments, including stock options, at fair value on the grant date and recognizes this cost in the statement of operations. The Company also has an employee stock purchase plan which is accounted for as a liability award.

Compensation expense for stock options, restricted stock awards and restricted stock units is recognized on a straight-line basis over the vesting period of the awards. Share-based compensation expense recorded for continuing operations for the years ended December 31, 2020, 2019 and 2018 was $5.0 million, $4.7 million and $5.5 million, respectively. These amounts were included in selling, general and administrative expenses on the Company's Consolidated Statements of Operations.

Share-based compensation expense for discontinued operations for the year ended December 31, 2019 was $2.9 million. Of this amount, $0.5 million was included in earnings from discontinued operations, net of tax on the Company's Consolidated Statements of Operations. As a result of the Company selling its Distribution business, the vesting dates of all outstanding unvested stock options and restricted stock awards for Distribution employees were accelerated to vest on the closing date. These stock options and awards would not have vested prior to the closing date; therefore, the related stock-based compensation expense previously recognized through the modification date of $0.4 million was reduced to zero and a new fair value of the options and awards was established on the date the Company entered the definitive agreement to sell the Distribution business. The expense of $2.8 million was recognized ratably from the date of signing the definitive agreement to the closing date of the sale. The amount included in the gain on disposal of discontinued operations, net of tax attributable to the acceleration and modification of these awards was $2.4 million for the year ended December 31, 2019. Share-based compensation expense recorded for discontinued operations for the year ended December 31, 2018 was $1.0 million. These amounts were included in earnings from discontinued operations, net of tax on the Company's Consolidated Statement of Operations. There was no share-based compensation expense recorded for discontinued operations for the year ended December 31, 2020.

Stock Incentive Plan

On April 17, 2013, the shareholders of the Company approved the 2013 Management Incentive Plan (the "2013 Plan"), which replaced the 2003 Stock Incentive Plan. The 2013 Plan was designed as a flexible share authorization plan, such that the Company's share authorization is based on the least costly type of award (stock options). Shares issued pursuant to “Full Value Awards” as defined in the 2013 Plan (awards other than stock options or stock appreciation rights which are settled by the issuance of shares, e.g., restricted stock, restricted stock units, performance shares, performance units if settled with stock, or other stock-based awards) count against the 2013 Plan's share authorization at a rate of 3 to 1, while shares issued upon exercise of stock options or stock appreciation rights count against the share authorization at a rate of 1 to 1. This means that every time an option is granted, the authorized pool of shares is reduced by one (1) share and every time a Full Value Award is granted, the authorized pool of shares is reduced by 3 shares. In deriving the valuation ratio used in the 2013 Plan, the Company used the Black Scholes Fair Value model as the basis for determining the approximate value of an option as compared to a "full value share." The 2013 Plan provided the Company with the ability to use equity-based awards of up to 2,250,000 authorized shares. On April 18, 2018, the shareholders of the Company approved the amendment and restatement of the 2013 Plan, which increased the number of authorized shares by 2,250,000 shares. As of December 31, 2020, there were 1,845,019 shares available for grant under the plan.

LTIP awards provide certain senior executives an opportunity to receive award payments in either stock or cash as determined by the Compensation Committee of the Board of Directors in accordance with the Plan, at the end of each performance cycle. Prior to 2018, performance was based on the Company’s financial results compared to the Russell 2000 indices for the same periods based upon the following metrics: (a) average return on total capital, (b) average earnings per share growth and (c) total return to shareholders for the performance period. Beginning in 2018, the performance metrics were changed to the following: (a) average return on total capital and (b) total return to shareholders, both compared to the Russell 2000 indices for the same performance period. No awards will be payable if the Company’s performance is below the 25th percentile. The maximum award is payable if performance reaches the 75th percentile of the designated indices. Awards are paid out at 100% at the 50th percentile. Awards for performance between the 25th and 75th percentiles are determined by straight-line interpolation between 0% and 200%. Generally, LTIP awards are paid in cash. Refer to Liquidity and Capital Resources in Management's Discussion and Analysis on this Form 10-K for changes to the Company's long-term incentive plan effective in 2021.

22. SHARE-BASED ARRANGEMENTS (CONTINUED)

Stock options are granted with an exercise price equal to the average market price of our stock at the date of grant. Stock options and Stock Appreciation Rights ("SARs") granted under the plan generally expire ten years from the date of grant and vest 20% each year over a 5-year period on each of the first five anniversaries of the date of grant. Restricted Stock Awards ("RSAs") are generally granted with restrictions that lapse at the rate of 20% per year over a 5-year period on each of the first five anniversaries of the date of grant. Generally, these awards are subject to forfeiture if a recipient separates from service with the Company.

