

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended March 31, 2020

or

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

For the transition period from _____ to _____

Commission File No. 1-12235

Triumph Group, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

51-0347963

(I.R.S. Employer
Identification Number)

899 Cassatt Road, Suite 210, Berwyn, Pennsylvania 19312

(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (610) 251-1000

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$.001 per share Purchase rights	TGI	New York Stock Exchange New York Stock Exchange

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

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

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934. (Check one)

Large accelerated filer

Non-accelerated filer

Emerging growth company

Accelerated filer

Smaller reporting company

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

Indicate by check mark whether the registrant 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 report.

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes No

As of September 30, 2019, the aggregate market value of the shares of Common Stock held by non-affiliates of the Registrant was approximately \$1,134 million. Such aggregate market value was computed by reference to the closing price of the Common Stock as reported on the New York Stock Exchange on September 30, 2019. For purposes of making this calculation only, the Registrant has defined affiliates as including all directors and executive officers.

The number of outstanding shares of the Registrant's Common Stock, par value \$.001 per share, on May 26, 2020 was 51,898,357.

Documents Incorporated by Reference

Portions of the following document are incorporated herein by reference:

The Proxy Statement of Triumph Group, Inc. to be filed in connection with our 2020 Annual Meeting of Stockholders is incorporated in part in Part III hereof, as specified herein.

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Item 1. Business

Cautionary Note Regarding Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 relating to our future operations and prospects, including statements that are based on current projections and expectations about the markets in which we operate, and management's beliefs concerning future performance and capital requirements based upon current available information. Such statements are based on management's beliefs as well as assumptions made by and information currently available to management. When used in this document, words like "may," "might," "will," "expect," "anticipate," "plan," "believe," "potential," and similar expressions are intended to identify forward-looking statements. Actual results could differ materially from management's current expectations. For example, there can be no assurance that additional capital will not be required, and that such amounts may be material, or that additional capital, if required, will be available on reasonable terms, if at all, at such times and in such amounts as may be needed by us. In addition to these factors, among other factors that could cause actual results to differ materially, are uncertainties relating to the integration of acquired businesses, general economic conditions affecting our business segments, the continued impact of the coronavirus pandemic (COVID-19), the severe disruptions to the economy, the financial markets and the markets in which we compete, dependence of certain of our businesses on certain key customers, the risk that we will not realize all of the anticipated benefits from acquisitions as well as competitive factors relating to the aerospace industry. For a more detailed discussion of these and other factors affecting us, see the risk factors described in "Item 1A. Risk Factors." A prolonged impact of COVID-19 could also have the effect of heightening many of these risks.

General

Triumph Group, Inc. ("Triumph," the "Company," "we," "us," or "our") was incorporated in 1993 in Delaware. Our companies design, engineer, manufacture, repair, and overhaul a broad portfolio of aerospace and defense systems, components, and structures. We serve the global aviation industry, including original equipment manufacturers, or OEMs, and the full spectrum of military and commercial aircraft operators.

Products and Services

Effective February 17, 2020, the Company combined its Integrated Systems and Product Support operating segments into one operating segment, Systems & Support. The Company believes that it is well-positioned to supply both critical OEM components and full life cycle aftermarket support and that this combination will allow the Company to accelerate its aftermarket growth rate while simplifying its structure. As a result, effective February 17, 2020, the Company has two reporting segments for financial reporting purposes – Systems & Support and Aerospace Structures.

We offer a variety of products and services to the aerospace industry through two operating segments: (i) Triumph Systems & Support, whose companies' revenues are derived from the design, development, and support of proprietary components, subsystems and systems, production of complex assemblies using external designs, as well as the provision of full life cycle solutions for commercial, regional, and military aircraft; and (ii) Triumph Aerospace Structures, whose companies supply commercial, business, regional and military manufacturers with large metallic and composite structures and produce close-tolerance parts primarily to customer designs and model-based definition, including a wide range of aluminum, hard metal and composite structure capabilities.

Systems & Support's capabilities include hydraulic, mechanical and electromechanical actuation, power and control; a complete suite of aerospace gearbox solutions, including engine accessory gearboxes and helicopter transmissions; active and passive heat exchange technology; fuel pumps, fuel metering units and Full Authority Digital Electronic Control fuel systems; hydromechanical and electromechanical primary and secondary flight controls; and a broad spectrum of surface treatment options.

The products that companies within this group design, engineer, build and repair include:

Aircraft and engine-mounted accessory drives
Cargo hooks
Cockpit control levers
Control system valve bodies
Electronic engine controls
Exhaust nozzles and ducting
Geared transmissions and drive train components
Fuel-metering units
Vibration absorbers

Thermal control systems and components
High lift actuation
Hydraulic systems and components
Landing gear actuation systems
Landing gear components and assemblies
Main engine gear box assemblies
Main fuel pumps
Secondary flight control systems

Extensive product and service offerings include full post-delivery value chain services that simplify the maintenance, repair and overhaul ("MRO") supply chain. Through its ground support equipment maintenance, component MRO and postproduction supply chain activities, Systems & Support is positioned to provide integrated planeside repair solutions globally. Capabilities include metallic and composite aircraft structures; nacelles; thrust reversers; interiors; auxiliary power units; and a wide variety of pneumatic, hydraulic, fuel and mechanical accessories. Companies in Systems & Support repair and overhaul various components for the aviation industry including:

Air cycle machines	Blades and vanes
APUs	Cabin panes, shades, light lenses and other components
Constant speed drives	Combustors
Engine and airframe accessories	Stators
Flight control surfaces	Transition ducts
Integrated drive generators	Sidewalls
Nacelles	Light assemblies
Remote sensors	Overhead bins
Thrust reversers	Fuel bladder cells

Aerospace Structures' products include wings, wing boxes, fuselage panels, horizontal and vertical tails, and subassemblies such as floor grids. Aerospace Structures also has the capability to engineer detailed structural designs in metal and composites. Aerospace Structures capabilities also include advanced composite and interior structures, joining processes such as welding, autoclave bonding and conventional mechanical fasteners.

The products that companies within this group design, manufacture, build and repair include:

Aircraft wings	Flight control surfaces
Composite and metal bonding	Integrated testing and certification services
Engine nacelles	Stretch-formed leading edges and fuselage skins
Comprehensive processing services	Wing spars and stringers
Empennages	Composite ducts and floor panels
Acoustic and thermal insulation systems	

Proprietary Rights

We benefit from our proprietary rights relating to designs, engineering and manufacturing processes, and repair and overhaul procedures. For some products, our unique manufacturing capabilities are required by the customer's specifications or designs, thereby necessitating reliance on us for the production of such specially designed products.

We view our name and trademark as significant to our business as a whole. Our products are protected by a portfolio of patents, trademarks, licenses or other forms of intellectual property that expire at various dates in the future. We continually develop and acquire new intellectual property and consider all of our intellectual property to be valuable. However, based on the broad scope of our product lines, management believes that the loss or expiration of any single intellectual property right would not have a material adverse effect on our results of operations, our financial position, or our business segments. Our policy is to file applications and obtain patents for our new products as appropriate, including product modifications and improvements. While patents generally expire 20 years after the patent application filing date, new patents are issued to us on a regular basis.

In our overhaul and repair businesses, OEMs of equipment that we maintain for our customers often include language in repair manuals that relate to their equipment, asserting broad claims of proprietary rights to the contents of the manuals used in our operations. There can be no assurance that OEMs will not try to enforce such claims, including the possible use of legal proceedings. In the event of such legal proceedings, there can be no assurance that such actions against the Company will be unsuccessful. However, we believe that our use of manufacture and repair manuals is lawful.

Raw Materials and Replacement Parts

We purchase raw materials, primarily consisting of extrusions, forgings, castings, aluminum and titanium sheets and shapes, and stainless steel alloys, from various vendors. We also purchase replacement parts, which are utilized in our various repair and overhaul operations. We believe that the availability of raw materials to us is adequate to support our operations.

Sales, Marketing and Engineering

While each of our operating companies maintains responsibility for selling and marketing its specific products, we have developed two marketing teams at the operating segment level who are focused on business development and cross-selling our broad capabilities. One team is dedicated to Systems & Support, and the other team supports Aerospace Structures. These teams are responsible for selling aerospace structures, systems, integrated assemblies, and repair and overhaul services, reaching across our operating companies, to our OEM, military, airline and air cargo customers. In certain limited cases, we use independent, commission-based representatives to serve our customers' changing needs in some of the markets and geographic regions in which we operate.

The two group-level marketing teams operate as the front-end of the selling process, establishing or maintaining relationships, identifying opportunities to leverage our brand, and providing service for our customers. Each individual operating company is responsible for its own technical support, pricing, manufacturing, and product support. Also, within Systems & Support, we meet our customers' needs by designing systems that integrate the capabilities of our companies.

A significant portion of our government and defense contracts are awarded on a competitive bidding basis. We generally do not bid or act as the primary contractor but will typically bid and act as a subcontractor on contracts on a fixed-price basis. We generally sell to our other customers on a fixed-price, negotiated contract, or purchase order basis.

When subcontracting, there is a risk of nonperformance by our subcontractors which could lead to disputes regarding quality, cost or impacts to production schedules. Additionally, economic environment changes or natural disasters, trade sanctions, tariffs, budgetary constraints, earthquakes, fires, extreme weather conditions, or pandemics, affecting the prime contractor and our subcontractors may adversely affect their ability to meet or support our performance requirements.

Backlog

We have a number of long-term agreements with several of our customers. These agreements generally describe the terms under which the customer may issue purchase orders to buy our products and services during the term of the agreement. These terms typically include a list of the products or repair services customers may purchase, initial pricing, anticipated quantities and, to the extent known, delivery dates. In tracking and reporting our backlog, however, we only include amounts for which we have actual purchase orders with firm delivery dates or contract requirements generally within the next 24 months, which primarily relate to sales to our OEM customer base. Purchase orders issued by our aftermarket customers are usually completed within a short period of time. As a result, our backlog data relates primarily to the OEM customers. The backlog information set forth below does not include the sales that we expect to generate from long-term agreements for which we do not have actual purchase orders with firm delivery dates.

As of March 31, 2020, we had outstanding purchase orders representing an aggregate invoice price of approximately \$3.20 billion, of which \$1.47 billion and \$1.73 billion related to Systems & Support and Aerospace Structures, respectively. As of March 31, 2019, our continuing operations had outstanding purchase orders representing an aggregate invoice price of approximately \$3.74 billion, of which \$1.47 billion and \$2.28 billion Systems & Support and Aerospace Structures, respectively. Of the existing backlog of \$3.20 billion, approximately \$1.17 billion will not be shipped by March 31, 2021.

Dependence on Significant Customers

As disclosed in Note 19, a significant portion of our net sales are to the Boeing Company ("Boeing") and Gulfstream Aerospace Corporation ("Gulfstream"). Refer to Note 19 for specific disclosure of the concentration of net sales and accounts receivable to these customers. A significant reduction in sales to Boeing and/or Gulfstream may have a material adverse impact on our financial position, results of operations and cash flows.

Competition

We compete primarily with Tier 1 and Tier 2 aerostructures manufacturers, systems suppliers and component manufacturers, some of which are divisions or subsidiaries of other large companies, in the manufacture of aircraft structures, systems components, subassemblies and detail parts.

Competition for the repair and overhaul of aviation components comes from four primary sources, some of whom possess greater financial and other resources than we have, and as a result, may be in a better position to handle the current environment: OEMs, major commercial airlines, government support depots, and other independent repair and overhaul companies. Some major commercial airlines continue to own and operate their own service centers, while others have begun to sell or outsource their repair and overhaul services to other aircraft operators or third parties. Large domestic and foreign airlines that provide repair and overhaul services typically provide these services not only for their own aircraft but for other airlines as well. OEMs also maintain service centers which provide repair and overhaul services for the components they manufacture. Many governments maintain aircraft support depots in their military organizations that maintain and repair the aircraft they operate. Other independent service organizations also compete for the repair and overhaul business of other users of aircraft components.

Participants in the aerospace industry compete primarily on the basis of breadth of technical capabilities, quality, turnaround time, capacity and price.

Government Regulation and Industry Oversight

The aerospace industry is highly regulated in the United States by the Federal Aviation Administration ("FAA") and in other countries by similar agencies. We must be certified by the FAA and, in some cases, by individual OEMs, in order to engineer and service parts and components used in specific aircraft models. If material authorizations or approvals were revoked or suspended, our operations would be adversely affected. New and more stringent government regulations may be adopted, or industry oversight heightened, in the future and these new regulations, if enacted, or any industry oversight, if heightened, may have an adverse impact on us.

We must also satisfy the requirements of our customers, including OEMs, that are subject to FAA regulations, and provide these customers with products and repair services that comply with the government regulations applicable to aircraft components used in commercial flight operations. The FAA regulates commercial flight operations and requires that aircraft components meet its stringent standards. In addition, the FAA requires that various maintenance routines be performed on aircraft components, and we currently satisfy these maintenance standards in our repair and overhaul services. Several of our operating locations are FAA-certificated repair stations.

Generally, the FAA only grants approvals for the manufacture or repair of a specific aircraft component, rather than the broader approvals that have been granted in the past. The FAA approval process may be costly and time-consuming. In order to obtain an FAA Air Agency Certificate, an applicant must satisfy all applicable regulations of the FAA governing repair stations. These regulations require that an applicant have experienced personnel, inspection systems, suitable facilities and equipment. In addition, the applicant must demonstrate a need for the certificate. An applicant must procure manufacturer's repair manuals from design approval holders relating to each particular aircraft component. Because of these regulatory requirements, the application process may involve substantial cost.

The certification processes for the European Aviation Safety Agency ("EASA"), which regulates this industry in the European Union; the Civil Aviation Administration of China; and other comparable foreign regulatory authorities are similarly stringent, involving potentially lengthy audits. EASA was formed in 2002 and is handling most of the responsibilities of the national aviation authorities in Europe, such as the United Kingdom Civil Aviation Authority.

Our operations are also subject to a variety of worker and community safety laws. For example, the Occupational Safety and Health Act of 1970 ("OSHA"), mandates general requirements for safe workplaces for all employees in the United States. In addition, OSHA provides special procedures and measures for the handling of hazardous and toxic substances. Specific safety standards have been promulgated for workplaces engaged in the treatment, disposal or storage of hazardous waste. We believe that our operations are in material compliance with OSHA's health and safety requirements.

Environmental Matters

Our business, operations and facilities are subject to numerous stringent federal, state, local and foreign environmental laws and regulations by government agencies, including the Environmental Protection Agency ("EPA"). Among other matters, these regulatory authorities impose requirements that regulate the emission, discharge, generation, management, transportation and disposal of hazardous materials, pollutants and contaminants; govern public and private response actions to hazardous or regulated substances which may be or have been released to the environment; and require us to obtain and maintain licenses and permits in connection with our operations. This extensive regulatory framework imposes significant compliance burdens and risks on us. Although management believes that our operations and our facilities are in material compliance with such laws and regulations, future changes in these laws, regulations, or interpretations thereof or the nature of our operations or regulatory enforcement actions which may arise, may require us to make significant additional capital expenditures to ensure ongoing compliance or engage in remedial actions.

Certain of our facilities, including facilities acquired and operated by us or one of our subsidiaries have at one time or another been under active investigation for environmental contamination by federal or state agencies when acquired, and at least in some cases, continue to be under investigation or subject to remediation. We are frequently indemnified by prior owners or operators and/or present owners of the facilities for liabilities which we incur as a result of these investigations and the environmental contamination found which pre-dates our acquisition of these facilities, subject to certain limitations. We also maintain a pollution liability policy that provides coverage for certain material liabilities associated with the cleanup of on-site pollution conditions, as well as defense and indemnity for certain third-party suits (including Superfund liabilities at third-party sites), in each case, to the extent not otherwise indemnified. This policy applies to all of our manufacturing and assembly operations worldwide. Also, as we proceed with our plans to exit certain facilities as part of restructuring and related initiatives, the need for remediation for potential environmental contamination could be identified, and such obligations could be material. If we are required to pay the expenses related to environmental liabilities because neither indemnification nor insurance coverage is available, these expenses could have a material adverse effect on us.

Employees

As of March 31, 2020, we employed 9,989 persons, of whom 2,105 were management employees, 104 were sales and marketing personnel, 1,249 were technical personnel, 452 were administrative personnel and 6,079 were production workers. Our segments were composed of the following employees: Systems & Support - 3,826 persons, Aerospace Structures - 6,022 persons, and Corporate - 141 persons.

Several of our subsidiaries are parties to collective bargaining agreements with labor unions. Under those agreements, we currently employ approximately 1,811 full-time employees. Currently, approximately 18% of our permanent employees are represented by labor unions and approximately 62% of net sales are derived from the facilities at which at least some employees are unionized. Of the 1,811 employees represented by unions, no employees are working under contracts that have expired.

During the fiscal year ended March 31, 2019, the Stuart, Florida facility production and maintenance employees elected the United Autoworkers of America, Local #2505, to represent them in collective bargaining with the Company. As of March 31, 2020, the union and the Company have not reached an agreement.

Our inability to negotiate an acceptable contract with any of our labor unions could result in strikes by the affected workers and increased operating costs as a result of higher wages or benefits paid to union members. If the unionized workers were to engage in a strike or other work stoppage, or other employees were to become unionized, we could experience a significant disruption of our operations and higher ongoing labor costs, which could have an adverse effect on our business and results of operations.

Executive Officers

Our current executive officers are:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Daniel J. Crowley	57	President and Chief Executive Officer and Director
James F. McCabe, Jr.	57	Senior Vice President, Chief Financial Officer
Jennifer H. Allen	48	Senior Vice President, General Counsel and Secretary
Lance R. Turner	49	Senior Vice President, Chief Human Resources Officer
Thomas A. Quigley, III	43	Vice President, Investor Relations and Controller
Peter K.A. Wick	50	Executive Vice President, Aerospace Structures
William Kircher	53	Executive Vice President, Systems & Support

Daniel J. Crowley was appointed President and Chief Executive Officer and a director of the Company on January 4, 2016. Previously, Mr. Crowley served as a corporate vice president and President of Integrated Defense Systems at Raytheon Company from 2013 until 2015, and as President of Network Centric Systems at Raytheon Company from 2010 until 2013. Prior to joining Raytheon Company, Mr. Crowley served as Chief Operating Officer of Lockheed Martin Aeronautics after holding a series of increasingly responsible assignments across its space, electronics, and aeronautics sectors.