From time-to-time, the Company has issued stock awards with market and performance based conditions. Throughout the course of the requisite service period, the Company monitors the level of achievement compared to the target and adjusts the number of shares expected to be earned, and the related compensation expense recorded thereafter, to reflect the most probable outcome. The number of shares earned under an award granted in 2016 has been determined at a 130% achievement level, representing 925 shares delivered in 2019. The number of shares were pro-rated to reflect the number of days the participant was employed by the Company during the performance period. There are no outstanding awards with these conditions that have not been settled. Compensation expense for these awards for the years ended December 31, 2020, 2019 and 2018, was not material.

Stock option activity is as follows:

	Options	Weighted average-exercise price
Options outstanding at December 31, 2019	736,364	$ 49.67
Granted	157,860	64.48
Exercised	(113,369)	34.92
Forfeited or expired	(8,230)	48.74
Options outstanding at December 31, 2020	772,625	$ 54.87

The following table presents information regarding options outstanding as of December 31, 2020:

Weighted-average remaining contractual term - options outstanding (years)	6.1
Aggregate intrinsic value - options outstanding (in thousands)	$ 4,283
Weighted-average exercise price - options outstanding	$ 54.87
Options exercisable	387,738
Weighted-average remaining contractual term - options exercisable (years)	4.8
Aggregate intrinsic value - options exercisable (in thousands)	$ 3,592
Weighted-average exercise price - options exercisable	$ 49.80

The intrinsic value represents the amount by which the market price of the stock on the measurement date exceeds the exercise price of the option. The intrinsic value of options exercised in 2020, 2019 and 2018 was $2.4 million, $6.2 million and $5.2 million, respectively. The Company currently has an open stock repurchase plan, which would enable the Company to repurchase shares as needed. Since 2008 the Company has generally issued shares related to option exercises and RSAs from its authorized but unissued common stock.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option valuation model. The following table indicates the weighted-average assumptions used in estimating fair value:

	2020	2019	2018
Expected option term (years)	4.9	4.9	4.9
Expected volatility	20.2 %	19.4 %	18.1 %
Risk-free interest rate	1.4 %	2.5 %	2.6 %
Expected dividend yield	1.3 %	1.3 %	1.5 %
Per share fair value of options granted	$ 10.74	$ 11.18	$ 10.65

22. SHARE-BASED ARRANGEMENTS (CONTINUED)

Stock Incentive Plan - continued

The expected term of options granted represents the period of time option grants are expected to be outstanding based upon historical exercise patterns. Forfeitures of options are estimated based upon historical data and are adjusted based upon actual occurrences. The cumulative effect of stock award forfeitures was immaterial. The volatility assumption is based on the historical daily price data of the Company's stock over a period equivalent to the weighted-average expected term of the options. Management evaluated whether there were factors during that period that were unusual and would distort the volatility figure if used to estimate future volatility and concluded that there were no such factors. The Company relies only on historical volatility since future volatility is expected to be consistent with historical volatility.

The risk-free interest rate assumption is based upon the interpolation of various U.S. Treasury rates determined at the date of option grant. Expected dividends are based upon a historical analysis of our dividend yield over the past year.

Restricted Stock Award and Restricted Stock Unit activity is as follows:

	Restricted Stock Awards	Weighted-average grant date fair value
Restricted Stock outstanding at December 31, 2019	92,800	$ 53.63
Granted	84,242	50.60
Vested	(65,638)	49.49
Forfeited or expired	(1,890)	60.97
Restricted Stock outstanding at December 31, 2020	109,514	$ 53.66

The grant date fair value for restricted stock is the average market price of the unrestricted shares on the date of grant. The total fair value of restricted stock awards vested during 2020, 2019 and 2018 was $3.1 million, $6.5 million and $3.6 million, respectively.

The Company records a tax benefit and associated deferred tax asset for compensation expense recognized on non-qualified stock options and restricted stock for which the Company is allowed a tax deduction. For 2020, 2019 and 2018, respectively, the Company recorded a tax benefit of $1.1 million, $1.6 million and $1.4 million for these two types of compensation expense.