James F. McCabe, Jr. has been our Senior Vice President and Chief Financial Officer since August 2016. He joined the Company from Steel Partners Holdings where he served in a number of roles from 2007 to 2016, including the following: Senior Vice President and CFO, President, Shared Services, and Senior Vice President and CFO of its affiliates Handy & Harman and Steel Excel. Prior to joining Steel Partners Holdings, Mr. McCabe served as Vice President, Finance and Treasurer of American Water's Northeast Region from 2004 to 2007, and President and CFO of Teleflex Aerospace from 1991 to 2003, which served the global aviation industry. He has previously qualified as a certified public accountant and Six Sigma Green Belt and served as a member of the Board of Governors and the Civil Aviation Council Executive Committee for the Aerospace Industries Association.

Jennifer H. Allen has been a Senior Vice President and our General Counsel and Secretary since September 2018. She joined Triumph Group from CIRCOR International, Inc. where she was Senior Vice President, General Counsel & Secretary from 2016 to 2018. Previously, she was Vice President & Associate General Counsel – Corporate for BAE Systems, Inc., from 2010 to 2016, a member of the mergers and acquisition group in the New York office of Jones Day from 2005 to 2010, and a member of the business and finance group in the Philadelphia office of Morgan, Lewis & Bockius LLP from 1996 to 2001.

Lance R. Turner was appointed our Senior Vice President and Chief Human Resources Officer in September 2017. From 2013 until September 2017, Mr. Turner served as Vice President of Human Resources for CenturyLink, Inc.; and from 2000 until 2013, as Senior Director of Human Resources for Honeywell.

Thomas A. Quigley, III has been our Vice President, Investor Relations and Controller since December 2019. From November 2012 to December 2019, Mr. Quigley served as our Vice President and Controller, and serves as the Company's principal accounting officer. Mr. Quigley previously served as the Company's SEC Reporting Manager from 2009 to 2012. From 2002 until joining Triumph in 2009, Mr. Quigley held various roles within the audit practice of KPMG LLP, including Senior Audit Manager.

Peter K.A. Wick was appointed our Executive Vice President, Aerospace Structures in December 2017. He previously served as Executive Vice President, Triumph Precision Components in 2017 and, prior to that, served as Vice President, Contracts for Triumph Group from 2016 to 2017, overseeing all contract-related activities and lead negotiations for major contracts with a primary focus on supply contracts to OEM customers. Prior to joining the Company in 2016, Mr. Wick spent eight years with GKN Aerospace holding a range of leadership positions, the last of which was VP Commercial for their North American business. Mr. Wick has in excess of 25 years of experience working in the aerospace industry across the commercial and military aviation, space and avionics sectors.

William Kircher was appointed our Executive Vice President, Product Support in September 2018. Prior to joining the Company, he served as Chief Operating Officer of MB Aerospace, a Blackstone portfolio company, from 2016 to 2017 and as CEO of VAS Aero Services, a HIG portfolio company, in 2015. Mr. Kircher also spent 18 years with United Technologies Corporation in various domestic and international leadership roles including President, UTC Aerospace Singapore, and Vice President, Singapore Overhaul and Repair for Pratt and Whitney.

Recent Developments

On May 22, 2020, the Company and its subsidiary co-borrowers and guarantors entered into a Twelfth Amendment to Credit Agreement (the “Twelfth Amendment” and the Credit Agreement as amended by the Twelfth Amendment, the “Amended Credit Agreement”) with the Administrative Agent and the Lenders party thereto. Among other things, the Twelfth Amendment:

- (i) limits the amount of cash and cash equivalents in the United States the Company can hold on its balance sheet to \$50.0 million, subject to certain limited exceptions;
- (ii) authorizes the completion of asset sales with respect to previously identified Specified TAS Business Units (as defined in the Amended Credit Agreement);
- (iii) provides for a reserve against the availability of up to 75% of the proceeds of Specified Asset Sales (as defined in the Amended Credit Agreement);
- (iv) increases the interest rate margins applicable to the revolving credit loans by 0.50%;
- (v) modifies the interest coverage ratio covenant to require a minimum interest coverage ratio of (i) 1.85 to 1.00 for the fiscal quarter ending June 30, 2020, (ii) 1.35 to 1.00 for the fiscal quarter ending September 30, 2020, (iii) 1.00 to 1.00 for the fiscal quarter ending December 31, 2020, (iv) 1.15 to 1.00 for the fiscal quarter ending March 31, 2021, (v) 1.75 to 1.00 for the fiscal quarter ending June 30, 2021, (vi) 2.00 to 1.00 for the fiscal quarter ending September 30, 2021, (vii) 2.25 to 1.00 for the fiscal quarters ending December 31, 2021 and March 31, 2022, and (viii) 2.75 to 1.00 for each fiscal quarter ending thereafter;
- (vi) suspends the senior secured leverage ratio covenant through the fiscal quarter ending March 31, 2021 and modifies the senior secured leverage ratio for subsequent fiscal quarters to require the senior secured leverage ratio not to exceed (i) 4.50 to 1.00 for the fiscal quarter ending June 30, 2021, (ii) 3.75 to 1.00 for the fiscal quarter ending September 30, 2021, (iii) 3.50 to 1.00 for the fiscal quarters ending December 31, 2021 and March 31, 2022, and (iv) 3.25 to 1.00 for each fiscal quarter ending thereafter;
- (vii) modifies the first lien secured leverage ratio covenant so that the maximum permitted first lien leverage ratio steps down from 2.50 to 1.00 to 2.00 to 1.00, commencing with the fiscal quarter ending March 31, 2021; and
- (v) modifies certain other covenants and terms.

Pursuant to the Amended Credit Agreement, the Company can borrow, repay and re-borrow revolving credit loans, and cause to be issued letters of credit, in an aggregate principal amount not to exceed \$600.0 million outstanding at any time. The loans borrowed under the Amended Credit Agreement bear interest at the Company’s option, at a base rate plus a margin of 2.50% to 3.00%, or a eurodollar rate, plus a margin of 3.50% to 4.00%. The applicable interest rate is based upon the Company’s ratio of total indebtedness to earnings before interest, taxes, depreciation and amortization; provided, however, that during the Pricing Restriction Period (as defined in the Amended Credit Agreement), the loans will bear interest at the highest rate per annum. In addition, the Company is required to pay a commitment fee of 0.30% to 0.50% on the unused portion of the revolving credit commitments depending on the Company’s total leverage ratio and whether a Pricing Restriction Period (as defined in the Amended Credit Agreement) is in effect. The Company’s obligations under the Amended Credit Agreement are guaranteed by the Company’s domestic subsidiaries.

In connection with entering into the Twelfth Amendment, the Company repaid certain of the outstanding revolving loans under the Credit Facility (as defined below).

The obligations under the Amended Credit Agreement and related documents are secured by liens on substantially all assets of the Company and its domestic subsidiaries pursuant to a Third Amended and Restated Guarantee and Collateral Agreement, dated as of September 23, 2019, among the administrative agent, the Company and the subsidiaries of the Company party thereto.

Approximately \$193.0 million of revolving credit commitments under the Amended Credit Agreement expire on May 3, 2021. As a result, the Company will have to pay accrued interest and fees to non-extending lenders commensurate with their commitment levels as required under the Amended Credit Agreement.

Available Information

For more information about us, visit our website at www.triumphgroup.com. The contents of the website are not part of this Annual Report on Form 10-K. Our electronic filings with the Securities and Exchange Commission ("SEC") (including all Forms 10-K, 10-Q and 8-K, and any amendments to these reports) are available free of charge through our website immediately after we electronically file with or furnish them to the SEC. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers who file electronically with the SEC at www.sec.gov.

Item 1A. Risk Factors

Factors that have an adverse impact on the aerospace industry may adversely affect our results of operations and liquidity.

A substantial percentage of our gross profit and operating results derive from commercial aviation. Our operations have been focused on designing, engineering, manufacturing, repairing and overhauling a broad portfolio of aerostructures, aircraft components, accessories, subassemblies and systems. Therefore, our business is directly affected by economic factors and other trends that affect our customers in the aerospace industry, including a possible decrease in outsourcing by OEMs and aircraft operators or projected market growth that may not materialize or be sustainable. We are also significantly dependent on sales to the commercial aerospace market, which has been cyclical in nature with significant downturns in the past. When these economic and other factors adversely affect the aerospace industry, they tend to reduce the overall customer demand for our products and services, which decreases our operating income. Economic and other factors that might affect the aerospace industry may have an adverse impact on our results of operations and liquidity. We have credit exposure to a number of commercial airlines, some of which have encountered severe financial difficulties. Some airlines are currently requesting federal assistance and there can be no assurance that they will receive such assistance in the desired amounts, if at all. In addition, an increase in energy costs and the price of fuel to the airlines could result in additional pressure on the operating costs of airlines. The market for jet fuel is inherently volatile and is subject to, among other things, changes in government policy on jet fuel production, fluctuations in the global supply of crude oil and disruptions in oil production or delivery caused by hostility in oil-producing areas. Airlines are sometimes unable to pass on increases in fuel prices to customers by increasing fares due to the competitive nature of the airline industry, and this compounds the pressure on operating costs. Other events of general impact such as natural disasters, pandemics, war, terrorist attacks affecting the industry or pandemic health crises may lead to declines in the worldwide aerospace industry that could adversely affect our business and financial condition.

In addition, demand for our maintenance, repair and overhaul services is strongly correlated with worldwide flying activity. A significant portion of the MRO activity required on commercial aircraft is mandated by government regulations that limit the total time or number of flights that may elapse between scheduled MRO events. As a result, although short-term deferrals are possible, MRO activity is ultimately required to continue to operate the aircraft in revenue-producing service. Therefore, over the intermediate and long term, trends in the MRO market are closely related to the size and utilization level of the worldwide aircraft fleet, as reflected by the number of available seat miles, commonly referred to as ASMs, and cargo miles flown. Consequently, conditions or events which contribute to declines in worldwide ASMs and cargo miles flown, such as those mentioned above, could negatively impact our MRO business.

The effects of COVID-19 and other potential future public health crises, epidemics, pandemics or similar events on our business, operating results and cash flows are uncertain.

The global outbreak of the coronavirus disease 2019 (COVID-19) was declared a pandemic by the World Health Organization and a national emergency by the U.S. Government in March 2020 and has negatively affected the U.S. and global economy; disrupted global supply chains; resulted in significant travel and transport restrictions, including mandated closures and orders to “shelter-in-place;” and created significant disruption of the financial markets. COVID-19 has already impacted the demand for our products and services. The extent of the continued impact of the COVID-19 pandemic on our operational and financial performance, including our ability to execute our programs in the expected time frame, will depend on future developments, including the duration and spread of the pandemic and related actions taken by the U.S. Government, state and local government officials, and international governments to prevent disease spread, all of which are uncertain and cannot be predicted.

In accordance with the U.S. Department of Defense guidance issued in March 2020 designating the Defense Industrial Base as a critical infrastructure workforce, our U.S. production facilities have continued to operate in support of essential products and services required to meet national security commitments to the U.S. Government and the U.S. military, however, facility closures or work slowdowns or temporary stoppages could occur. In addition, other countries have different practices and policies that can affect our international operations and the operations of our suppliers and customers. For example, we had a brief pause in operations located in Mexico in observance of local COVID-19 policies and additional closures could occur, and we are also seeing impacts from travel restrictions both within and outside the U.S. In some cases, facilities are not operating under full staffing as a result of the impact of COVID-19 on or our customers, which could have a longer-term impact.

If significant portions of our workforce are unable to work effectively, including because of illness, quarantines, absenteeism, government actions, facility closures, travel restrictions, or other restrictions in connection with the COVID-19 pandemic, our operations will be impacted. We may be unable to perform fully on our contracts and our costs may increase as a result of the COVID-19 outbreak. These cost increases, including costs for employees whose jobs cannot be performed remotely, may not be fully recoverable under our contracts, particularly fixed-price contracts, or adequately covered by insurance. The impact of COVID-19 could worsen if there is an extended duration of any COVID-19 outbreak or a resurgence of COVID-19 infection in affected regions after they have begun to experience improvement. We have also incurred increased costs as part of the measures that we have taken to ensure the health and well-being of our employees.

The continued spread of COVID-19 has also led to disruption and volatility in the global capital markets, which depending on future developments could impact our capital resources and liquidity in the future. We are also monitoring the impacts of COVID-19 on the fair value of our assets. As described in Note 2, the Company recognized an impairment of goodwill within the Systems & Support reportable segment that was largely due to the impact of COVID-19 on global capital markets as well as certain of the MRO operations within that segment. We cannot assure you that we will not experience future changes in expectations for sales, earnings and cash flows related to intangible assets and goodwill below our current projections, which could result in additional impairment changes.

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 risk factors described in this "Risk Factors" section, such as those relating to our level of indebtedness, results of operations and cash flows.

Changes in levels of U.S. Government defense spending or overall acquisition priorities could negatively impact our financial position and results of operations.

We derive a significant portion of our revenue from the U.S. Government, primarily from defense-related programs with the U.S. Department of Defense ("U.S. DoD"). Levels of U.S. defense spending are very difficult to predict and may be impacted by numerous factors such as the political environment, U.S. foreign policy, macroeconomic conditions and the ability of the U.S. Government to enact relevant legislation such as authorization and appropriations bills.

In addition, significant budgetary delays and constraints have already resulted in reduced spending levels, and additional reductions may be forthcoming. The Budget Control Act of 2011 established limits on U.S. Government discretionary spending, including a reduction of defense spending between the 2012 and 2021 U.S. Government fiscal years. Accordingly, long-term uncertainty remains with respect to overall levels of defense spending and it is likely that U.S. Government discretionary spending levels will continue to be subject to pressure.

In addition, there continues to be significant uncertainty with respect to program-level appropriations for the U.S. DoD and other government agencies within the overall budgetary framework described above. While the House and Senate Appropriations committees included funding for major military programs in fiscal year 2020, such as CH-47 Chinook, AH-64 Apache, KC-46A Tanker, UH-60 Black Hawk, Northrop Grumman Global Hawk and V-22 Osprey programs, uncertainty remains about how defense budgets in fiscal year 2021 and beyond will affect these programs. Future budget cuts, including cuts mandated by sequestration, or future procurement decisions associated with the authorizations and appropriations process could result in reductions, cancellations, and/or delays of existing contracts or programs. Any of these impacts could have a material effect on the results of the Company's operations, financial position and/or cash flows.

In addition, as a result of the significant ongoing uncertainty with respect to both U.S. defense spending levels and the nature of the threat environment, we expect the U.S. DoD to continue to emphasize cost-cutting and other efficiency initiatives in its procurement processes. If we can no longer adjust successfully to these changing acquisition priorities and/or fail to meet affordability targets set by the U.S. DoD customer, our revenues and market share would be further impacted.

Our business could be negatively affected by cyber or other security threats or other disruptions.

Our businesses depend heavily on information technology and computerized systems to communicate and operate effectively. The Company's systems and technologies, or those of third parties on which we rely, could fail or become unreliable due to equipment failures, software viruses, cyber threats, terrorist acts, natural disasters, power failures or other causes. These threats arise in some cases as a result of our role as a defense contractor. Our customers, including the U.S. Government, are increasingly requiring cybersecurity protections and mandating cybersecurity standards in our products, and we may incur additional cost to comply with such demands.

Cybersecurity threats are evolving and include, but are not limited to, malicious software; attempts to gain unauthorized access to our sensitive information, including that of our customers, suppliers, subcontractors, and joint venture partners; and other electronic security breaches that could lead to disruptions in mission critical systems, unauthorized release of confidential or otherwise protected information and corruption of data.

Although we utilize various procedures and controls to monitor and mitigate these threats, there can be no assurance that these procedures and controls will be sufficient to prevent security threats from materializing. If any of these events were to materialize, the costs related to cyber or other security threats or disruptions may not be fully insured or indemnified and could have a material adverse effect on our reputation, operating results and financial condition.

Our substantial debt could adversely affect our financial condition and our ability to operate and grow our business. The terms of our indentures governing our Senior Notes and Amended Credit Agreement impose significant operating and financial restrictions on the Company and our subsidiaries, which could also adversely affect our operating flexibility and put us at a competitive disadvantage by preventing us from capitalizing on business opportunities and additional financing may not be available on terms acceptable to us.

The terms of our indentures governing our Senior Notes, Amended Credit Agreement and Securitization Facility (each as defined in Note 10) impose significant operating and financial restrictions on us, which limit our ability to incur liens, sell assets and enter into certain transactions, among other things. In addition, our debt documents require us to comply with various financial and other covenants set forth in the related agreement, and our Amended Credit Agreement requires us to maintain certain financial ratios, including an interest coverage ratio, a senior secured leverage ratio covenant, and a first lien secured leverage ratio. We are in compliance with all of our debt covenants.

We cannot assure you that we will be able to maintain compliance with the covenants in the agreements governing our indebtedness in the future or, if we fail to do so, that we will be able to obtain waivers from the holders of such indebtedness or amend the covenants and other terms of the agreements governing such indebtedness on commercially reasonable terms, if at all. Failure to maintain compliance with these covenants may allow the holders of such indebtedness to require immediate repayment of the indebtedness owed to them and to terminate any unfunded commitments, which could have a material adverse effect on our operations.

We may periodically need to obtain additional financing in order to meet our debt obligations as they come due, to support our operations and/or to make acquisitions. Our access to the debt capital markets and the cost of borrowings are affected by a number of factors, including market conditions and the strength of our credit ratings and the impact of COVID-19 on our markets. If we cannot obtain adequate sources of credit on favorable terms, or at all, our business, operating results, and financial condition could be adversely affected. We may also seek transactions to extend the maturity of our debt, reduce leverage or obtain covenant flexibility. Such transactions could result in us incurring additional secured debt or equity and there can be no assurance that we will be successful in these endeavours.

The profitability of certain development and production programs depends significantly on the assumptions surrounding satisfactory settlement of claims and assertions.

For certain of our new development programs, we regularly commence work or incorporate customer-requested changes prior to negotiating pricing terms for engineering work or the product which has been modified. We typically have the legal right to negotiate pricing for customer-directed changes. In those cases, we assert to our customers our contractual rights to obtain the additional revenue or cost reimbursement we expect to receive upon finalizing pricing terms. An expected recovery value of these assertions is incorporated into our contract profitability estimates when applying contract accounting. Our inability to recover these expected values, among other factors, could result in the recognition of a forward loss on these programs or a lower than expected profit margin and could have a material adverse effect on our results of operations. In addition, negotiations over our claims may lead to disputes with our customers that would result in litigation and its associated costs and risks of damages, penalties and injunctive relief, any of which could have a material, adverse effect on our business and results of operations.

We incur risk associated with new programs with new technologies.

New programs with new technologies typically carry risks associated with design responsibility, development of new production tools, hiring and training of qualified personnel, increased capital and funding commitments, ability to meet customer specifications, delivery schedules and unique contractual requirements, supplier performance, subcontractor performance, ability of the customer to meet its contractual obligations to us, and our ability to accurately estimate costs associated with such programs. In addition, any new aircraft program may not generate sufficient demand or may experience technological problems or significant delays in the regulatory certification or manufacturing and delivery schedule. If we were unable to perform our obligations under new programs to the customer's satisfaction or manufacture products at our estimated costs, if we were to experience unexpected fluctuations in raw material prices or supplier problems leading to cost overruns, if we were unable to successfully perform under revised design and manufacturing plans or successfully and equitably resolve claims and assertions, or if a new program in which we had made a significant investment was terminated or experienced weak demand, delays or technological problems, our business, financial condition and results of operations could be materially adversely affected. This risk includes the potential for default, quality problems, or inability to meet weight requirements and could result in low margin or forward loss contracts, and the risk of having to write-off inventory or contract assets if they were deemed to be unrecoverable over the life of the program. In addition, beginning new work on existing programs also carries risks associated with the transfer of technology, knowledge and tooling.

In order to perform on new programs, we may be required to construct or acquire new facilities requiring additional up-front investment costs. In the case of significant program delays and/or program cancellations, we could be required to bear certain unrecoverable construction and maintenance costs and incur potential impairment charges for the new facilities. Also, we may need to expend additional resources to determine an alternate revenue generating use for the facilities. Likewise, significant delays in the construction or acquisition of a plant site could impact production schedules.

Volatility in the financial markets may impede our ability to successfully access capital markets and ensure adequate liquidity and may adversely affect our customers and suppliers.

Turmoil in the capital markets may impede our ability to access the capital markets when we would like, or need, to raise capital or may restrict our ability to borrow money on favorable terms. Such market conditions could have an adverse impact on our flexibility

to react to changing economic and business conditions and on our ability to fund our operations and capital expenditures in the future. In addition, interest rate fluctuations, financial market volatility, or credit market disruptions may also negatively affect our customers' and our suppliers' ability to obtain credit to finance their businesses on acceptable terms. As a result, our customers' need for and ability to purchase our products or services may decrease, and our suppliers may increase their prices, reduce their output or change their terms of sale. If our customers' or suppliers' operating and financial performance deteriorates, or if they are unable to make scheduled payments or obtain credit, our customers may not be able to pay, or may delay payment of, accounts receivable owed to us, and our suppliers may restrict credit or impose different payment terms. Any inability of customers to pay us for our products and services or any demands by suppliers for different payment terms may adversely affect our earnings and cash flow.

Cancellations, reductions or delays in customer orders, or new orders under existing forward loss contracts, may adversely affect our results of operations.

Our overall operating results are affected by many factors, including the timing of orders from large customers and the timing of expenditures to manufacture parts and purchase inventory in anticipation of future sales of products and services. A large portion of our operating expenses are relatively fixed. Because several of our operating locations typically do not obtain long-term purchase orders or commitments from our customers, they must anticipate the future volume of orders based upon the historic purchasing patterns of customers and upon our discussions with customers as to their anticipated future requirements. These historic patterns may be disrupted by many factors, including changing economic conditions, inventory adjustments, or work stoppages or labor disruptions at our customers' locations. Cancellations, reductions or delays in orders by a customer or group of customers could have a material adverse effect on our business, financial condition, and results of operations. Additionally, new orders submitted under long-term contracts that have been determined to be forward loss contracts may result in significant forward loss accruals immediately upon receipt of the new order and have a material adverse effect on our business, financial condition, and results of operations.

A significant decline in business with a key customer could have a material adverse effect on us.

As disclosed in Note 19, a significant portion of our net sales are to Boeing and Gulfstream. As a result, a significant reduction in purchases by Boeing and/or Gulfstream could have a material adverse impact on our financial condition, results of operations, and cash flows. In addition, some of our individual companies rely significantly on particular customers, the loss of which could have an adverse effect on those businesses.

Our international sales and operations are subject to applicable laws relating to trade, export controls and foreign corrupt practices, the violation of which could adversely affect our operations.

We must comply with all applicable export control laws and regulations of the United States and other countries. United States laws and regulations applicable to us include the Arms Export Control Act, the International Traffic in Arms Regulations ("ITAR"), the Export Administration Regulations ("EAR") and the trade sanctions laws and regulations administered by the United States Department of the Treasury's Office of Foreign Assets Control ("OFAC"). EAR restricts the export of dual-use products and technical data to certain countries, while ITAR restricts the export of defense products, technical data and defense services. The U.S. Government agencies responsible for administering EAR and ITAR have significant discretion in the interpretation and enforcement of these regulations. We cannot provide services to certain countries subject to United States trade sanctions unless we first obtain the necessary authorizations from OFAC. In addition, we are subject to the Foreign Corrupt Practices Act, which generally bars bribes or unreasonable gifts to foreign governments or officials.

Violations of these laws or regulations could result in significant additional sanctions, including fines, more onerous compliance requirements, more extensive debarments from export privileges, loss of authorizations needed to conduct aspects of our international business and criminal penalties and may harm our ability to enter into contracts with the U.S. Government. A future violation of ITAR or the other regulations enumerated above could materially adversely affect our business, financial condition and results of operations.

Any significant disruption from key suppliers of raw materials and key components could delay production and decrease revenue.

We are highly dependent on the availability of essential raw materials such as carbon fiber, aluminum and titanium, and purchased engineered component parts from our suppliers, many of which are available only from single customer-approved sources. Moreover, we are dependent upon the ability of our suppliers to provide raw materials and components that meet our specifications, quality standards and delivery schedules. Our suppliers' failure to provide expected raw materials or component parts could require us to identify and enter into contracts with alternate suppliers that are acceptable to both us and our customers, which could result in significant delays, expenses, increased costs and management distraction and adversely affect production schedules and contract profitability.

We have from time to time experienced limited interruptions of supply, and we may experience a significant interruption in the future. Our continued supply of raw materials and component parts are subject to a number of risks, including:

- availability of capital to our suppliers;
- the destruction of our suppliers' facilities or their distribution infrastructure;
- a work stoppage or strike by our suppliers' employees;
- the failure of our suppliers to provide raw materials or component parts of the requisite quality;
- the failure of essential equipment at our suppliers' plants;
- the failure or shortage of supply of raw materials to our suppliers;
- contractual amendments and disputes with our suppliers;
- reduction to credit terms; and
- geopolitical conditions in the global supply base.

In addition, some contracts with our suppliers for raw materials, component parts and other goods are short-term contracts, which are subject to termination on a relatively short-term basis. The prices of our raw materials and component parts fluctuate depending on market conditions, and substantial increases in prices could increase our operating costs, which, as a result of our fixed-price contracts, we may not be able to recoup through increases in the prices of our products.

Due to economic difficulty, we may face pressure to renegotiate agreements resulting in lower margins. Our suppliers may discontinue provision of products to us at attractive prices or at all, and we may not be able to obtain such products in the future from these or other providers on the scale and within the time periods we require. Furthermore, substitute raw materials or component parts may not meet the strict specifications and quality standards we and our customers demand, or that the U.S. Government requires. If we are not able to obtain key products on a timely basis and at an affordable cost, or we experience significant delays or interruptions of their supply, revenues from sales of products that use these supplies will decrease. The current impact of COVID-19 could also result in a larger period of time to find suitable replacements.

Significant consolidation by aerospace industry suppliers could adversely affect our business.

The aerospace industry continues to experience consolidation among suppliers and customers, primarily as it pertains to the airlines. Suppliers have consolidated and formed alliances to broaden their product and integrated system offerings and achieve critical mass. This supplier consolidation is in part attributable to aircraft manufacturers more frequently awarding long-term sole-source or preferred supplier contracts to the most capable suppliers, thus reducing the total number of suppliers. This consolidation could cause us to compete against certain competitors with greater financial resources, market penetration and purchasing power. When we purchase component parts and services from suppliers to manufacture our products, consolidation reduces price competition between our suppliers, which could diminish incentives for our suppliers to reduce prices. If this consolidation continues, our operating costs could increase and it may become more difficult for us to be successful in obtaining new customers. COVID-19 has also put considerable pressure on suppliers which could exacerbate this consolidation.

Competitive pressures may adversely affect us.

We have numerous competitors in the aerospace industry. We compete primarily with the top-tier systems integrators and the manufacturers that supply them, some of which are divisions or subsidiaries of OEMs and other large companies that manufacture aircraft components and subassemblies. Our OEM competitors, which include Boeing, Airbus, Bell Helicopter, Bombardier, Cessna, General Electric, Gulfstream, Honeywell, Lockheed Martin, Northrop Grumman, Raytheon, Rolls Royce and Sikorsky, may choose not to outsource production of aerostructures or other components due to, among other things, their own direct labor and overhead considerations, capacity utilization at their own facilities, and desire to retain critical or core skills. Consequently, traditional factors affecting competition, such as price and quality of service, may not be significant determinants when OEMs decide whether to produce a part in-house or to outsource. We also face competition from non-OEM component manufacturers, including Alenia Aeronautica, Fokker Technologies, Fuji Heavy Industries, GKN Westland Aerospace (U.K.), Kawasaki Heavy Industries, Mitsubishi Heavy Industries, Spirit AeroSystems and UTC Aerospace Systems. Competition for the repair and overhaul of aviation components comes from three primary sources: OEMs, major commercial airlines and other independent repair and overhaul companies.

We may need to expend significant capital to keep pace with technological developments in our industry.

The aerospace industry is constantly undergoing development and change and it is likely that new products, equipment and methods of repair and overhaul service will be introduced in the future. In order to keep pace with any new developments, such as additive technology, we may need to expend significant capital to purchase new equipment and machines or to train our employees in the new methods of production and service. As a result of the current impact of COVID-19, we cannot assure you whether we will need to allocate resources for other purposes.

The construction of aircraft is heavily regulated and failure to comply with applicable laws could reduce our sales or require us to incur additional costs to achieve compliance, and we may incur significant expenses to comply with new or more stringent governmental regulation.

The aerospace industry is highly regulated in the United States by the FAA and in other countries by similar agencies. We must be certified by the FAA and, in some cases, by individual OEMs in order to engineer and service parts, components and aerostructures used in specific aircraft models. If any of our material authorizations or approvals were revoked or suspended, our operations would be adversely affected. New or more stringent governmental regulations may be adopted, or industry oversight heightened in the future, and we may incur significant expenses to comply with any new regulations or any heightened industry oversight.

Our business could be materially adversely affected by product warranty obligations.

Our operations expose us to potential liability for warranty claims made by customers or third parties with respect to aircraft components that have been designed, manufactured, or serviced by us or our suppliers. Material product warranty obligations could have a material adverse effect on our business, financial condition and results of operations.

We may not realize our anticipated return on capital commitments made to expand our capabilities.

We continually make significant capital expenditures to implement new processes and to increase both efficiency and capacity. Some of these projects require additional training for our employees and not all projects may be implemented as anticipated. If any of these projects do not achieve the anticipated increase in efficiency or capacity, our returns on these capital expenditures may be lower than expected.

We may not be successful in achieving expected operating efficiencies and sustaining or improving operating expense reductions, and may experience business disruptions associated with restructuring, facility consolidations, realignment, cost reduction and other strategic initiatives.

Over the past several years, we have implemented a number of restructuring, realignment and cost-reduction initiatives, including facility consolidations, organizational realignments and reductions in our workforce. While we have realized some efficiencies from these actions, we may not realize the benefits of these initiatives to the extent we anticipated. Further, such benefits may be realized later than expected, and the ongoing difficulties in implementing these measures may be greater than anticipated, which could cause us to incur additional costs or result in business disruptions. In addition, if these measures are not successful or sustainable, we may be compelled to undertake additional realignment and cost reduction efforts, which could result in significant additional charges. Moreover, if our restructuring and realignment efforts prove ineffective, our ability to achieve our other strategic and business plan goals may be adversely affected. The continued impact of COVID-19 could also make it more difficult to realize the benefits and synergies of our actions. We generally do not have the ability to pass on additional costs as a result of COVID-19 to our customers under fixed-price contracts.

Any product liability claims in excess of insurance may adversely affect our financial condition.

Our operations expose us to potential liability for personal injury or death as a result of the failure of an aircraft component that has been serviced by us or the failure of an aircraft component designed or manufactured by us. While we believe that our liability insurance is adequate to protect us from these liabilities, our insurance may not cover all liabilities. Additionally, should insurance market conditions change, general aviation product liability, insurance coverage may not be available in the future at a cost acceptable to us. Any material liability not covered by insurance or for which third-party indemnification is not available could have a material adverse effect on our financial condition.

The lack of available skilled personnel may have an adverse effect on our operations.

From time to time, some of our operating locations have experienced difficulties in attracting and retaining skilled personnel to design, engineer, manufacture, repair and overhaul sophisticated aircraft components. Our ability to operate successfully could be jeopardized if we are unable to attract and retain a sufficient number of skilled personnel to conduct our business.

Our fixed-price contracts may commit us to unfavorable terms.

A significant portion of our net sales are derived from fixed-price contracts under which we have agreed to provide components or aerostructures for a price determined on the date we entered into the contract. Several factors may cause the costs we incur in fulfilling these contracts to vary substantially from our original estimates, and we bear the risk that increased or unexpected costs may reduce our profit or cause us to sustain losses on these contracts. In a fixed-price contract, we must fully absorb cost overruns, notwithstanding the difficulty of estimating all of the costs we will incur in performing these contracts. Because our ability to terminate contracts is generally limited, we may not be able to terminate our performance requirements under these contracts at all or without substantial liability and, therefore, in the event we are sustaining reduced profits or losses, we could continue to sustain these reduced profits or losses for the duration of the contract term. Our failure to anticipate technical problems, estimate delivery reductions, estimate costs accurately or control costs during performance of a fixed-price contract may reduce our profitability or cause significant losses on programs similar in nature to the forward losses incurred on the Boeing 747-8 ("747-8 program") and Bombardier Global 7500 contracts.

Any exposure to environmental liabilities may adversely affect us.

Our business, operations and facilities are subject to numerous stringent federal, state, local, and foreign environmental laws and regulations, and we are subject to potentially significant fines or penalties, including criminal sanctions, if we fail to comply with these requirements. In addition, we could be affected by future laws and regulations, including those imposed in response to climate change concerns and other actions commonly referred to as "green initiatives." Compliance with current and future environmental laws and regulations currently requires and is expected to continue to require significant operating and capital costs.

Pursuant to certain environmental laws, a current or previous owner or operator of a contaminated site may be held liable for the entire cost of investigation, removal or remediation of hazardous materials at such property. Innocent Landowner Regulations require an Environmental Site Assessment prior to acquisition to prevent unknowingly acquiring impaired property. Once identified, if the transaction continues, the impairment is not covered by insurance. Although management believes that our operations and facilities are in material compliance with such laws and regulations, future changes in such laws, regulations or interpretations thereof or the nature of our operations or regulatory enforcement actions which may arise, may require us to make significant additional capital expenditures to ensure compliance in the future. Certain of our facilities, including facilities acquired and operated by us or one of our subsidiaries, have at one time or another been under active investigation for environmental contamination by federal or state agencies when acquired and, at least in some cases, continue to be under investigation or subject to remediation. Lawsuits, claims and costs involving environmental matters may arise in the future. Individual facilities of ours have also been subject to investigation on occasion for possible past waste disposal practices which might have contributed to contamination at or from remote third-party waste disposal sites. In some instances, we are indemnified by prior owners or operators and/or present owners of the facilities for liabilities which we incur as a result of these investigations and the environmental contamination found which pre-dates our acquisition of these facilities, subject to certain limitations, including, but not limited to, specified exclusions, deductibles and limitations on the survival period of the indemnity. We also maintain a pollution liability policy that provides coverage, subject to specified limitations, for specified material liabilities associated with the cleanup of certain on-site pollution conditions, as well as defense and indemnity for certain third-party suits (including Superfund liabilities at third-party sites), in each case, to the extent not otherwise indemnified. Also, as we proceed with our plans to exit certain facilities as part of restructuring and related initiatives, the need for remediation for potential environmental contamination could be identified. However, if we are required to pay the expenses related to environmental liabilities because neither indemnification nor insurance coverage is available, these expenses could have a material adverse effect on our financial position, results of operations, and cash flows.

Our expansion into international markets may increase credit, currency and other risks, and our current operations in international markets expose us to such risks.

As we pursue customers in Asia, South America and other less developed aerospace markets throughout the world, our inability to ensure the creditworthiness of our customers in these areas could adversely impact our overall profitability. In addition, with operations in China, France, Germany, Ireland, Mexico, Thailand and the United Kingdom, and customers throughout the world, we are subject to the legal, political, social and regulatory requirements, and economic conditions of other jurisdictions. In the future, we may also make additional international capital investments, including further acquisitions of companies outside the United States or companies having operations outside the United States. Risks inherent to international operations include, but are not limited to, the following:

- difficulty in enforcing agreements in some legal systems outside the United States;
- imposition of additional withholding taxes or other taxes on our foreign income, tariffs or other restrictions on foreign trade and investment, including currency exchange controls;
- fluctuations in exchange rates which may affect demand for our products and services and may adversely affect our profitability in U.S. dollars;
- inability to obtain, maintain or enforce intellectual property rights;
- changes in general economic and political conditions in the countries in which we operate;

- unexpected adverse changes in the laws or regulatory requirements outside the United States, including those with respect to environmental protection, export duties and quotas;
- failure by our employees or agents to comply with U.S. laws affecting the activities of U.S. companies abroad;
- difficulty with staffing and managing widespread operations; and
- difficulty of and costs relating to compliance with the different commercial and legal requirements of the countries in which we operate.