As of December 31, 2020, future compensation costs related to non-vested stock options and restricted stock grants is $4.9 million. The Company anticipates that this cost will be recognized over a weighted-average period of 2.9 years.

Employees Stock Purchase Plan

The Kaman Corporation Employees Stock Purchase Plan ("ESPP") allows employees to purchase common stock of the Company, through payroll deductions, at 85% of the market value of shares at the time of purchase. The plan provides for the grant of rights to employees to purchase a maximum of 2,000,000 shares of common stock.

During 2020, 47,524 shares were issued to employees at prices ranging from $38.47 to $65.92. During 2019, 60,997 shares were issued to employees at prices ranging from $55.61 to $63.69. During 2018, 59,082 shares were issued to employees at prices ranging from $56.86 to $72.15. At December 31, 2020, there were 503,588 shares available for purchase under the plan.

23. SUBSEQUENT EVENTS

In the fourth quarter of 2020, the Company received approval from its Board of Directors to sell its UK Composites division. On February 2, 2021, the transaction closed. Refer to Note 2, *Discontinued Operations and Liabilities Held for Sale*, for further information on the sale.

The Company has evaluated subsequent events through the issuance date of these financial statements. Other than the matter noted above, no material subsequent events were identified that require disclosure.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company has carried out an evaluation, under the supervision and with the participation of our management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that, as of December 31, 2020, the Company's disclosure controls and procedures were effective.

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. 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 reporting purposes in accordance with U.S. generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Management has assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020.

In making its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, management utilized the criteria set forth by the Committee of Sponsoring Organizations ("COSO") of the Treadway Commission in Internal Control—Integrated Framework (2013). Management concluded that based on its assessment the Company's internal control over financial reporting was effective as of December 31, 2020. The effectiveness of internal control over financial reporting as of December 31, 2020, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included in Item 8 of this Annual Report on Form 10-K.

The scope of management's assessment of the effectiveness of internal control over financial reporting excludes the operations of Bal Seal, which the Company acquired through a business combination during the year ended December 31, 2020. The acquired business represented approximately 10% of the Company's consolidated revenues for the year ended December 31, 2020, and assets associated with the acquired business represented approximately 10% of the Company's consolidated assets as of December 31, 2020.

Changes in Internal Control Over Financial Reporting

Management of the Company has evaluated, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, changes in the Company's internal controls over financial reporting during 2020.

During the fourth quarter ended December 31, 2020, management made no changes to internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations of Controls

The Company's evaluation described in this Item was undertaken acknowledging that there are inherent limitations to the effectiveness of any system of controls, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective controls can only provide reasonable assurance of achieving their control objectives.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Other than the list of executive officers of the Company set forth in Item 1, Information about our Executive Officers, all information under this caption may be found in the Company's proxy statement to be delivered to stockholders in connection with the Annual Meeting of Shareholders, which is scheduled for April 14, 2021, (the "Proxy Statement") in the following sections: "Proposal 1 - Election of Six Directors for One-Year Terms," "Information about Director Nominees and Continuing Directors," "Information about the Board of Directors and Corporate Governance - Director Nominees," "Information about the Board of Directors and Corporate Governance - Specific Experience, Qualifications, Attributes and Skills of Current Board Members," "Information about the Board of Directors and Corporate Governance - Code of Business Conduct and Other Governance Documents Available on the Company's Website" and "Information about the Board of Directors and Corporate Governance - Board Meetings and Committees - Audit Committee." Those portions of the Proxy Statement are incorporated by reference into this Item 10.

ITEM 11. EXECUTIVE COMPENSATION

Information about the compensation of Kaman's named executive officers appears under the captions "Compensation Discussion and Analysis," "Summary Compensation Table," "Post-Termination Payments and Benefits" and "Pay Ratio Disclosure" in the Proxy Statement. Information about the compensation of Kaman's directors appears under "Information about the Board of Directors and Corporate Governance - 2020 Director Compensation" in the Proxy Statement. Information required pursuant to Item 407(d) and (e) of Regulation S-K appears under the captions "Information about the Board of Directors and Corporate Governance - Board Meetings and Committees - Compensation Committee Interlocks and Insider Participation" and "Compensation Discussion and Analysis - Compensation Committee Report." Those portions of the Proxy Statement are incorporated by reference into this Item 11.

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

Information about security ownership of certain beneficial owners and management appears under "Security Ownership of Certain Beneficial Owners and Management" in the Proxy Statement. That portion of the Proxy Statement is incorporated by reference into this Item 12.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table provides information as of December 31, 2020, concerning Common Stock issuable under the Company's equity compensation plans.