Due to the size and long-term nature of many of our contracts, we are required by GAAP to estimate sales and expenses relating to these contracts in our financial statements, which may cause actual results to differ materially from those estimated under different assumptions or conditions.

Our consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States ("GAAP"). These principles require our management to make estimates and assumptions regarding our contracts that affect the reported amounts of revenue and expenses during the reporting period. Accounting for revenue recognized over time requires judgment relative to assessing risks, estimating contract sales and costs, and making assumptions for schedule and technical issues. Due to the size and nature of many of our contracts, the estimation of total sales and cost at completion is complicated and subject to many variables. While we base our estimates on historical experience and on various assumptions that we believe to be reasonable under the circumstances at the time made, actual results may differ materially from those estimated.

We could become involved in intellectual property litigation, which could have a material and adverse impact on our profitability.

We and other companies in our industry possess certain proprietary rights relating to designs, engineering, manufacturing processes, and repair and overhaul procedures. In the event that we believe that a third party is infringing upon our proprietary rights, we may bring an action to enforce such rights. In addition, third parties may claim infringement by us with respect to their proprietary rights and may initiate legal proceedings against us in the future. The expense and time of bringing an action to enforce such rights or defending against infringement claims can be significant. Intellectual property litigation involves complex legal and factual questions which makes the outcome of any such proceedings subject to considerable uncertainty. Not only can such litigation divert management's attention, but it can also expose the Company to damages and potential injunctive relief which, if granted, may preclude the Company from making, using, or selling particular products or technology. The expense and time associated with such litigation may have a material and adverse impact on our profitability.

We do not own certain intellectual property and tooling that is important to our business.

In our overhaul and repair businesses, OEMs of equipment that we maintain for our customers include language in repair manuals relating to their equipment asserting broad claims of proprietary rights to the contents of the manuals used in our operations. Although we believe that our use of manufacture and repair manuals is lawful, there can be no assurance that OEMs will not try to enforce such claims, including through the possible use of legal proceedings, or that any such actions will be unsuccessful.

Our business also depends on using certain intellectual property and tooling that we have rights to use pursuant to license grants under our contracts with our OEM customers. These contracts contain restrictions on our use of the intellectual property and tooling and may be terminated if we violate certain of these restrictions. Our loss of a contract with an OEM customer and the related license rights to use an OEM's intellectual property or tooling would materially adversely affect our business.

Our operations depend on our manufacturing facilities, which are subject to physical and other risks that could disrupt production.

Our manufacturing facilities or our customers' facilities could be damaged or disrupted by a natural disaster, war, or terrorist activity. We maintain property damage and business interruption insurance at the levels typical in our industry or for our customers and suppliers, however, a pandemic or other major catastrophe, such as an earthquake, hurricane, fire, flood, tornado or other natural disaster at any of our sites, or war or terrorist activities in any of the areas where we conduct operations could result in a prolonged interruption of our business. Any disruption resulting from these events could cause significant delays in shipments of products and the loss of sales and customers and we may not have insurance to adequately compensate us for any of these events. For leased facilities, timely renewal of leases and risk mitigation from the sale of our leased facilities is required to avoid any business interruption.

Our reputation; our ability to do business; and our financial position, results of operations and/or cash flows may be impacted by the improper conduct of employees, agents, subcontractors, suppliers, business partners or joint ventures in which we participate.

We have implemented policies, procedures, training and other compliance controls, and have negotiated terms designed to prevent misconduct by employees, agents or others working on our behalf or with us that would violate the applicable laws of the jurisdictions in which we operate, including laws governing improper payments to government officials, the protection of export

controlled or classified information, cost accounting and billing, competition and data privacy. However, we cannot ensure that we will prevent all such misconduct committed by our employees, agents, subcontractors, suppliers, business partners or others working on our behalf or with us, and this risk of improper conduct may increase as we expand globally. In the ordinary course of our business we form and are members of joint ventures. We may be unable to prevent misconduct or other violations of applicable laws by these joint ventures (including their officers, directors and employees) or our partners. Improper actions by those with whom or through whom we do business (including our employees, agents, subcontractors, suppliers, business partners and joint ventures) could subject us to administrative, civil or criminal investigations and monetary and non-monetary penalties, including suspension and debarment, which could negatively impact our reputation and ability to conduct business and could have a material adverse effect on our financial position, results of operations and/or cash flows.

We may be subject to work stoppages at our facilities or those of our principal customers and suppliers, which could seriously impact the profitability of our business.

Our unionized workforces and those of our customers and suppliers may experience work stoppages during collective bargaining agreement negotiations. If we are unable to negotiate a contract with those workforces, our operations may be disrupted and we may be prevented from completing production and delivery of products from those facilities, which would negatively impact our results. Contingency plans have been developed that would allow production to continue in the event of a strike.

Many aircraft manufacturers, airlines and aerospace suppliers have unionized workforces. Strikes, work stoppages or slowdowns experienced by aircraft manufacturers, airlines or aerospace suppliers could reduce our customers' demand for our products or prevent us from completing production. In turn, this may have a material adverse effect on our financial condition, results of operations and cash flows.

Financial market conditions may adversely affect the benefit plan assets for our defined benefit plans, increase funding requirements and materially impact our statements of financial position and cash flows.

Our benefit plan assets are invested in a diversified portfolio of investments in both the equity and debt categories, as well as limited investments in other alternative investments. The current market values of all of these investments, as well as the related benefit plan liabilities are impacted by the movements and volatility in the financial markets. In accordance with the *Compensation—Retirement Benefits* topic of the Accounting Standards Codification ("ASC"), we have recognized the overfunded or underfunded status of a defined benefit postretirement plan as an asset or liability on our balance sheet, and will recognize changes in that funded status in the year in which the changes occur. The funded status is measured as the difference between the fair value of the plan's assets and the projected benefit obligation. A decrease in the fair value of these plan assets or a decrease in interest rates resulting from movements in the financial markets will increase the underfunded status of the plans recorded on our consolidated balance sheets and result in additional cash funding requirements to meet the minimum required funding levels.

The U.S. Government is a significant customer of our largest customers, and we and they are subject to specific U.S. Government contracting rules and regulations.

The military aircraft manufacturers' business, and by extension, our business, is affected by the U.S. Government's continued commitment to programs under contract with our customers. The terms of defense contracts with the U.S. Government generally permit the government to terminate contracts partially or completely, either for its convenience or if we default by failing to perform under the contract. Termination for convenience provisions provide only for our recovery of unrecovered costs incurred or committed, settlement expenses and profit on the work completed prior to termination. Termination for default provisions provide for the contractor to be liable for excess costs incurred by the U.S. Government in procuring undelivered items from another source. On contracts where the price is based on cost, the U.S. Government may review our costs and performance, as well as our accounting and general business practices. Based on the results of such audits, the U.S. Government may adjust our contract-related costs and fees, including allocated indirect costs. In addition, under U.S. Government purchasing regulations, some of our costs, including most financing costs, portions of research and development costs, and certain marketing expenses may not be subject to reimbursement.

We bear the potential risk that the U.S. Government may unilaterally suspend our customers or us from new contracts pending the resolution of alleged violations of procurement laws or regulations. Sales to the U.S. Government are also subject to changes in the government's procurement policies in advance of design completion. An unexpected termination of, or suspension from, a significant government contract, a reduction in expenditures by the U.S. Government for aircraft using our products, lower margins resulting from increasingly competitive procurement policies, a reduction in the volume of contracts awarded to us, or substantial cost overruns could have a material adverse effect on our financial condition, results of operations and cash flows.

We are subject to the requirements of the National Industrial Security Program Operating Manual for facility security clearance, which is a prerequisite for our ability to perform on classified contracts for the U.S. Government.

U.S. DoD facility security clearance is required in order to be awarded and be able to perform on classified contracts for the U.S. DoD and certain other agencies of the U.S. Government, which is a significant part of our business. We have obtained clearance at appropriate levels that require stringent qualifications, and we may be required to seek higher level clearances in the future. We

cannot assure you that we will be able to maintain our security clearance. If for some reason our security clearance is invalidated or terminated, we may not be able to continue to perform our present classified contracts or be able to enter into new classified contracts, which could affect our ability to compete for and capture new business.

Regulations related to conflict minerals have and will continue to force us to incur additional expenses, may make our supply chain more complex, and could adversely impact our business.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 contains provisions to improve transparency and accountability concerning the supply of certain minerals and metals, known as conflict minerals, originating from the Democratic Republic of Congo (the "DRC") and adjoining countries. As a result, in August 2012, the SEC adopted annual investigation, disclosure and reporting requirements for those companies that manufacture or contract to manufacture products that contain conflict minerals that originated from the DRC and adjoining countries. We have and will continue to incur compliance costs, including costs related to determining the sources of conflict minerals used in our products and other potential changes to processes or sources of supply as a consequence of such verification activities. The implementation of these rules could adversely affect the sourcing, supply and pricing of materials used in certain of our products. As there may be only a limited number of suppliers offering "conflict free" minerals, we cannot be sure that we will be able to obtain necessary conflict-free minerals from such suppliers in sufficient quantities or at competitive prices. Also, we may face reputational challenges if we determine that certain of our products contain minerals not determined to be conflict free.

Our business is subject to regulation in the United States and internationally.

The manufacturing of our products is subject to numerous federal, state and foreign governmental regulations. The number of laws and regulations that are being enacted or proposed by various governmental bodies and authorities are increasing. Compliance with these regulations is difficult and expensive. If we fail to adhere, or are alleged to have failed to adhere, to any applicable federal, state or foreign laws or regulations, or if such laws or regulations negatively affect sales of our products, our business, prospects, results of operations, financial condition or cash flows may be adversely affected. In addition, our future results could be adversely affected by changes in applicable federal, state, and foreign laws and regulations, or the interpretation or enforcement thereof, including those relating to manufacturing processes, product liability, government contracts, trade rules and customs regulations, intellectual property, consumer laws, privacy laws, as well as accounting standards and taxation requirements (including tax-rate changes, new tax laws or revised tax law interpretations).

Brexit may have short-term and long-term adverse impacts on the Company's operations in the United Kingdom.

The Company's United Kingdom operations represented approximately 4% of consolidated net sales for the 12 months ended March 31, 2020. The impact of Brexit could adversely affect our business, results of operations, and financial condition. In the short-term, volatility in the British pound sterling could continue as the United Kingdom negotiates its anticipated exit from the European Union. In the longer term, any impact from Brexit on the Company's United Kingdom operations will depend, in part, on the outcome of tariff, trade, regulatory, and other negotiations.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of March 31, 2020, our segments owned or leased properties that are material to our operations with the following square footage:

<i>(Square feet in thousands)</i>	Owned	Leased	Total
Systems & Support	1,444	563	2,007
Aerospace Structures	2,812	2,845	5,657
Corporate	—	22	22
Total	4,256	3,430	7,686

At March 31, 2020, our segments occupied 64% of the square footage in the table above at the following major locations:

- Systems & Support: West Hartford, Connecticut; Park City, Utah; and Hot Springs, Arkansas
- Aerospace Structures: Milledgeville, Georgia; Hawthorne, California; Red Oak, Texas; Grand Prairie, Texas; and Stuart, Florida

We believe that our properties are adequate to support our operations for the foreseeable future.

Item 3. Legal Proceedings

In the ordinary course of business, we are involved in disputes, claims and lawsuits with employees, suppliers and customers, as well as governmental and regulatory inquiries, that are deemed to be immaterial. Some may involve claims or potential claims of substantial damages, fines, penalties or injunctive relief. While we cannot predict the outcome of any pending or future litigation or proceeding and no assurances can be given, we do not believe that any pending matter will have a material effect, individually or in the aggregate, on its financial position or results of operations.

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

Our common stock is traded on the New York Stock Exchange under the symbol "TGI." As of May 26, 2020, there were approximately 114 holders of record of our common stock and we believe that our common stock was beneficially owned by approximately 15,000 persons.

Dividend Policy

During fiscal 2020 and 2019, we paid cash dividends of \$0.16 per share and \$0.16 per share, respectively. However, we suspended the declaration and payment of dividends in March 2020 and, pursuant to the Twelfth Amendment, we agreed not to pay any cash dividends prior to the first date after a fiscal quarter ending on or after March 31, 2022 with respect to which we deliver a compliance certificate demonstrating compliance with the financial maintenance covenants under our Amended Credit Agreement. Further, our declaration and payment of cash dividends in the future and the amount thereof will depend upon our results of operations, financial condition, cash requirements, future prospects, limitations imposed by credit agreements or indentures governing debt securities and other factors deemed relevant by our Board of Directors. No assurance can be given that cash dividends will continue to be declared and paid at historical levels or at all. Certain of our debt arrangements, including the Amended Credit Agreement, restrict our paying dividends and making distributions on our capital stock, except for the payment of stock dividends and redemptions of an employee's shares of capital stock upon termination of employment. The Company currently has an accumulated deficit which could limit or restrict our ability to pay dividends in the future.

Repurchases of Stock

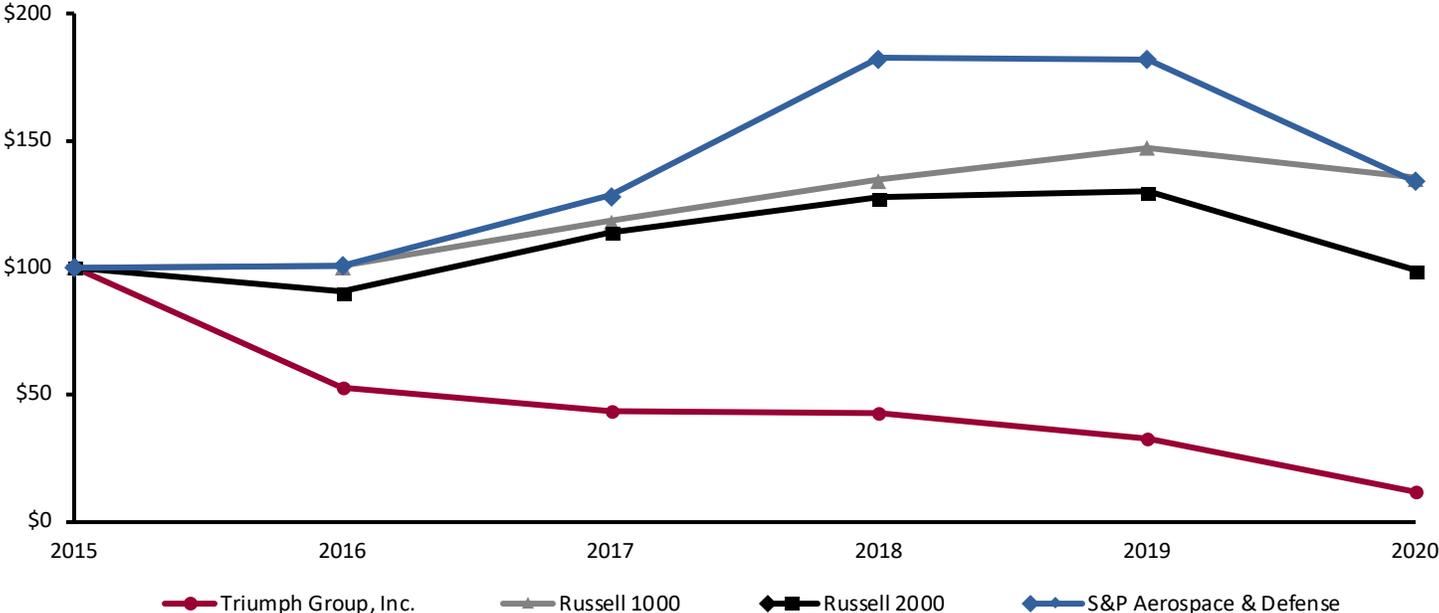
In December 1998, we announced a program to repurchase up to 500,000 shares of our common stock. In February 2008, the Company's Board of Directors authorized an increase in the Company's existing stock repurchase program by up to an additional 500,000 shares of its common stock. In February 2014, the Company's Board of Directors authorized an increase in the Company's existing stock repurchase program by up to an additional 5,000,000 shares of its common stock. Though no purchases have been made in recent years, to the extent permitted by our Amended Credit Agreement and other documentation governing our indebtedness, repurchases may be made from time to time in open market transactions, block purchases, privately negotiated transactions or otherwise at prevailing prices. No time limit has been set for completion of the program and the terms of our Amended Credit Agreement do not currently permit us to repurchase shares under the program. As of May 28, 2020, the Company remains able to purchase an additional 2,277,789 shares under such program.

Equity Compensation Plan Information

The information required regarding equity compensation plan information will be included in our 2020 Proxy Statement in connection with our 2020 Annual Meeting of Stockholders to be held on July 16, 2020, under the heading "Equity Compensation Plan Information" and is incorporated herein by reference.

The following graph compares the cumulative 5-year total return provided stockholders on our common stock relative with the cumulative total returns of the Russell 1000 index, the Russell 2000 index and the S&P Aerospace & Defense index. An investment of \$100 (with reinvestment of all dividends) is assumed to have been made in our common stock and in each of the indexes on March 31, 2015, and its relative performance is tracked through March 31, 2020.

COMPARISON OF 5-YEAR CUMULATIVE TOTAL RETURN*
Among Triumph Group, Inc., and The Russell 1000 and 2000 Indexes
And The S&P Aerospace & Defense Index



* \$100 invested on March 31, 2015, in stock or index, including reinvestment of dividends.

	Fiscal year ended March 31,					
	2015	2016	2017	2018	2019	2020
Triumph Group, Inc.	100.00	52.91	43.51	42.81	32.63	11.66
Russell 1000	100.00	100.50	118.02	134.52	147.03	135.23
Russell 2000	100.00	90.24	113.90	127.33	129.94	98.77
S&P Aerospace & Defense	100.00	100.97	128.44	182.43	182.20	134.14

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Item 6. Selected Financial Data

The following selected financial data should be read in conjunction with the consolidated financial statements and related notes thereto and management's discussion and analysis of financial condition and results of operations included herein.