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders:			
2003 Stock Incentive Plan	27,019	$ 35.79	—
2013 Management Incentive Plan	745,606	55.56	1,845,019
Employees Stock Purchase Plan	—	—	503,588
Equity compensation plans not approved by security holders	—	—	—
Total	772,625	$ 54.87	2,348,607

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information about certain relationships and related transactions appears under “Information about the Board of Directors and Corporate Governance - Related Party Transactions” and “Information about the Board of Directors and Corporate Governance - Board and Committee Independence Requirements” in the Proxy Statement. Those portions of the Proxy Statement are incorporated by reference into this Item 13.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information regarding audit fees and all other fees, in addition to the Audit Committee’s pre-approval policies and procedures appears under “Principal Accounting Fees and Services” and "Audit Committee Preapproval Policy" in the Proxy Statement. Those portions of the Proxy Statement are incorporated by reference into this Item 14.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULE

(a)(1) FINANCIAL STATEMENTS.

	Page Number in Form 10-K
See Item 8 of this Form 10-K setting forth our Consolidated Financial Statements.	60

(a)(2) FINANCIAL STATEMENT SCHEDULE.

KAMAN CORPORATION AND SUBSIDIARIES
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
YEARS ENDED DECEMBER 31, 2020, 2019 AND 2018
(Dollars in Thousands)

		Additions			
DESCRIPTION	Balance Beginning of Period	Charged to Costs and Expenses	Others (A)	Deductions (B)	Balance End of Period
2020					
Allowance for doubtful accounts	$ 1,246	$ 1,391	$ 82	$ 711	$ 2,008
2019					
Allowance for doubtful accounts	$ 2,498	$ 788	$ —	$ 2,040	$ 1,246
2018					
Allowance for doubtful accounts	$ 2,181	$ 767	$ —	$ 450	$ 2,498

(A) Additions to allowance for doubtful accounts attributable to acquisitions.
(B) Recoveries and write-off of bad debts.

		Additions (Reductions)		
DESCRIPTION	Balance Beginning of Period	Current Year Provision (Benefit)	Others	Balance End of Period
2020				
Valuation allowance on deferred tax assets	$ 8,142	$ 1,166	$ 908	$ 10,216
2019				
Valuation allowance on deferred tax assets	$ 8,243	$ 2,046	$ (2,147)	$ 8,142
2018				
Valuation allowance on deferred tax assets	$ 4,944	$ 3,472	$ (173)	$ 8,243

(a)(3) EXHIBITS.

	Page Number in Form 10-K
An index to the exhibits filed or incorporated by reference immediately precedes such exhibits.	131

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 Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Bloomfield, State of Connecticut, on this 25th day of February 2021.

KAMAN CORPORATION
(Registrant)

By: */s/ Ian K. Walsh*
Ian K. Walsh
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 and on the dates indicated.

Signature	Title:	Date:
/s/ Ian K. Walsh Ian K. Walsh	President, Chief Executive Officer and Director (Principal Executive Officer)	February 25, 2021
/s/ Robert D. Starr Robert D. Starr	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 25, 2021
/s/ Rebecca F. Stath Rebecca F. Stath	Vice President – Accounting and External Reporting (Principal Accounting Officer)	February 25, 2021
/s/ Ian K. Walsh Ian K. Walsh Attorney-in-Fact for:		February 25, 2021
Aisha M. Barry	Director	
E. Reeves Callaway III	Director	
Karen M. Garrison	Director	
A. William Higgins	Director	
Neal J. Keating	Director	
Scott E. Kuechle	Director	
Michelle J. Lohmeier	Director	
George E. Minnich	Director	
Jennifer M. Pollino	Director	
Thomas W. Rabaut	Director	