	Fiscal Year Ended March 31,				
	2020 ⁽¹⁾	2019 ⁽²⁾	2018 ⁽³⁾	2017 ⁽⁴⁾	2016 ⁽⁵⁾
	(in thousands, except per share data)				
Operating Data:					
Net sales	\$2,900,117	\$3,364,930	\$3,198,951	\$3,532,799	\$3,886,072
Cost of sales	2,307,393	2,924,920	2,607,556	2,774,449	3,671,684
	592,724	440,010	591,395	758,350	214,388
Selling, general and administrative	257,529	298,386	292,630	285,001	290,338
Depreciation and amortization	138,168	149,904	158,368	176,946	177,755
Impairment of intangible assets	66,121	—	535,227	266,298	874,361
Restructuring	25,340	31,098	40,069	42,177	36,182
Loss on sale of assets and businesses	56,916	235,301	30,741	19,124	—
(Gain) loss on legal judgment or settlement, net of expenses	(9,257)	—	—	—	5,476
Operating income (loss)	57,907	(274,679)	(465,640)	(31,196)	(1,169,724)
Non-service defined benefit income	(41,894)	(62,105)	(103,234)	(88,085)	(78,618)
Interest expense and other	122,129	114,619	99,442	80,501	68,041
Loss from continuing operations, before income taxes	(22,328)	(327,193)	(461,848)	(23,612)	(1,159,147)
Income tax expense (benefit)	5,798	(5,426)	(36,457)	19,340	(111,187)
Net loss	\$ (28,126)	\$ (321,767)	\$ (425,391)	\$ (42,952)	\$ (1,047,960)
Loss per share:					
Loss from continuing operations:					
Basic	\$ (0.56)	\$ (6.47)	\$ (8.60)	\$ (0.87)	\$ (21.29)
Diluted ⁽⁶⁾	\$ (0.56)	\$ (6.47)	\$ (8.60)	\$ (0.87)	\$ (21.29)
Cash dividends declared per share	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16
Shares used in computing earnings per share:					
Basic	50,494	49,698	49,442	49,303	49,218
Diluted ⁽⁶⁾	50,494	49,698	49,442	49,303	49,218

	As of March 31,				
	2020 ⁽¹⁾	2019 ⁽²⁾	2018 ⁽³⁾	2017 ⁽⁴⁾	2016 ⁽⁵⁾
	(in thousands)				
Balance Sheet Data:					
Working capital	\$ 573,879	\$ 265,795	\$ 930,486	\$ 438,659	\$ 606,767
Total assets	2,980,333	2,854,574	3,807,064	4,414,600	4,835,093
Long-term debt, including current portion	1,807,507	1,488,821	1,438,284	1,196,300	1,417,320
Total stockholders' (deficit) equity	\$ (781,264)	\$ (573,313)	\$ 450,534	\$ 846,473	\$ 934,944

- (1) Includes the divestiture of Triumph Aerospace Structures' manufacturing operations in Nashville, Tennessee, as well as the gain recognized as a result of the transfer of certain assets and liabilities to AeroSpace Technologies of Korea Inc.
- (2) Includes the divestitures of Triumph Fabrications - San Diego, Inc.; Triumph Fabrications - Ft. Worth, Inc.; Triumph Structures - Kansas City, Inc.; Triumph Structures - Wichita, Inc.; Triumph Gear Systems - Toronto, ULC and Triumph Northwest (The Triumph Group Operations, Inc.); Triumph Aviation Services - NAAS Division, Inc.; Triumph Structures - East Texas, Inc. as well as all of the shares of Triumph Structures - Los Angeles, Inc.; and Triumph Processing, Inc.; as well as the loss recognized as a result of the transition of the Global 7500 program to Bombardier.
- (3) Includes the divestitures of Triumph Processing- Embee Division (September 2017) and Triumph Structures- Long Island (March 2018). Additionally, the fiscal 2018 and prior period operating data has been adjusted as a result of Accounting Standards Update ("ASU") 2017-07, *Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* ("ASU 2017-07"). The fiscal 2018 and prior period operating data has not been adjusted as a result of ASU 2014-09, *Revenue From Contracts with Customers* ("ASU 2014-09"); this affects the comparability of the information reflected in the selected financial data for this year. See Notes to the Consolidated Financial Statements.
- (4) Includes the divestitures of Triumph Aerospace Systems-Newport News, Inc. (September 2016) and Triumph Air Repair, the Auxiliary Power Unit Overhaul Operations of Triumph Aviations Services - Asia, Ltd. and Triumph Engines - Tempe (December 2016). Additionally, the fiscal 2018 and prior period operating data has not been adjusted as a result of ASU 2014-09; this affects the comparability of the information reflected in the selected financial data for this year. See Notes to the Consolidated Financial Statements.
- (5) Includes the acquisition of Fairchild Controls Corporation (October 2015) from the date of acquisition, forward losses on the Bombardier and 747-8 programs of \$561,158 (March 2016). Additionally, the fiscal 2018 and prior period operating data has been adjusted as a result of ASU 2017-07. The fiscal 2018 and prior period operating data has not been adjusted as a result of ASU 2014-09; this affects the comparability of the information reflected in the selected financial data for this year. See Notes to the Consolidated Financial Statements.
- (6) Diluted earnings per share for the fiscal years ended March 31, 2015, included 40,177 shares related to the dilutive effects of the Company's Convertible Notes.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto contained elsewhere herein.

OVERVIEW

We are a major supplier to the aerospace industry and have two reportable segments: (i) Systems & Support, whose companies' revenues are derived from integrated solutions, including design, development and support of proprietary components, subsystems and systems, production of complex assemblies using external designs, as well as full life cycle solutions for commercial, regional and military aircraft; and (ii) Aerospace Structures, whose companies supply commercial, business, regional, and military manufacturers with large metallic and composite structures and produce close-tolerance parts primarily to customer designs and model-based definition, including a wide range of aluminum, hard metal and composite structure capabilities.

During the fiscal year ended March 31, 2020, the Company divested of a number of its assets and operations, including the sale of its manufacturing operations at its Nashville, TN, facility and the assignment of its E-2 Jets contract with Embraer for the manufacture of structural components for their program to AeroSpace Technologies of Korea Inc. ("ASTK"). The operating results of the Nashville manufacturing operations are included in Aerospace Structures through the date of divestiture or assignment. Collectively, these transactions are referred to as the "fiscal 2020 divestitures." The Company recognized combined net losses of \$56.9 million associated with the fiscal 2020 divestitures, which are presented on the accompanying consolidated statements of operations within loss on sale of assets and businesses, net.

Significant financial results for the fiscal year ended March 31, 2020, include:

- Net sales for fiscal 2020 decreased 13.8% to \$2.90 billion.
- Operating income for fiscal 2020 was \$57.9 million.
- Included in operating income for fiscal 2020 was loss on sale of assets and businesses of \$56.9 million and restructuring charges of \$25.3 million.
- Net loss for fiscal 2020 was \$28.1 million or \$0.56 per diluted common share.
- Backlog decreased 14.5% over the prior year to \$3.2 billion due to divestitures.

Our working capital needs are generally funded through cash flows from operations and borrowings under our credit arrangements. For the fiscal year ended March 31, 2020, we generated \$96.7 million of cash flows from operating activities, received \$7.4 million from investing activities, and received \$293.7 million from financing activities. Cash flows used in operating activities in fiscal year 2019 were \$174.4 million.

The Company has committed to several plans (which were initiated in fiscal 2016) that incorporated the restructuring of certain of its businesses as well as the consolidation of certain of its facilities. As of March 31, 2020, with the exception of three pending facility closures to be completed in fiscal 2021 or 2022, the Company has substantially completed these plans.

On March 18, 2020, in response to anticipated market headwinds primarily arising from the impact of COVID-19, the Company committed to new restructuring and cost reduction activities to align capacity with expected demand. These plans and related activities are expected to generate savings of approximately \$120.0 million in fiscal 2021 on a consolidated basis, primarily from headcount and other human resource related cost reductions. While the long-term outlook for the aerospace industry remains positive due the fundamental drivers of air travel demand, current expectations are that it will take 2-3 years for travel to return to calendar 2019 levels and a few years beyond that for the industry to return to long-term trend growth, although there can be no assurance that such period will not be longer. To balance the supply and demand given the COVID-19 shock and to preserve long-term potential and competitiveness, our customers have decided to reduce the production rates of several of their commercial aircraft programs. These rate decisions were based on assessments of the demand environment. There is significant uncertainty with respect to when commercial air traffic levels will begin to recover, and whether and at what point capacity will return to and/or exceed pre-COVID-19 levels. The Company will work with its customers to closely monitor the key factors that affect backlog and future demand including customers' evolving manufacturing plans, the widebody replacement cycle and the cargo market, but such impact could be material and make it difficult to compare periods.

The Company expects COVID-19 to reduce demand for commercial aviation aftermarket due to the recent sharp decreases in flights; as well as reduce demand for commercial aviation production as OEMs have lowered their related delivery rate assumptions. The COVID-19 related reduction in OEM production rates will result in additional costs to produce and deliver our products, which may not be mitigated through our cost reduction initiatives and could negatively impact earnings and cash flows, particularly with respect to our fixed-price contracts.

The Company is unable at this time to reasonably estimate potential future additional financial impacts or a range of loss, if any, due to continued uncertainties related to the impacts of COVID-19 on our operations, supply chain and customers, future changes to OEM production rates, supply chain impacts, and/or the results of negotiations with particular customers. Any such impacts, including any changes in our estimates, could have a material adverse effect on our financial position, results of operations, and/or cash flows.

For example, the Company expects that, in the event that its customers are unable to resume aircraft deliveries consistent with provided assumptions, the continued absence of revenue, earnings, and cash flows associated with those deliveries would continue to have a material impact on our operating results. In the event that future OEM production rate increases occur at a slower rate or take longer than the Company is currently assuming, the Company expects that the growth in inventory and other cash flow impacts associated with production would decrease. However, while any prolonged delays in planned OEM production rate increases could mitigate the impact on our liquidity, it could significantly increase the overall expected costs to manufacture our products, which would reduce operating margins and/or increase abnormal production costs in the future. Additionally, the declines in global air travel are expected to result in reduced demand for MRO services and uncertainty exists related to the length of time until air travel returns to historical levels.

From fiscal 2014 through fiscal 2020, our Aerospace Structures business unit had been performing design, development and initial manufacturing on several new programs, including the Global 7500, the Embraer second generation E-Jet ("E2-Jets") and more recently, the Gulfstream G500/G600 programs. Historically, low-rate production commences during flight testing, followed by an increase to full-rate production, assuming that successful testing and certification are achieved. While work progressed on these development programs, we have experienced difficulties in achieving estimated cost targets particularly in the areas of engineering and estimated recurring costs which resulted in forward losses. Additionally, from fiscal 2015 to fiscal 2019, our Aerospace Structures business unit experienced operating and forward losses on its production of the Boeing 747-8 fuselage for Boeing, Gulfstream G280 wing for Israel Aerospace Industries, Ltd ("IAI") and Gulfstream G650 wing for Gulfstream. Further discussion is included below regarding the significant developments of each program.

Boeing 737 MAX

The Boeing 737 MAX program represents approximately 5% of revenue for the fiscal year ended March 31, 2020. The temporary suspension of 737 MAX production by Boeing in January 2020 and subsequent temporary suspension of production operations in the Puget Sound area as a result of the COVID-19 crisis in March 2020, had minimal unfavorable effect on our results through March 31, 2020. Boeing has since resumed production operations during the week of April 20, 2020 and updated the delivery rate assumptions. Boeing's assumptions include the return of 737 MAX aircraft production during the second calendar quarter of 2020 as timing and conditions of return to service and COVID-19 impacts are better understood; as well as the timing of regulatory approvals will enable 737 MAX deliveries to resume during the third calendar quarter of 2020.

Boeing has stated it has approximately 450 airplanes in inventory at March 31, 2020, and has also assumed that the majority of 737 MAX airplanes produced during the grounding and included within inventory will be delivered during the first year after the resumption of deliveries, although at a slower pace than our previous assumptions due to COVID-19. The slower production and delivery rate ramp-ups reflect commercial airline industry uncertainty due to the impact of COVID-19. Based on the above assumption, Triumph expects to see declines in revenue across both of its operating segments in its fiscal 2021. A resurgence of COVID-19 that results in additional delays or shut downs could further exacerbate this expectation.

Boeing 747-8

As disclosed during fiscal 2016, Boeing announced a rate reduction to the 747-8 program, which lowered production to one plane every two months. The impact of the rate reduction resulted in additional forward loss during the fiscal year ended March 31, 2016.

In March 2017, the Company settled several outstanding change orders and open pricing on a number of its programs with Boeing. The agreement included pricing settlements, advanced payments, delivery schedule adjustments and the opportunity to extend the mutual relationship on future programs. The agreement also provided for continued build ahead on the 747-8 program through the end of the existing contract, resulting in a reduction to the previously recognized forward losses on the 747-8 program.

As of March 31, 2020, Triumph's production on this program has substantially completed from its Hawthorne, CA facility, with the remaining production from its Grand Prairie, TX, facility expected to complete in late fiscal 2021. Facility exit plans are underway at both locations and are expected to result in additional cost to exit of approximately \$20.0 million through mid-fiscal 2022 and result in projected cash uses.

G280

We acquired both the G280 and G650 wing programs in fiscal 2015 and received proceeds for \$160.0 million as both contracts were operating at a loss. While operations have improved on the G650 since acquisition as noted further below, the cost profile of the G280 wing program has continued to result in forward loss charges, including \$29.1 million in the fiscal year ended March 31, 2019.

In April 2019, the Company and IAI reached an agreement to transition the manufacture of the G280 wing to IAI. The two companies have developed detailed transition plans to enable a transition of work. Our contract with IAI will terminate upon completion of the transition of work. Our forward loss recognized in the fiscal year ended March 31, 2019, noted above includes the cost to transition, which is estimated to be completed in mid-fiscal 2021 and include projected cash uses. Changes to the forward loss associated with this program were immaterial in the year ended March 31, 2020.

In May 2020, the Company reached a letter of intent to the accelerated transfer of the G280 wing program to Israel Aerospace Industries and Korean Aerospace Industries by mid-2020 at which point the leased Tulsa factory will be closed.

G650

In the first quarter of fiscal 2019, the Company reached an agreement with Gulfstream to optimize the supply chain on the Company's G650 work scope. The G650 wing box and wing completion work, which had been co-produced across three facilities at both companies, are being consolidated into Gulfstream's facilities in Savannah, Georgia. The Company completed the manufacturing of its final wing box in July 2019. The Company anticipates reaching an agreement to sell its remaining G650 wing supply chain activity and engineering services to Gulfstream, although the continued impact of COVID-19 could impact the timing and terms thereof. This transaction is expected to close in the first half of fiscal 2021.

E2-Jets

Under our contract with Embraer, we had the exclusive right to design, develop and manufacture the center fuselage section III, rear fuselage section and various tail section components (rudder and elevator) for the E2-Jets over the initial 600 ship sets. The contract provided for funding on a fixed amount of nonrecurring costs, to be paid over a specified number of production units. Higher than expected spending on the E2-Jets program resulted in a near break-even estimated profit margin percentage, with additional potential future cost pressures as well as opportunities for improved performance. Risks related to additional engineering on the retained component manufacturing as well as the recurring cost profile remain on this program.

During the fiscal year ended March 31, 2018, the Company reached an agreement with AeroSpace Technologies of Korea Inc. ("ASTK") to optimize the supply chain under our portion of the E2 program. Under this agreement, ASTK will build and transport fuselage shipsets to Embraer and establish a facility in Brazil to manage stock and repairs locally. At the time, the Company maintained its role as the supply chain integrator on the program.

In April 2019, we announced an agreement to assign our contract with Embraer for the manufacture of structural components for their program to ASTK. Under this agreement, we will remain a supplier to ASTK for the rudder and elevator components. We completed the assignment of our contract during fiscal year 2020 and recognized a gain of approximately \$10.0 million included in our Aerospace Structures operating income.

T-7 Red Hawk

In September 2017, the Company reached an agreement with Boeing to supply the wing, vertical tail and horizontal tail structures for the new T-7 Red Hawk, originally known as the Boeing T-X, for the U.S. Air Force. In September 2018, the U.S. Air Force awarded the contract to Boeing. In fiscal 2020, the Company continued supply chain analysis in support of Boeing's preliminary design. Risks related to development and recurring productions costs are possible and could result in future forward losses.

Although none of the development or production programs noted above individually are expected to have a material impact on our net revenues, they do have the potential, either individually or in the aggregate, to materially and negatively impact our consolidated results of operations if future changes in estimates result in the need for a forward loss provision. Absent any such loss provisions, we do not anticipate that any of these programs will significantly dilute our future consolidated margins, although a prolonged impact of COVID-19 could result in changes in expectations.

During the fiscal year ended March 31, 2019, the Company divested of a number of its assets and operations, including (i) selling all of the shares of Triumph Structures - East Texas, Inc. and all of the shares of Triumph Structures - Los Angeles, Inc. and Triumph Processing, Inc. (collectively, the "Long & Large"), (ii) transitioning the responsibility for the Bombardier Global 7500 ("Global 7500") wing program manufacturing operations of Aerospace Structures to Bombardier, (iii) selling all of the shares of Triumph Fabrications - San Diego, Inc. and Triumph Fabrications - Ft. Worth, Inc. (together, "Fabrications"), (iv) selling all of the shares of Triumph Structures - Kansas City, Inc., Triumph Structures - Wichita, Inc., Triumph Gear Systems - Toronto, ULC and Triumph Northwest (The Triumph Group Operations, Inc.) (together, "Machining"), and (v) selling all of the shares of Triumph Aviation Services - NAAS Division, Inc. ("NAAS"). Collectively, these transactions are referred to as the "fiscal 2019 divestitures". The Company recognized combined net losses of \$235.3 million associated with the fiscal 2019 divestitures, which are presented on the accompanying consolidated statements of operations within loss on divestitures. With the exception of NAAS, the operating results for the fiscal 2019 divestitures are included in Aerospace Structures ("fiscal 2019 Aerospace Structures Divestitures") through the respective dates of divestiture. The operating results for NAAS are included in Systems & Support through the date of divestiture.