KAMAN CORPORATION
INDEX TO EXHIBITS

Exhibit 2.1	Share Purchase Agreement, dated as of June 25, 2019, by and between Kaman Corporation and LJ KAI Blocker, Inc., LJ KFP Blocker, Inc. and LJ KIT Blocker, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K dated June 26, 2019, File No. 001-35419).	Previously Filed
Exhibit 2.2	Securities and Asset Purchase Agreement, dated November 4, 2019, by and among Kaman Aerospace Group, Inc., Kaman Corporation, as guarantor, Peter J. Balsells, in his capacity as trustee of the BF Trust, 19650 Pauling, LLC, Pauling Properties LLC and Bal Seal Engineering, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K dated November 5, 2019, File No. 001-35419).	Previously Filed
Exhibit 2.3	First Amendment to Securities and Asset Purchase Agreement, dated as of December 26, 2019, by and among Kaman Aerospace Group, Inc., Kaman Corporation, as guarantor, Peter J. Balsells, in his capacity as trustee of The Balsells Family Trust Dated October 1, 1985 - Trust A, as Wholly Amended And Restated June 5, 2019, 19650 Pauling, LLC, Pauling Properties LLC and Bal Seal Engineering, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K/A dated December 27, 2019, File No. 001-35419).	Previously Filed
Exhibit 3.1	Amended and Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated November 4, 2005, File No. 333-66179), as amended by the Certificate of Amendment thereto (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated April, 22 2019).	Previously Filed
Exhibit 3.2	Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated December 15, 2020, File No. 001-35419).	Previously Filed
Exhibit 4.1	Description of Registrant’s Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934. (incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019, File No. 001-35419).	Previously Filed
Exhibit 4.2	Indenture, dated as of May 12, 2017, by and between Kaman Corporation and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated May 12, 2017, File No. 001-35419).	Previously Filed
Exhibit 4.3	First Supplemental Indenture, dated as of July 15, 2019, by and between Kaman Corporation and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated July 16, 2019, File No. 001-35419).	Previously Filed
Exhibit 10.1	Kaman Corporation 2013 Management Incentive Plan (incorporated by reference to Annex A to the Company's Definitive Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on March 1, 2013, File No. 001-35419).*	Previously Filed
Exhibit 10.2	First Amendment to the Kaman Corporation 2013 Management Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated February 23, 2015, File No. 001-35419).*	Previously Filed
Exhibit 10.3	Kaman Corporation Amended and Restated 2013 Management Incentive Plan. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 23, 2018, File No. 001-35419).*	Previously Filed
Exhibit 10.4	Form of Nonqualified Stock Option Agreement under the Kaman Corporation 2013 Management Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated February 24, 2014, File No. 001-35419).*	Previously Filed
Exhibit 10.5	Form of Restricted Share Agreement under the Kaman Corporation 2013 Management Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated February 24, 2014, File No. 001-35419).*	Previously Filed

Exhibit 10.6	Form of Restricted Stock Unit Agreement under the Kaman Corporation 2013 Management Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company’s Current Report on Form 8-K dated June 6, 2014, File No 001-35419).*	Previously Filed
Exhibit 10.7	Form of Long-Term Performance Award Agreement (Payable in Cash) under the Kaman Corporation 2013 Management Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated February 24, 2014, File No. 001-35419).*	Previously Filed
Exhibit 10.8	Form of Long-Term Performance Award Agreement (Payable in Cash) granted under the Kaman Corporation 2013 Management Incentive Plan, for awards granted on or after February 17, 2017 (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the fiscal quarter ended March 31, 2017, File No. 001-35419).*	Previously Filed
Exhibit 10.9	Form of Long-Term Performance Award Agreement (Payable in Shares) granted under the Kaman Corporation 2013 Management Incentive Plan (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K dated February 24, 2014, File No. 001-35419).*	Previously Filed
Exhibit 10.10	Form of Award Agreement for Non-Employee Directors under the Kaman Corporation 2013 Management Incentive Plan (incorporated by reference to Exhibit 10.6 to the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2013, File No. 001-35419).*	Previously Filed
Exhibit 10.11	Kaman Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10(a)(i) to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended October 2, 2009, File No. 000-01093), as amended by amendments thereto filed with the SEC on April 7, 2010 (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K dated April 7, 2010, File No. 000-01093) and November 1, 2010 (incorporated by reference to Exhibit 10(b) to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended October 1, 2010, File No. 000-01093), and February 22, 2012 (incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K, dated February 22, 2012, File No. 000-01093).*	Previously Filed
Exhibit 10.12	Form of Incentive Stock Option Agreement under the Kaman Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10h(i) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, File No. 000-01093).*	Previously Filed
Exhibit 10.13	Form of Non-Statutory Stock Option Agreement under the Kaman Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10h(ii) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, File No. 000-01093).*	Previously Filed
Exhibit 10.14	Form of Stock Appreciation Rights Agreement under the Kaman Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10h(iii) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, File No. 000-01093).*	Previously Filed
Exhibit 10.15	Form of Restricted Stock Agreement under the Kaman Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10h(iv) to the Company's Form 10-Q for the fiscal quarter ended June 29, 2007, File No. 000-01093).*	Previously Filed
Exhibit 10.16	Form of Long Term Performance Award Agreement under the Kaman Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10h(v) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2011, File No. 001-35419).*	Previously Filed
Exhibit 10.17	Form of Restricted Stock Unit Agreement under the Kaman Corporation 2003 Stock Incentive Plan (incorporated by reference to Exhibit 10h(vi) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2009, File No. 000-10093).*	Previously Filed

Exhibit 10.18	Kaman Corporation Employees Stock Purchase Plan (incorporated by reference to Exhibit 10(a) to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended October 1, 2010, File No. 000-01093), as amended by the First Amendment thereto filed with the SEC on February 27, 2012 (incorporated by reference to Exhibit 10b to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2011, File No. 001-35419), the Second Amendment thereto filed with the SEC on February 25, 2013 (incorporated by reference to Exhibit 10.3 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, File No. 001-35419) and the Third Amendment thereto filed with the SEC on February 27, 2014 by reference to Exhibit 10.15 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, File No. 001-35419).*	Previously Filed
Exhibit 10.19	Kaman Corporation Amended and Restated Employee Stock Purchase Plan. (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on April 23, 2018, File No. 001-35419), as amended by the First Amendment thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated November 15, 2018, File No. 001-35419).*	Previously Filed
Exhibit 10.20	Kaman Corporation Supplemental Employees' Retirement Plan (incorporated by reference to Exhibit 10c to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2000, File No. 333-66179), as amended by an amendment thereto filed with the SEC on March 5, 2004 (incorporated by reference to Exhibit 10c to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003, File No. 333-66179), and an amendment thereto filed with the SEC on February 26, 2007 (incorporated by reference to Exhibit 10.10 to the Company's Current Report on Form 8-K, dated February 26, 2007, File No. 000-01093).*	Previously Filed
Exhibit 10.21	Post-2004 Supplemental Employees' Retirement Plan (incorporated by reference to Exhibit 10.11 to the Company's Current Report on Form 8-K, dated February 26, 2007, File No. 000-01093), as amended by the First Amendment thereto filed with the SEC on February 28, 2008 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated February 28, 2008, File No. 000-01093) and the Second Amendment thereto filed with the SEC on February 25, 2010 (incorporated by reference to Exhibit 10(c)(iii) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2009, File No. 000-01093).*	Previously Filed
Exhibit 10.22	Kaman Corporation Amended and Restated Deferred Compensation Plan (incorporated by reference to Exhibit 10d to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002, File No. 333-66179), as amended by an amendment thereto filed with the SEC on March 5, 2004 (incorporated by reference to Exhibit 10d to the Company's Annual report on Form 10-K for the fiscal year ended December 31, 2003 File No. 333-66179), and an amendment thereto filed with the SEC on August 3, 2004 (incorporated by reference to Exhibit 10(a) to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2004, File No. 333-66179).*	Previously Filed
Exhibit 10.23	Kaman Corporation Post-2004 Deferred Compensation Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, dated February 28, 2008, File No. 000-01093), as amended by the First Amendment thereto filed with the SEC on February 27, 2012 (incorporated by reference to Exhibit 10d(ii) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2011, File No. 001-35419), the Second Amendment thereto (incorporated by reference to Exhibit 10.20 to the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2013, File No. 001-35419), the Third Amendment thereto (incorporated by reference to Exhibit 10.3 to the Company’s Current Report on Form 8-K dated November 21, 2014, File No. 001-35419) and the Fourth Amendment thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated June 13, 2016, File No. 001-35419). *	Previously Filed