During fiscal 2018, the Company sold all of the shares of (i) Triumph Processing - Embee Division, Inc. ("Embee") and (ii) Triumph Structures - Long Island ("TS-LI"), (collectively, the "fiscal 2018 divestitures") for total cash proceeds of \$74.5 million and a combined loss of \$28.3 million presented on the accompanying consolidated statements of operations as loss on divestitures and is included in Corporate. The operating results of Embee were included in Systems & Support and the operating results of TS-LI were included in Aerospace Structures, respectively, through their dates of disposal.

RESULTS OF OPERATIONS

The following includes a discussion of our consolidated and business segment results of operations. The Company's diverse structure and customer base do not provide for precise comparisons of the impact of price and volume changes to our results. However, we have disclosed the significant variances between the respective periods.

Non-GAAP Financial Measures

We prepare and publicly release annual audited and quarterly unaudited financial statements prepared in accordance with U.S. GAAP. In accordance with Securities and Exchange Commission (the "SEC") rules, we also disclose and discuss certain non-GAAP financial measures in our public filings and earning releases. Currently, the non-GAAP financial measures that we disclose are Adjusted EBITDA, which is our net loss before interest, income taxes, amortization of acquired contract liabilities, legal settlements, loss on divestitures, depreciation and amortization; and Adjusted EBITDAP, which is Adjusted EBITDA, before pension expense or benefit, including the effects of curtailments, settlements, and other early retirement incentives. We disclose Adjusted EBITDA on a consolidated and Adjusted EBITDAP on a consolidated and a reportable segment basis in our earnings releases, investor conference calls and filings with the SEC. The non-GAAP financial measures that we use may not be comparable to similarly titled measures reported by other companies. Also, in the future, we may disclose different non-GAAP financial measures in order to help our investors more meaningfully evaluate and compare our future results of operations with our previously reported results of operations.

We view Adjusted EBITDA and Adjusted EBITDAP as operating performance measures and, as such, we believe that the U.S. GAAP financial measure most directly comparable to such measures is net loss. In calculating Adjusted EBITDA and Adjusted EBITDAP, we exclude from net loss the financial items that we believe should be separately identified to provide additional analysis of the financial components of the day-to-day operation of our business. We have outlined below the type and scope of these exclusions and the material limitations on the use of these non-GAAP financial measures as a result of these exclusions. Adjusted EBITDA and Adjusted EBITDAP are not measurements of financial performance under U.S. GAAP and should not be considered as a measure of liquidity, as an alternative to net loss, or as an indicator of any other measure of performance derived in accordance with U.S. GAAP. Investors and potential investors in our securities should not rely on Adjusted EBITDA or Adjusted EBITDAP as a substitute for any U.S. GAAP financial measure, including net loss. In addition, we urge investors and potential investors in our securities to carefully review the reconciliation of Adjusted EBITDA and Adjusted EBITDAP to net loss set forth below, in our earnings releases, and in other filings with the SEC and to carefully review the U.S. GAAP financial information included as part of our Quarterly Reports on Form 10-Q and our Annual Reports on Form 10-K that are filed with the SEC, as well as our quarterly earnings releases, and compare the U.S. GAAP financial information with our Adjusted EBITDA and Adjusted EBITDAP.

Adjusted EBITDA and Adjusted EBITDAP are used by management to internally measure our operating and management performance and by investors as a supplemental financial measure to evaluate the performance of our business that, when viewed with our U.S. GAAP results and the accompanying reconciliation, we believe provides additional information that is useful to gain an understanding of the factors and trends affecting our business. We have spent more than 20 years expanding our product and service capabilities, partially through acquisitions of complementary businesses. Due to the expansion of our operations, which included acquisitions, our net loss has included significant charges for depreciation and amortization. Adjusted EBITDA and Adjusted EBITDAP exclude these charges and provide meaningful information about the operating performance of our business, apart from charges for depreciation and amortization. We believe the disclosure of Adjusted EBITDA and Adjusted EBITDAP helps investors meaningfully evaluate and compare our performance from quarter to quarter and from year to year. We also believe Adjusted EBITDA and Adjusted EBITDAP are measures of our ongoing operating performance because the isolation of noncash charges, such as depreciation and amortization, and nonoperating items, such as interest, income taxes, pension and other postretirement benefits, provides additional information about our cost structure and, over time, helps track our operating progress. In addition, investors, securities analysts, and others have regularly relied on Adjusted EBITDA and Adjusted EBITDAP to provide financial measures by which to compare our operating performance against that of other companies in our industry.

Set forth below are descriptions of the financial items that have been excluded from our net income to calculate Adjusted EBITDA and Adjusted EBITDAP and the material limitations associated with using these non-GAAP financial measures as compared with net loss from continuing operations:

- Gains or losses from sale of assets and businesses may be useful for investors to consider because they reflect gains or losses from sale of operating units or other assets. We do not believe these earnings necessarily reflect the current and ongoing cash earnings related to our operations.

- Legal judgments and settlements, when applicable, may be useful for investors to consider because it reflects gains or losses from disputes with third parties. We do not believe these earnings necessarily reflect the current and ongoing cash earnings related to our operations.
- Non-service defined benefit income or expense from our pension and other postretirement benefit plans (inclusive of the adoption of ASU 2017-07 and certain pension related transactions such as curtailments, settlements, early retirement or other incentives) may be useful for investors to consider because they represent the cost of postretirement benefits to plan participants, net of the assumption of returns on the plan's assets and are not indicative of the cash paid for such benefits. We do not believe these earnings (expenses) necessarily reflect the current and ongoing cash earnings related to our operations.
- Amortization of acquired contract liabilities may be useful for investors to consider because it represents the non-cash earnings on the fair value of off-market contracts acquired through acquisitions. We do not believe these earnings necessarily reflect the current and ongoing cash earnings related to our operations.
- Amortization expense (including goodwill and intangible asset impairments) may be useful for investors to consider because it represents the estimated attrition of our acquired customer base and the diminishing value of tradenames, product rights, licenses, or, in the case of goodwill, other assets that are not individually identified and separately recognized under U.S. GAAP. We do not believe these charges necessarily reflect the current and ongoing cash charges related to our operating cost structure.
- Depreciation may be useful for investors to consider because it generally represents the wear and tear on our property and equipment used in our operations. We do not believe these charges necessarily reflect the current and ongoing cash charges related to our operating cost structure.
- The amount of interest expense and other we incur may be useful for investors to consider and may result in current cash inflows or outflows. However, we do not consider the amount of interest expense and other to be a representative component of the day-to-day operating performance of our business.
- Income tax expense may be useful for investors to consider because it generally represents the taxes which may be payable for the period and the change in deferred income taxes during the period and may reduce the amount of funds otherwise available for use in our business. However, we do not consider the amount of income tax expense to be a representative component of the day-to-day operating performance of our business.

Management compensates for the above-described limitations of using non-GAAP measures only to supplement our U.S. GAAP results and to provide additional information that is useful to gain an understanding of the factors and trends affecting our business.

The following table shows our Adjusted EBITDA and Adjusted EBITDAP reconciled to our net loss for the indicated periods (in thousands):

	Fiscal year ended March 31,		
	2020	2019	2018
Net loss (U.S. GAAP measure)	\$ (28,126)	\$ (321,767)	\$ (425,391)
Legal judgment gain, net of expenses	(9,257)	—	—
Loss on sale of assets and businesses, net	56,916	235,301	30,741
Adoption of ASU 2017-07	—	87,241	—
Amortization of acquired contract liabilities	(75,286)	(67,314)	(125,148)
Depreciation and amortization*	204,289	149,904	693,595
Interest expense and other	122,129	114,619	99,442
Curtailments, settlements and early retirement incentives	14,293	4,032	(25,722)
Union represented employee incentives	7,071	—	—
Income tax expense (benefit)	5,798	(5,426)	(36,457)
Adjusted EBITDA (non-GAAP measure)	\$ 297,827	\$ 196,590	\$ 211,060
Non-service defined benefit income (excluding settlements)	(56,187)	(66,137)	(77,512)
Adjusted EBITDAP (non-GAAP measure)	\$ 241,640	\$ 130,453	\$ 133,548

* Includes impairment charges related to intangible assets

The following tables show our Adjusted EBITDAP by reportable segment reconciled to our operating (loss) income for the indicated periods (in thousands):

	Fiscal year ended March 31, 2020			
	Total	Systems & Support	Aerospace Structures	Corporate/ Eliminations
Operating income (loss)	\$ 57,907	\$ 141,341	\$ 41,864	\$ (125,298)
Legal judgment gain, net of expenses	(9,257)	—	—	(9,257)
Loss (gain) on sale of assets and businesses	56,916	—	(10,121)	67,037
Union represented employee incentives	7,071	—	7,071	—
Amortization of acquired contract liabilities	(75,286)	(34,486)	(40,800)	—
Depreciation and amortization*	204,289	98,497	102,418	3,374
Adjusted EBITDAP	\$ 241,640	\$ 205,352	\$ 100,432	\$ (64,144)

	Fiscal year ended March 31, 2019			
	Total	Systems & Support	Aerospace Structures	Corporate/ Eliminations
Operating (loss) income	\$ (274,679)	\$ 201,094	\$ (152,407)	\$ (323,366)
Loss on sale of assets and businesses	235,301	—	—	235,301
Adoption of ASU 2017-07	87,241	—	87,241	—
Amortization of acquired contract liabilities	(67,314)	(34,121)	(33,193)	—
Depreciation and amortization	149,904	35,373	111,431	3,100
Adjusted EBITDAP	\$ 130,453	\$ 202,346	\$ 13,072	\$ (84,965)

	Fiscal year ended March 31, 2018			
	Total	Systems & Support	Aerospace Structures	Corporate/ Eliminations
Operating (loss) income	\$ (465,640)	\$ 231,103	\$ (568,164)	\$ (128,579)
Loss on sale of assets and businesses	30,741	—	—	30,741
Amortization of acquired contract liabilities	(125,148)	(38,293)	(86,855)	—
Depreciation and amortization*	693,595	42,730	649,013	1,852
Adjusted EBITDAP	\$ 133,548	\$ 235,540	\$ (6,006)	\$ (95,986)

* Includes impairment charges related to intangible assets

The fluctuations from period to period within the amounts of the components of the reconciliations above are discussed further below within Results of Operations.

Fiscal year ended March 31, 2020, compared with fiscal year ended March 31, 2019

	Year Ended March 31,	
	2020	2019
	(in thousands)	
Net sales	\$ 2,900,117	\$ 3,364,930
Segment operating income	\$ 183,205	\$ 48,687
Corporate expense	(125,298)	(323,366)
Total operating income (loss)	57,907	(274,679)
Interest expense and other	122,129	114,619
Non-service defined benefit income	(41,894)	(62,105)
Income tax expense (benefit)	5,798	(5,426)
Net loss	\$ (28,126)	\$ (321,767)

Net sales decreased by \$464.8 million, or 13.8%, to \$2.90 billion for the fiscal year ended March 31, 2020, from \$3.36 billion for the fiscal year ended March 31, 2019. Organic sales adjusted for inter-segment sales increased \$140.5 million, or 5.2%, offset by declines from the fiscal 2019 divestitures and fiscal 2020 divestitures, including the Global 7500 transition, of \$605.3 million. Organic sales increased primarily due to increased volumes across Airbus commercial programs and various military programs, as well as aftermarket demand for military rotorcraft programs in Systems & Support, increased volumes on G550, 767, 787, G280, and M100 programs as well as increased volume and pricing on E-2 Jets sales to ASTK in Aerospace Structures, and increased demand for accessory components. These increases were partially offset in decreased volumes on 737.

Cost of sales decreased by \$617.5 million, or 21.1%, to \$2.31 billion for the fiscal year ended March 31, 2020, from \$2.92 billion for the fiscal year ended March 31, 2019. Organic cost of sales adjusted for inter-segment sales increased \$26.3 million, or 1.2%,

offset by declines from the fiscal 2019 divestitures and fiscal 2020 divestitures, including the Global 7500 transition, of \$645.6 million. Organic cost of sales increased primarily due to the higher volumes in the above programs partially offset by the prior year forward loss provisions from the adoption of ASU 2017-07 of \$87.2 million. Organic gross margin for the fiscal year ended March 31, 2020, was 20.8% compared with 17.6% for the fiscal year ended March 31, 2019. The gross margin for the fiscal year ended March 31, 2020, increased compared with the prior year period due to the nonrecurring forward loss provisions from the adoption of ASU 2017-07.

Gross margin included net unfavorable cumulative catch-up adjustments on long-term contracts of \$22.8 million. The unfavorable cumulative catch-up adjustments to operating income included gross favorable adjustments of \$43.4 million and gross unfavorable adjustments of \$66.2 million. Gross margins for fiscal 2019 included net unfavorable cumulative catch-up adjustments of \$68.7 million.

Segment operating income increased by \$134.5 million, or 276.3%, to \$183.2 million for the fiscal year ended March 31, 2020, from \$48.7 million for the fiscal year ended March 31, 2019. Organic segment operating income increased by \$45.1 million, or 31.7%, primarily due to the increased margins above as well as decreases in administrative compensation cost of \$13.7 million and research and development of \$8.5 million, were partially offset by a \$66.1 million goodwill impairment charge under Systems & Support. The fiscal 2019 divestitures and fiscal 2020 divestitures contributed \$89.4 million in increased operating income in the current year primarily due to incurring operating losses of the fiscal year ended March 31, 2019.

Corporate operations incurred expenses of \$125.3 million for the fiscal year ended March 31, 2020, as compared with \$323.4 million for the fiscal year ended March 31, 2019. The corporate expenses included decreased loss on sale of assets and businesses of \$168.3 million, decreased compensation cost of \$12.3 million, with additional benefit from the legal judgment gain of \$9.3 million.

Interest expense and other increased by \$7.5 million, or 6.6%, to \$122.1 million for the fiscal year ended March 31, 2020, compared with \$114.6 million for the fiscal year ended March 31, 2019, due to higher interest rates and relative debt levels.

Non-service defined benefit income decreased by \$20.2 million, or 32.5%, to \$41.9 million for the fiscal year ended March 31, 2020, compared with \$62.1 million for the fiscal year ended March 31, 2019. The decrease was primarily due to additional expense in the current year from pension settlements, special termination benefits, and curtailment losses of \$63.8 million partially offset by a gain from curtailment of other post-employment benefits of \$49.5 million, as well as changes in actuarial assumptions and experience which reduced income for fiscal year 2020 by \$9.0 million.

The income tax expense was \$5.8 million for the fiscal year ended March 31, 2020, reflecting an effective tax rate of (26.0)%. During the fiscal year ended March 31, 2020, the Company adjusted the valuation allowance against the consolidated net deferred tax asset by \$36.9 million primarily due to an increase in the net operating loss and changes to temporary differences related to pension and other postretirement benefit plans. As of March 31, 2020, management determined that it was necessary to maintain a valuation allowance against principally all of its net deferred tax assets.

Fiscal year ended March 31, 2019, compared with fiscal year ended March 31, 2018

	Year Ended March 31,	
	2019	2018
	(in thousands)	
Net sales	\$ 3,364,930	\$ 3,198,951
Segment operating income (loss)	\$ 48,687	\$ (337,061)
Corporate expenses	(323,366)	(128,579)
Total operating loss	(274,679)	(465,640)
Interest expense and other	114,619	99,442
Non-service defined benefit income	(62,105)	(103,234)
Income tax benefit	(5,426)	(36,457)
Net loss	\$ (321,767)	\$ (425,391)

Net sales increased by \$166.0 million, or 5.2%, to \$3.36 billion for the fiscal year ended March 31, 2019, from \$3.20 billion for the fiscal year ended March 31, 2018. Net sales increases included the production ramp on Global 7500 of \$232.5 million prior to transition. Organic sales adjusted for inter-segment sales increased \$34.9 million, or 1.3%. The fiscal 2018 divestitures and fiscal 2019 divestitures, excluding the Global 7500 transition contributed \$101.4 million to the net sales decrease as compared with the prior fiscal year. Organic sales increased primarily due to the rate increases on key commercial programs and higher volumes on military programs in Systems & Support as well as increased demand for structural component repair offset by decreased business jet sales from reduced scope of the G650 wing.

Cost of sales increased by \$317.4 million, or 12.2%, to \$2.92 billion for the fiscal year ended March 31, 2019, from \$2.61 billion for the fiscal year ended March 31, 2018. Net sales increases from the production ramp on Global 7500 contributed \$343.9 million increase in cost of sales prior to transition, including \$60.4 million in forward loss charges. Organic cost of sales adjusted for inter-segment sales increased \$121.3 million or 4.6% and included additional forward loss provisions from the adoption of ASU 2017-07

of \$87.2 million, as well as \$29.1 million on the G280 wing program. The fiscal 2018 divestitures and fiscal 2019 divestitures, excluding the Global 7500 transition contributed \$94.8 million to the cost of sales variance compared with the prior fiscal year. Organic gross margin for the fiscal year ended March 31, 2019, was 17.2% compared with 20.8% for the fiscal year ended March 31, 2018. The gross margin for the fiscal year ended March 31, 2019, decreased compared with the comparable prior year period due to the additional forward loss provisions noted above.

Gross margin included net unfavorable cumulative catch-up adjustments on long-term contracts of \$68.7 million. The favorable cumulative catch-up adjustments to operating income included gross favorable adjustments of \$46.1 million and gross unfavorable adjustments of \$114.8 million. Additionally, the adoption of ASU 2017-07 resulted in a change in estimates due to a change in accounting principles of \$87.2 million. Gross margins for fiscal 2018 included net favorable cumulative catch-up adjustments of \$19.7 million.

Segment operating income increased by \$385.7 million, or 114.4%, to an operating income of \$48.7 million for the fiscal year ended March 31, 2019, from \$337.1 million of operating loss for the fiscal year ended March 31, 2018. Organic operating income increased due to a prior year goodwill impairment charge of \$535.2 million. The fiscal 2018 divestitures and fiscal 2019 divestitures contributed \$16.7 million to an operating income decrease compared with the prior fiscal year.

Corporate operations incurred expenses of \$323.4 million for the fiscal year ended March 31, 2019, as compared with \$128.6 million for the fiscal year ended March 31, 2018. The corporate expenses included increased loss on divestitures of \$204.6 million, partially offset by \$13.0 million in decreased restructuring expenses.

Interest expense and other increased by \$15.2 million, or 15.3%, to \$114.6 million for the fiscal year ended March 31, 2019, compared with \$99.4 million for the fiscal year ended March 31, 2018, due to higher interest rates and relative debt levels and the favorable net change in foreign exchange rate gain/loss of approximately \$6.8 million compared with the prior year period.

Non-service defined benefit income decreased by \$41.1 million, or 39.8%, to \$62.1 million for the fiscal year ended March 31, 2019, compared with \$103.2 million for the fiscal year ended March 31, 2018. The decrease was primarily due to nonrecurring income recognized in fiscal year 2018 from a curtailment of other post-employment benefits of \$26.3 million and changes in actuarial assumptions and experience which reduced income for fiscal year 2019 by \$6.0 million.

The income tax benefit was \$5.4 million for the fiscal year ended March 31, 2019, reflecting an effective tax rate of 1.7%. During the fiscal year ended March 31, 2019, the Company adjusted the valuation allowance against the consolidated net deferred tax asset by \$252,243 primarily due to an increase in the net operating loss and changes to temporary differences related to ASC 606. As of March 31, 2019, management determined that it was necessary to maintain a valuation allowance against principally all of its net deferred tax assets.

Business Segment Performance

We report our financial performance based on the following two reportable segments: Systems & Support and Aerospace Structures. The Company's Chief Operating Decision Maker ("CODM") utilizes Adjusted EBITDAP as a primary measure of profitability to evaluate performance of its segments and allocate resources.

The results of operations among our reportable segments vary due to differences in competitors, customers, extent of proprietary deliverables and performance. For example, Systems & Support, which generally includes proprietary products and/or arrangements where we become the primary source or one of a few primary sources to our customers, our unique manufacturing capabilities command a higher margin. Also, OEMs are increasingly focusing on assembly activities while outsourcing more manufacturing and repair to third parties, and as a result, are less of a competitive force than in previous years. This compares to Aerospace Structures, which generally includes long-term sole-source or preferred supplier contracts and the success of these programs provides a strong foundation for our business and positions us well for future growth on new programs and new derivatives.

Refer to Item 1 for further details regarding the operations and capabilities of each of our reportable segments.

We currently generate a majority of our revenue from clients in the commercial aerospace industry, the military, the business jet industry and the regional airline industry. Our growth and financial results are largely dependent on continued demand for our products and services from clients in these industries. If any of these industries experiences a downturn, our clients in these sectors may conduct less business with us. The following table summarizes our net sales by end market by business segment. The loss of one or more of our major customers or an economic downturn in the commercial airline or the military and defense markets could have a material adverse effect on our business.

	Year Ended March 31,		
	2020	2019	2018
Systems & Support			
Commercial aerospace	26.5%	22.6%	23.8%
Military	15.0	12.2	11.5
Business Jets	2.3	1.9	1.7
Regional	1.5	1.4	1.5
Non-aviation	1.3	0.8	0.8
Total Integrated Systems net sales	46.6%	38.9%	39.3%
Aerospace Structures			
Commercial aerospace	30.3%	30.4%	33.9%
Military	4.0	7.1	8.6
Business Jets	16.0	21.7	16.8
Regional	3.1	1.1	0.7
Non-aviation	0.0	0.8	0.7
Total Aerospace Structures net sales	53.4%	61.1%	60.7%
Total Consolidated net sales	100.0%	100.0%	100.0%

We continue to experience a higher proportion of our sales mix in the commercial aerospace end market across both of our segments due to the 737, 767/Tanker, 777, 787, A320, A321, and G650 programs. Systems & Support has experienced an increase in its military end market primarily from volume on military rotorcraft, and Aerospace Structures has experienced a decrease in its military end market due to reduced volume in the C-130 program and certain military rotorcraft.

Business Segment Performance—Fiscal year ended March 31, 2020, compared with fiscal year ended March 31, 2019

	Year Ended March 31,		% Change	% of Total Sales	
	2020	2019		2020	2019
(in thousands)					
NET SALES					
Systems & Support	\$ 1,357,564	\$ 1,325,011	2.5%	46.8%	39.4%
Aerospace Structures	1,555,887	2,062,404	(24.6)%	53.7%	61.3%
Elimination of inter-segment sales	(13,334)	(22,485)	40.7%	(0.5)%	(0.7)%
Total net sales	\$ 2,900,117	\$ 3,364,930	(13.8)%	100.0%	100.0%

	Year Ended March 31,		% Change	% of Segment Sales	
	2020	2019		2020	2019
(in thousands)					
SEGMENT OPERATING (LOSS) INCOME					
Systems & Support	\$ 141,341	\$ 201,094	(29.7)%	10.4%	15.2%
Aerospace Structures	41,864	(152,407)	127.5%	2.7%	(7.4)%
Corporate	(125,298)	(323,366)	61.3%	n/a	n/a
Total segment operating (loss) income	\$ 57,907	\$ (274,679)	121.1%	2.0%	(8.2)%

	Year Ended March 31,		% Change	% of Segment Sales	
	2020	2019		2020	2019
(in thousands)					
Adjusted EBITDAP					
Systems & Support	\$ 205,352	\$ 202,346	1.5%	15.5%	15.7%
Aerospace Structures	100,432	13,072	668.3%	6.6%	0.6%
Corporate	(64,144)	(84,965)	24.5%	n/a	n/a
	\$ 241,640	\$ 130,453	85.2%	8.6%	4.0%

Systems & Support: Systems & Support net sales increased by \$32.6 million, or 2.5%, to \$1.36 billion for the fiscal year ended March 31, 2020, from \$1.33 billion for the fiscal year ended March 31, 2019. Organic sales increased by \$63.3 million, or 4.9%,

offset by declines of \$30.8 million from the fiscal 2019 divestitures within Systems & Support. Organic sales increased due to increased volumes on engine components, Airbus commercial programs, aftermarket demand for military rotorcraft components, and aftermarket spare part sales and accessory component repairs. These increases were partially offset by decreased volumes on 737.

Systems & Support cost of sales increased by \$8.7 million, or 0.9%, to \$960.5 million for the fiscal year ended March 31, 2020, from \$951.8 million for the fiscal year ended March 31, 2019. Organic cost of sales increased by \$33.1 million, or 3.6%, offset by declines of \$24.4 million from the fiscal 2019 divestitures within Systems & Support. Organic gross margin for the fiscal year ended March 31, 2020, was 29.3% compared with 28.3% for the fiscal year ended March 31, 2019. Organic cost of sales increased due to the sales increase noted above and sales mix, partially offset by a reduction of cost of sales as a result of a \$5.3 million reduction in acquired contract reserves, which also drove the increased gross margin for the fiscal year ended March 31, 2020.

Systems & Support operating income decreased by \$59.8 million, or 29.7%, to \$141.3 million for the fiscal year ended March 31, 2020, from \$201.1 million for the fiscal year ended March 31, 2019. Organic operating income decreased by \$57.2 million, or 28.8% primarily due to the goodwill impairment charge of \$66.1 million and increased restructuring costs of \$8.3 million, partially offset by decreased research and development costs of \$5.9 million and the increased gross margin described above. The fiscal 2019 divestitures resulted in \$2.6 million in decreased operating income in the current year primarily due to operating income earned in the fiscal year ended March 31, 2019.

Systems & Support operating income as a percentage of segment sales decreased to 10.4% for the fiscal year ended March 31, 2020, as compared with 15.2% for the fiscal year ended March 31, 2019, due to the factors described above. These same factors contributed to the decrease in Adjusted EBITDAP margin year over year.

Aerospace Structures: Aerospace Structures net sales decreased by \$506.5 million, or 24.6%, to \$1.56 billion for the fiscal year ended March 31, 2020, from \$2.06 billion for the fiscal year ended March 31, 2019. Organic net sales increased by \$68.0 million, offset by declines of \$574.5 million from the fiscal 2019 and fiscal 2020 divestitures within Aerospace Structures. Organic net sales increased due to increased volumes for the G280, G550, 767, and M100 programs, as well as increased volumes and pricing related to the E-2 Jets and 787 programs. These increases were partially offset by decreased volumes on 737.

Aerospace Structures cost of sales decreased by \$637.2 million, or 31.9%, to \$1.36 billion for the fiscal year ended March 31, 2020, from \$2.00 billion for the fiscal year ended March 31, 2019. Organic cost of sales decreased by \$16.0 million, with an additional reduction in cost of sales of \$621.3 million from the fiscal 2019 and fiscal 2020 divestitures within Aerospace Structures. Organic gross margin for the fiscal year ended March 31, 2020, was 13.0% compared with 7.7% for the fiscal year ended March 31, 2019. The decrease in organic cost of sales is due to the nonrecurring forward loss provisions from the adoption of ASU 2017-07 in the year ended March 31, 2019, of \$87.2 million and a reduction in unfavorable cumulative catch-up adjustments of \$45.8 million partially offset by increases related to the increased net sales above. The gross margin included net unfavorable cumulative catch-up adjustments of \$22.9 million due in large part to the estimated effects of COVID-19. The net unfavorable cumulative catch-up adjustments included gross favorable adjustments of \$43.3 million and gross unfavorable adjustments of \$66.2 million. The net unfavorable cumulative catch-up adjustment for the fiscal year ended March 31, 2019, was \$68.7 million.

Aerospace Structures operating income increased by \$194.3 million, or 127.5%, to \$41.9 million for the fiscal year ended March 31, 2020, from an operating loss of \$152.4 million for the fiscal year ended March 31, 2019. Organic operating income increased by \$102.3 million, or 182.0%, with further increases resulting from the fiscal 2019 and fiscal 2020 divestitures within Aerospace Structures of \$92.0 million. The increased organic operating income for the fiscal year ended March 31, 2020, was primarily due to the increased gross margin discussed above as well as lower administrative compensation due to decreased severance and headcount of approximately \$18.8 million and the approximately \$10.0 million gain recognized as a result of the transfer of the E-2 Jets program to ASTK. The increase in Adjusted EBITDAP year over year is due to the same factors that increased operating income.

Aerospace Structures operating income as a percentage of segment sales increased to 2.7% for the fiscal year ended March 31, 2020, as compared with (7.4)% for the fiscal year ended March 31, 2019, due to the increase in operating income as noted above. These same factors as noted above for the Adjusted EBITDAP contributed to the increased Adjusted EBITDAP margin year over year.

Business Segment Performance—Fiscal year ended March 31, 2019, compared with fiscal year ended March 31, 2018

	Year Ended March 31,		% Change	% of Total Sales	
	2019	2018		2019	2018
	(in thousands)				
NET SALES					
Systems & Support	\$1,325,011	\$1,267,508	4.5%	39.4%	39.6%
Aerospace Structures	2,062,404	1,954,729	5.5%	61.3%	61.1%
Elimination of inter-segment sales	(22,485)	(23,286)	3.4%	(0.7)%	(0.7)%
Total net sales	\$3,364,930	\$3,198,951	5.2%	100.0%	100.0%

	Year Ended March 31,		% Change	% of Segment Sales	
	2019	2018		2019	2018
(in thousands)					
SEGMENT OPERATING INCOME (LOSS)					
Systems & Support	\$ 201,094	\$ 231,103	(13.0)%	15.2%	18.2%
Aerospace Structures	(152,407)	(568,164)	73.2%	(7.4)%	(29.1)%
Corporate	(323,366)	(128,579)	(151.5)%	n/a	n/a
Total segment operating income (loss)	\$ (274,679)	\$ (465,640)	41.0%	(8.2)%	(14.6)%

	Year Ended March 31,		% Change	% of Segment Sales	
	2019	2018		2019	2018
(in thousands)					
Adjusted EBITDAP					
Systems & Support	\$ 202,346	\$ 235,540	(14.1)%	15.7%	19.2%
Aerospace Structures	13,072	(6,006)	317.7%	0.6%	(0.3)%
Corporate	(84,965)	(95,986)	11.5%	n/a	n/a
	\$ 130,453	\$ 133,548	(2.3)%	4.0%	4.3%

Systems & Support: Systems & Support net sales increased by \$57.5 million, or 4.5%, to \$1.33 billion for the fiscal year ended March 31, 2019, from \$1.27 billion for the fiscal year ended March 31, 2018. Organic sales increased by \$87.9 million, or 7.3%. The divestitures of NAAS, RPL, Embee, Engines and APU (“TSS divestitures”) contributed (\$30.4 million) to the net sales variance. Organic sales increased primarily due to rate increases on key commercial programs, higher volumes on certain military programs and increased demand in structural component repairs.

Systems & Support cost of sales increased by \$86.3 million, or 10.0%, to \$949.9 million for the fiscal year ended March 31, 2019, from \$863.6 million for the fiscal year ended March 31, 2018. Organic cost of sales increased by \$107.4 million, or 13.1%, while divestitures contributed (\$21.1 million) reduction to cost of sales. Organic gross margin for the fiscal year ended March 31, 2019, was 28.5% compared with 32.2% for the fiscal year ended March 31, 2018. The decrease in gross margin for the fiscal year ended March 31, 2019, is the result of sales mix, the higher costs incurred to drive future operational improvements noted above, increased costs on a development program, learning curves on new repair programs and a favorable settlement of customer assertions in the comparable prior period.

Systems & Support operating income decreased by \$30.0 million, or 13.0%, to \$201.1 million for the fiscal year ended March 31, 2019, from \$231.1 million for the fiscal year ended March 31, 2018. Organic operating income decreased (\$26.6 million), or (11.8)%, while divestitures contributed (\$3.4 million) to operating income in the prior year period.

Organic operating income decreased due to the decreased gross margin noted above and increased restructuring expenses of \$5.3 million. These same factors contributed to the decrease in Adjusted EBITDAP year over year.

Systems & Support operating income as a percentage of segment sales decreased to 15.2% for the fiscal year ended March 31, 2019, as compared with 18.2% for the fiscal year ended March 31, 2018, due to the gross margin increases. These same factors contributed to the decrease in Adjusted EBITDAP margin year over year.

Aerospace Structures: Aerospace Structures net sales increased by \$107.7 million, or 5.5%, to \$2.06 billion for the fiscal year ended March 31, 2019, from \$1.95 billion for the fiscal year ended March 31, 2018. Net sales increases included the production ramp on Global 7500 of \$232.5 million prior to transition. Organic net sales decreased \$54.8 million due to declines in business jet, primarily on our change in scope on the G650 program. The fiscal 2019 Aerospace Structures divestitures, excluding the Global 7500 transition contributed \$71.1 million to the net sales variance.

Aerospace Structures cost of sales increased by \$232.0 million, or 13.1%, to \$2.00 billion for the fiscal year ended March 31, 2019, from \$1.77 billion for the fiscal year ended March 31, 2018. The cost of sales increase was driven by the increased sales and included additional forward loss provisions from the adoption of ASU 2017-07 of \$87.2 million, as well as from the Bombardier Global 7500 program of \$60.4 million prior to transition and \$29.1 million on the G280 wing program.

Gross margin for the fiscal year ended March 31, 2019, was 3.1% compared with 9.7% for the fiscal year ended March 31, 2018. The decreased gross margin is due to additional forward loss charges noted above. In addition to the forward loss provision from the adoption of ASU 2017-07 noted above, the gross margin included net unfavorable cumulative catch-up adjustments of \$68.7 million. The net unfavorable cumulative catch-up adjustments included gross favorable adjustments of \$46.1 million and gross unfavorable adjustments of \$114.8 million. The net unfavorable cumulative catch-up adjustment for the fiscal year ended March 31, 2016, was \$19.7 million.

Aerospace Structures operating loss decreased by \$415.8 million, or 73.2%, to \$152.4 million for the fiscal year ended March 31, 2019, from a loss of \$568.2 million for the fiscal year ended March 31, 2018. The decreased operating loss for the fiscal year ended March 31, 2019, is due to the aforementioned goodwill impairment charge of \$535.2 million in the prior year period, partially offset by the additional forward loss charges noted above. The Adjusted EBITDAP is adjusted for the adoption of ASU 2017-07 and increased for the fiscal year ended March 31, 2019, due to the increased sales.

Aerospace Structures operating loss as a percentage of segment sales improved to 7.4% for the fiscal year ended March 31, 2019, as compared with 29.1% for the fiscal year ended March 31, 2018, due to the goodwill impairment charge in the prior year period discussed above. The Adjusted EBITDAP margin improvement was also affected by the increased sales noted above.

Liquidity and Capital Resources

For the fiscal year ended March 31, 2020, we had a net cash inflow of \$96.7 million from operating activities, an increase of \$271.1 million, compared with a net cash outflow of \$174.4 million for the fiscal year ended March 31, 2019. We liquidated approximately \$89.0 million in prior period customer advances against current period deliveries. During the fiscal year ended March 31, 2019, we invested in inventory to support ramping and existing programs.

In March 2020, in response to anticipated headwinds resulting from the impact of COVID-19 on the aerospace industry, including the impact on global air travel, we implemented certain cost reduction actions to improve our financial health, align capacity with expected demand, and ensure our long-term competitiveness. This has included the reduction of overhead and indirect staff and temporary workers and the selective implementation of furloughs across our business to reduce costs while delivering on customer commitments. When combined with reductions in travel, corporate events, and other expenses, Triumph expects annual savings to operating cash flows of approximately \$120.0 million beginning in fiscal 2021, although there can be no assurance that we will achieve such synergy in the anticipated amounts and timeline. Unrelated to COVID-19, the Company currently expects certain material cash outflows related to the completion of certain previously announced consolidation and shutdown costs with sunseting programs within Aerospace Structures.

Cash flows provided by investing activities for the fiscal year ended March 31, 2020, decreased \$193.2 million from the fiscal year ended March 31, 2019. Cash flows provided by investing activities for the fiscal year ended March 31, 2020, included cash from the fiscal 2020 sales of assets and businesses of \$47.2 million offset by capital expenditures of \$39.8 million. Cash flows used in investing activities for the fiscal year ended March 31, 2019, included cash from the fiscal 2019 divestitures of \$247.6 million offset by capital expenditures of \$47.1 million.