Exhibit 10.24	Amended and Restated Executive Employment Agreement between Kaman Corporation and Neal J. Keating, originally dated as of August 7, 2007 and amended and restated as of November 11, 2008 (incorporated by reference to Exhibit 10g(xviii) to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, File No. 000-01093), as amended by Amendment No. 1 thereto dated January 1, 2010 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated February 23, 2010, File No. 000-01093), Amendment No. 2 thereto dated September 17, 2010 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated September 20, 2010, File No. 000-01093), and Amendment No. 3 thereto dated November 18, 2014 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, dated November 21, 2014, File No. 000-01093).*	Previously Filed
Exhibit 10.25	Transition and Retirement Agreement, dated as of August 20, 2020 by and between Neal J. Keating and the Company (incorporated by reference to Exhibit 10.2 to the Company's current Report on Form 8-K, dated August 21, 2020, File No. 000-35419).*	Previously Filed
Exhibit 10.26	Executive Employment Agreement, dated as of August 20, 2020, by and between Ian K. Walsh and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, dated August 21, 2020, File No. 000-35419).*	Previously Filed
Exhibit 10.27	Executive Employment Agreement between Kaman Corporation and Robert D. Starr, dated as of November 18, 2014 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated November 21, 2014, File No. 001-35419).*	Previously Filed
Exhibit 10.28	Retirement and Consulting Letter Agreement, dated as of August 20, 2020, by and between Richard R. Barnhart and the Company (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, dated August 21, 2020, File No. 001-35419).	Previously Filed
Exhibit 10.29	Form of Amended and Restated Change in Control Agreement by and between the Company and certain of its executive officers (to wit: Messrs. Walsh, Starr, Lisle and Coogan) (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated April 22, 2016, File No. 001-35419).*	Previously Filed
Exhibit 10.30	Garden Leave and General Release Agreement, effective as of October 31, 2019, by and between Kaman Corporation and Paul M. Villani. (incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019, File No. 001-35419).*	Previously Filed
Exhibit 10.31	Retention and Special Assistance Agreement, effective April 10, 2020, by and between the Company and John J. Tedone (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated April 16, 2020, File No. 001-35419)*	Previously Filed
Exhibit 10.32	Retirement and Consulting Agreement, dated as of November 16, 2020, by and between Gregory T. Troy and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated November 18, 2020, File No. 001-35419).*	Previously Filed
Exhibit 10.33	Letter Agreement, dated May 8, 2017, between Bank of America, N.A. and Kaman Corporation, regarding the Capped Call Transaction (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated May 12, 2017, File No. 001-35419).	Previously Filed
Exhibit 10.34	Letter Agreement, dated May 8, 2017, between JPMorgan Chase Bank, National Association, London Branch and Kaman Corporation, regarding the Capped Call Transaction (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K dated May 12, 2017, File No. 001-35419).	Previously Filed
Exhibit 10.35	Letter Agreement, dated May 8, 2017 between UBS AG, London Branch and Kaman Corporation, regarding the Capped Call Transaction (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K dated May 12, 2017, File No. 001-35419).	Previously Filed

Exhibit 10.36	Letter Agreement, dated May 22, 2017, between Bank of America, N.A. and Kaman Corporation, regarding the Additional Capped Call Transaction (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 25, 2017, File No. 001-35419).	Previously Filed
Exhibit 10.37	Letter Agreement, dated May 22, 2017, between JPMorgan Chase Bank, National Association, London Branch and Kaman Corporation, regarding the Additional Capped Call Transaction (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated May 25, 2017, File No. 001-35419).	Previously Filed
Exhibit 10.38	Letter Agreement, dated May 22, 2017, between UBS AG, London Branch and Kaman Corporation, regarding the Additional Capped Call Transaction (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated May 25, 2017, File No. 001-35419).	Previously Filed
Exhibit 10.39	Second Amended and Restated Credit and Guaranty Agreement, dated as of December 13, 2019, by and among Kaman Corporation, RWG Germany GmbH, Kaman Lux Holding, S.à r.l and the other subsidiary borrowers from time to time party thereto, the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent and as Collateral Agent (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated December 18, 2019, File No. 001-35419).	Previously Filed
Exhibit 10.40	Transition Services Agreement, dated as of August 26, 2019, by and among Kaman Corporation, LJ KAI Blocker, Inc., LJ KFP Blocker, Inc. and LJ KIT Blocker, Inc., and Kaman Industrial Technologies Corporation (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated August 26, 2019, File No. 001-35419).	Previously Filed
Exhibit 10.41	Form of Trademark, Trade Name and Domain Name License Agreement, dated as of August 26, 2019, between Kaman Corporation and certain Licensees (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated August 26, 2019, File No. 001-35419); and Schedule identifying agreements substantially identical to the form of Trademark, Trade Name and Domain Name License Agreement filed as Exhibit 10.39 hereto (incorporated by reference to Exhibit 10.2(a) to the Company's Current Report on Form 8-K dated August 26, 2019, File No. 001-35419).	Previously Filed
Exhibit 21	List of Subsidiaries	Filed Herewith
Exhibit 23	Consent of PricewaterhouseCoopers LLP, the Company’s current independent registered public accounting firm.	Filed Herewith
Exhibit 24	Power of attorney under which this report was signed on behalf of certain directors.	Filed Herewith
Exhibit 31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14 under the Securities and Exchange Act of 1934.	Filed Herewith
Exhibit 31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14 under the Securities and Exchange Act of 1934.	Filed Herewith
Exhibit 32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Filed Herewith
Exhibit 32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Filed Herewith
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document	Filed Herewith
101.SCH	Inline XBRL Taxonomy Extension Schema	Filed Herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase	Filed Herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase	Filed Herewith

101.LAB	Inline XBRL Taxonomy Extension Label Linkbase	Filed Herewith
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase	Filed Herewith
104	Cover Page Interactive Data File, formatted in iXBRL and contained in Exhibit 101	Filed Herewith

* Management contract or compensatory plan

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LEADERSHIP
KAMAN CORPORATION

CORPORATE LEADERSHIP

Neal J. Keating
Executive Chairman

Ian K. Walsh
President and Chief Executive Officer

Robert D. Starr
Executive Vice President and Chief Financial Officer

Russell J. Bartlett
Senior Vice President and Chief Operating Officer

Shawn G. Lisle
Senior Vice President, General Counsel and Assistant Secretary

Lisa A. Barry
Vice President – Financial Planning and Analysis

Rafael Z. Cohen
Vice President – Information Technology and Cybersecurity

Jairaj Chetnani
Vice President and Treasurer

James G. Coogan
Vice President – Investor Relations and Business Development

Richard C. Forsberg
Vice President and Chief Ethics and Compliance Officer

Michael J. Lyon
Vice President – Tax

Megan A. Morgan
Vice President – Human Resources and Chief Human Resources Officer

Michael J. Morneau
Vice President and Controller

Kristen M. Samson
Vice President and Chief Marketing and Communications Officer

Richard S. Smith, Jr.
Vice President, Deputy General Counsel and Secretary

Rebecca F. Stath
Vice President – Accounting and External Reporting

Gary L. Tong
Vice President – Corporate Risk, Safety and Environmental Management

Amanda N. Balboni
Assistant Vice President – Internal Audit

DIRECTORS

Neal J. Keating
Executive Chairman, Kaman Corporation

Aisha M. Barry [3]
Vice President and General Manager, Koninklijke Philips N.V.

E. Reeves Callaway III [3,4]
Founder, President and Chief Executive Officer, The Callaway Companies

Karen M. Garrison [1*,3]
Lead Independent Director; President – Business Services, Retired, Pitney Bowes

A. William Higgins [3,4]
President and Chief Executive Officer, Albany International Corporation

Michelle J. Lohmeier [2,4]
Strategic Advisor to the CEO of Spirit AeroSystems, Inc.

Scott E. Kuechle [1,2*]
Executive Vice President and Chief Financial Officer, Retired Goodrich Corporation

George E. Minnich [1,2,4*]
Senior Vice President and Chief Financial Officer, Retired ITT Corporation

Jennifer M. Pollino [1,3*]
Executive Coach and Consultant, JMPollino LLC and Executive Vice President – Human Resources and Communications, Retired, Goodrich Corporation

Thomas W. Rabaut [2,4]
Operating Executive, The Carlyle Group

Ian K. Walsh
President and Chief Executive Officer, Kaman Corporation

STANDING COMMITTEE ASSIGNMENTS

[1] Corporate Governance
[2] Audit
[3] Compensation
[4] Finance
[*] Denotes Chairmanship

CORPORATE AND SHAREHOLDER INFORMATION

KAMAN CORPORATION AND SUBSIDIARIES

CORPORATE HEADQUARTERS

Kaman Corporation
1332 Blue Hills Avenue
Bloomfield, Connecticut 06002
(860) 243 7100

STOCK LISTING

Kaman Corporation s common stock is traded on the New York Stock Exchange under the symbol KAMN.

INVESTOR RELATIONS CONTACT

James G. Coogan
Vice President, Investor Relations & Business Development
(860) 243 6342
James.Coogan@kaman.com

ANNUAL MEETING

The Annual Meeting of Shareholders is scheduled to be held on Wednesday, April 14, 2021 at 9:00 am local time at the offices of the Company, 1332 Blue Hills Avenue, Bloomfield, Connecticut, 06002.

TRANSFER AGENT

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(877) 373 6374
www.computershare.com/investor

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462 South 4th Street, Suite 1600
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