Cash flows provided by financing activities for the fiscal year ended March 31, 2020, were \$293.7 million, compared with cash flows provided by financing activities for the fiscal year ended March 31, 2019, of \$32.5 million. Cash flows provided by financing activities for the fiscal year ended March 31, 2020, included the issuance of our Senior Secured Notes due 2024 of \$525.0 million, offset by repayment of the Senior Notes due 2021 of \$375.0 million, and payment of financing fees of approximately \$17.7 million. Additionally, the Company drew on its Credit Facility (as defined below), bringing the outstanding balance as of March 31, 2020, to \$400.0 million. This was done as part of a comprehensive precautionary approach to increase the Company's cash position and maximize its financial flexibility, in light of the current volatility in the global markets resulting from the COVID-19 pandemic. We have since repaid approximately \$200.0 million of the borrowings, and cash continues to be used to repay the borrowings through an automated cash sweep mechanism implemented with our lenders. Cash flows provided by financing activities for the fiscal year ended March 31, 2019, included additional borrowings to fund operations.

As of March 31, 2020, we had \$485.5 million of cash on hand and \$70.3 million was available under the Company's existing credit agreement (the "Credit Facility"). On March 31, 2020, approximately \$22.3 million in letters of credit were outstanding under the Credit Facility, all of which were accruing interest at LIBOR plus applicable basis points totaling approximately 3.50% per annum. Amounts repaid under the Credit Facility may be reborrowed.

We are taking a number of actions to improve liquidity. In March 2020, we suspended the declaration and/or payment of dividends until further notice. We have furloughed certain employees and recently announced reductions in force which we have implemented in the first quarter of fiscal 2021. We are reducing discretionary spending as well as reducing or deferring research and development and capital expenditures. We are also working with our customers and supply chain to accelerate receipts and conserve cash. We are also deferring certain employer payroll tax payments pursuant to the Coronavirus Aid, Relief, and Economic Security (CARES) Act. We expect to take advantage of additional programs if passed by the federal government.

We believe, based on an assessment of current market conditions, that cash flows from operations and borrowings under the Amended Credit Agreement will be sufficient to meet anticipated cash requirements for our current operations for at least the next 12 months. We are evaluating additional funding options from the U.S. government via the U.S. Treasury and various Federal Reserve programs. We are also considering various divestiture opportunities that should provide liquidity. However, the COVID-19 crisis is constraining the credit and capital markets and our ability to access credit and capital markets may be reduced. In the event that the overall aviation market experiences delayed recoveries and divestiture opportunities do not occur, the availability under the Amended Credit Agreement may change or be fully utilized and additional funding sources may be needed. There can be no assurance that such funding sources will be available to us on terms favorable to us, if at all. We may also seek transactions to extend the maturity of our indebtedness, reduce leverage, decrease interest expense or obtain covenant flexibility. Such transactions could include one or more repurchases or exchanges of our outstanding indebtedness. These transactions could increase our total amount of secured indebtedness or be dilutive to stockholders. There can be no assurances if or when we will consummate any such transactions or the timing thereof.

In December 2019, the Company amended its receivable securitization facility (the "Securitization Facility") decreasing the purchase limit from \$125.0 million to \$75.0 million and extended the term through December 2022. At March 31, 2020, there was \$75.0 million outstanding under our Securitization Facility. Interest rates on the Securitization Facility are based on prevailing

market rates for short-term commercial paper, plus a program fee and a commitment fee. The Securitization Facility's net availability is not affected by the borrowing capacity of the Amended Credit Agreement.

The 5.25% Senior Notes due June 1, 2022 (the "2022 Notes"), the 6.250% Senior Secured Notes due September 15, 2024 (the "2024 Notes"), and the 7.750% Senior Notes due August 15, 2025 (the "2025 Notes") (collectively, the "Senior Notes") are the Company's senior unsecured obligations and rank equally in right of payment with all of its other existing and future senior unsecured indebtedness and senior in right of payment to all of its existing and future subordinated indebtedness. The Senior Notes are guaranteed on a full, joint and several basis by each of the Guarantor Subsidiaries.

Pursuant to the documentation governing the Senior Notes, the Company may redeem some or all of its Senior Notes prior to their stated maturities, subject to certain limitations set forth in the indenture governing the applicable Senior Notes and, in certain cases, subject to significant prepayment premiums; however, the Amended Credit Agreement restricts us from doing so. The Company is obligated to offer to repurchase the Senior Notes at specified prices as a result of certain change-of-control events and a sale of all or substantially all of its assets. These restrictions and prohibitions are subject to certain qualifications and exceptions.

The indentures governing the Senior Notes, as well as the Amended Credit Agreement and Securitization Facility, contain covenants and restrictions that, among other things, limit the Company's ability and the ability of any of the Guarantor Subsidiaries to (i) grant liens on its assets; (ii) make dividend payments, other distributions or other restricted payments; (iii) incur restrictions on the ability of the Guarantor Subsidiaries to pay dividends or make other payments or investments; (iv) enter into sale and leaseback transactions; (v) merge, consolidate, transfer or dispose of substantially all of their assets; (vi) incur additional indebtedness; (vii) use the proceeds from sales of assets, including capital stock of restricted subsidiaries (in the case of the Senior Notes); and (viii) enter into transactions with affiliates. The Company is currently in compliance with all financial covenants under its debt documents.

For further information on the Company's long-term debt, see Note 10.

On May 22, 2020, the Company and its subsidiary co-borrowers and guarantors entered into an Twelfth Amendment to the Credit Agreement with the Administrative Agent and the Lenders party thereto. Among other things, the Twelfth Amendment (i) limits the amount of cash in the United States the Company can hold on its balance sheet to \$50.0 million, (ii) authorizes the sale of any Specified TAS Business Unit (as defined in the Amended Credit Agreement); (iii) provides for a reserve against the availability of up to 75% of the proceeds of Specified Asset Sales; and (iv) modifies certain financial covenants and other terms over the quarterly periods ending June 2020 through March 2022. Refer to Item 1 – Recent Developments for further details regarding the Twelfth Amendment.

On September 23, 2019, the Company issued \$525.0 million principal amount of 6.250% Senior Secured Notes due September 15, 2024. The 2024 Notes are guaranteed on a full, senior secured, joint and several basis by each of the Company's domestic restricted subsidiaries that is a borrower under the Company's Credit Facility or that guarantees any of the Company's debt or that of any of the Company's domestic restricted subsidiaries under the Company's Credit Facility and in the future by any of the Company's domestic restricted subsidiaries that are borrowers under any credit facility or that guarantee any debt of the Company or any of its domestic restricted subsidiaries incurred under any credit facility. Under certain circumstances, the guarantees may be released without action by, or the consent of, the holders of the 2024 Notes.

The 2022 Notes and 2025 Notes are the Company's senior unsecured obligations and rank equally in right of payment with all of its other existing and future senior unsecured indebtedness and senior in right of payment to all of its existing and future subordinated indebtedness. The 2021 Notes and 2025 Notes are guaranteed on a full, joint and several basis by each of the Company's existing and future domestic restricted subsidiaries that is a borrower under any of the Company's credit facilities or that guarantees any of the Company's debt or that of any of its restricted subsidiaries, in each case incurred under any of the Company's credit facilities.

The only consolidated subsidiaries of the Company that are not guarantors of the 2022 Notes, the 2024 Notes and the 2025 Notes (the "Non-Guarantor Subsidiaries") are: (i) the receivables securitization special purpose entity, and (ii) the foreign operating subsidiaries.

The 2024 Notes and the guarantees are secured, subject to permitted liens, by second-priority liens on all assets of the Company and its subsidiary guarantors (the "Collateral") that secure all of the indebtedness under the Company's Credit Facility and certain hedging and cash management obligations. The 2024 Notes and the guarantees are not secured by the assets of Non-Guarantor Subsidiaries. Some of the Company's assets are excluded from the Collateral, including the Company's real property assets.

Parent and Guarantor Summarized Financial Information	As of and for the fiscal year ended March 31, 2020	
Current assets	\$	1,177,461
Noncurrent assets		1,248,525
Current liabilities		920,414
Noncurrent liabilities		2,514,760
Due to/from Non-Guarantor Subsidiaries		14,624
Net sales		2,572,806
Gross profit		520,096
Loss from continuing operations		(50,842)
Net loss		(54,048)

For the fiscal year ended March 31, 2019, we had a net cash outflow of \$174.4 million from operating activities, a decrease of \$114.5 million, compared with a net cash outflow of \$288.9 million for the fiscal year ended March 31, 2018. We invested in inventory and contract assets for new programs which impacts our cash flows from operating activities. Cash flows used on new programs included approximately \$230.0 million and \$16.0 million pertaining to the Bombardier Global 7500 program, through the date of transition in February 2019, and the Embraer E-Jet, respectively. The Company received approximately \$125.0 million in customer advances. In addition, the Company liquidated approximately \$177.0 million of prior period advances against current period deliveries. The Company also received approximately \$20 million to settle an indemnification receivable initially recognized related to a specific matter that we acquired from the seller.

Cash flows provided by investing activities for the fiscal year ended March 31, 2019, increased \$162.3 million from the fiscal year ended March 31, 2018. Cash flows provided by investing activities for the fiscal year ended March 31, 2019, included cash from the fiscal 2019 divestitures of \$247.6 million offset by capital expenditures of \$47.1 million. Cash flows used in investing activities for the fiscal year ended March 31, 2018, included cash from the fiscal 2018 divestitures of \$83.1 million, offset by capital expenditures of \$42.1 million.

Our expected future cash flows for the next five years for long-term debt, leases and other obligations are as follows:

Contractual Obligations	Payments Due by Period				
	Total	Less than 1 Year	1 - 3 Years	4 - 5 Years	After 5 Years
			(in thousands)		
Debt principal	\$ 1,823,933	\$ 7,336	\$ 381,611	\$ 927,216	\$ 507,770
Debt interest ⁽¹⁾	469,489	110,386	191,996	147,009	20,098
Operating leases	84,983	16,843	25,595	15,353	27,192
Purchase obligations	1,374,122	950,626	390,305	15,128	18,064
Total	3,752,527	1,085,191	989,506	1,104,706	573,124

(1) Includes fixed-rate interest only.

The above table excludes unrecognized tax benefits of \$19.1 million as of March 31, 2020, since we cannot predict with reasonable certainty the timing of cash settlements with the respective taxing authorities.

In addition to the financial obligations detailed in the table above, we also had obligations related to our benefit plans at March 31, 2020, as detailed in the following table. Our other postretirement benefits are not required to be funded in advance, so benefit payments are paid as they are incurred. Our expected net contributions and payments are included in the table below:

	Pension Benefits		Other Postretirement Benefits	
	(in thousands)			
Projected benefit obligation at March 31, 2020	\$	2,254,985	\$	7,150
Plan assets at March 31, 2020		1,598,045		—
Projected contributions by fiscal year				
2021		—		4,824
2022		81,800		813
2023		90,600		182
2024		85,800		171
2025		70,100		162
Total 2021 - 2025	\$	328,300	\$	6,152

Current plan documents reserve our right to amend or terminate the plans at any time, subject to applicable collective bargaining requirements for represented employees.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Critical accounting policies are those accounting policies that can have a significant impact on the presentation of our financial condition and results of operations, and that require the use of complex and subjective estimates based upon past experience and management's judgment. Because of the uncertainty inherent in such estimates, actual results may differ from these estimates. Below are those policies applied in preparing our consolidated financial statements that management believes are the most dependent on the application of estimates and assumptions. For additional accounting policies, see Note 2 of "Notes to Consolidated Financial Statements."

Revenue Recognition and Contract Balances

The Company's accounting policy regarding revenue recognition is disclosed in Note 2 to the consolidated financial statements. As described in Note 2, for certain contracts and performance obligations, the Company is required to exercise judgment when developing assumptions regarding expected total costs to fulfill performance obligations, variable consideration, and the standalone selling price of a performance obligation. These assumptions are most significant within the Company's Aerospace Structures business segment because the size and long-term nature of its contracts with customers. Specifically, assumptions regarding the total costs require significant judgment with regard to materials, labor, and overhead costs that are affected by the Company's ability to achieve technical requirements and schedule requirements, as well as the Company's estimation of internal and subcontractor performance projections, anticipated volume, asset utilization, labor agreements, and inflation trends. The Company continually reviews and update its assumptions based on market trends and experience. Material changes in assumptions may result in positive or negative cumulative catch-up adjustments related to revenues previously recognized or, in some cases, forward loss contract reserves.

Goodwill and Intangible Assets

Refer to Note 2 and Note 7 for details on our goodwill and intangible asset accounting policies. We test goodwill for impairment on an annual basis during the fourth quarter or whenever events or circumstances change between annual tests that could more likely than not reduce the fair value of a reporting unit below its carrying amount. When such events or circumstances are identified, the Company performs a quantitative test to assess whether goodwill is impaired.

When applying the quantitative approach to testing goodwill for impairment, we determine fair value for reporting units using a combination of the income approach and the market approach, applying appropriate weighting based on events and circumstances existing at the valuation date.

Valuations using the market approach are derived from metrics of publicly traded companies. We consider risk profiles, size, geography, and diversity of products and services when selecting comparable businesses in the markets in which our reporting units operate. The market approach is only used when there are publicly traded companies that have the characteristics similar to our businesses.

Under the income approach, fair value is determined based on the present value of estimated future cash flows, discounted at an appropriate risk-adjusted rate. We use our internal forecasts to estimate future cash flows and include an estimate of long-term future growth rates based on our most recent views of the long-term outlook for each business. Actual results may differ from those assumed in our forecasts. The discount rate applied to the cash flows is based upon a market-derived weighted average cost of capital ("WACC") that takes into account the required rate of return for both debt and equity investors. We use discount rates that are commensurate with the risks and uncertainty inherent in the respective businesses and in our internally developed forecasts. Discount rates used in our annual reporting unit valuations ranged from 14.5% to 16.0%.

Estimating the fair value of reporting units requires the exercise of judgment to develop various assumptions used in the valuation approaches. The most significant area of judgment pertains to the development of our internal forecasts regarding future operating results. Internal forecasts and other key assumptions used to estimate the fair value of reporting units are based on judgments that consider actual operating results, market observable pricing multiples of similar businesses and comparable transactions, possible control premiums, determining the appropriate discount rate and long-term growth rate assumptions, and, if multiple approaches are being used, determining the appropriate weighting applied to each approach. It is reasonably possible that the judgments and estimates described above could change in future periods.

We review identified intangible assets with definite lives and subject to amortization for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable. Determining whether an impairment loss has occurred requires the use of our internal forecast to estimate future cash flows and the useful life over which these cash flows will occur.

As disclosed in Note 7, as of March 31, 2020, Aerospace Structures had goodwill of \$1.2 billion which was fully impaired during fiscal year 2018. In the year ended March 31, 2020, Systems & Support recognized a goodwill impairment charge of \$66.1 million.

Postretirement Plans

Certain of our current and former employees participate in defined benefit pension and other postretirement defined benefit plans (collectively, referred to as “defined benefit plans”) in the United States, Canada, and the United Kingdom, which are sponsored by the Company. The determination of projected benefit obligations and the recognition of expenses related to defined benefit pension plans are dependent on various assumptions. The most significant of these assumptions are the discount rates and the long-term expected rates of return on plan assets. Actual results that differ from our assumptions are accumulated and amortized for each plan to the extent required over the estimated future life expectancy of plan participants.

Significant Assumptions

We develop assumptions using relevant experience, in conjunction with market-related data for each plan. Assumptions are reviewed annually with third party consultants and adjusted as appropriate. Refer to Note 15 for details regarding the assumptions used to estimate projected benefit obligations and net periodic benefit cost as they pertain to our defined benefit pension plans.

Expected Return on Plan Assets

We determine our expected return on plan assets by evaluating both historical returns and estimates of future returns. Specifically, we consider the plan’s actual historical annual return on assets and historical broad market returns over long-term time frames based on our strategic allocation, which is detailed in Note 15. Future returns are based on independent estimates of long-term asset class returns. Based on this approach, the weighted average long-term expected annual rate of return on assets was estimated at 7.94% for fiscal year 2020.

Discount Rate

The discount rate is used to calculate the present value of expected future benefit payments at the measurement date. A decrease in the discount rate increases the present value of benefit obligations and generally decreases pension expense. The discount rate assumption is based on current investment yields of high-quality fixed income investments during the retirement benefits maturity period. The pension discount rate is determined by considering an interest rate yield curve comprising AAA/AA bonds, with maturities between zero and thirty years, developed by the plan’s actuaries. Annual benefit payments are then discounted to present value using this yield curve to develop a single discount rate matching the plan’s characteristics. The discount rate assumption will change from measurement date to measurement date as market yields on high quality corporate bonds change.

Sensitivity Analysis

Pension Expense

A 25 basis point change in each of the long-term expected rate of return on plan assets and discount rate would have the following effect on the combined U.S. defined benefit pension plans’ pension income for the next 12 months:

	<u>Increase/(Decrease) in Pension Income</u>	
	<u>25 Basis Point Increase</u>	<u>25 Basis Point Decrease</u>
	(In thousands)	
Expected long-term rate of return on plan assets	\$ 4,167	\$ (4,167)
Discount rate	\$ (104)	\$ 235

Projected Benefit Obligation

Funded status is derived by subtracting the respective year-end values of the projected benefit obligations (“PBO”) from the fair value of plan assets. The sensitivity of the PBO to changes in the discount rate varies depending on the magnitude and direction of the change in the discount rate. Refer to Note 12 for a quantitative sensitivity analysis for the PBO.

Income Tax

The Company follows Accounting Standards Codification (“ASC”) ASC 740, *Income Taxes*, which prescribes a recognition threshold and measurement attribute criteria for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return, as well as guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

We recognize deferred tax assets and liabilities based on the differences between the financial statement basis and the tax basis of assets, liabilities, net operating losses and tax carryforwards. A valuation allowance is required to be recognized to reduce the recorded deferred tax asset to the amount that will more likely than not be realized. The ultimate realization of deferred tax assets is

dependent upon the generation of future taxable income by jurisdiction during the periods in which those temporary differences become deductible or when carryforwards can be utilized. We consider the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in this assessment. As of March 31, 2020, we have a valuation allowance against substantially all of our net deferred tax assets given the insufficient positive evidence to support the realization of our deferred tax assets. A reduction in the valuation allowance could result in a significant decrease in income tax expense in the period that the reduction is recorded. However, the exact timing and amount of the reduction in our valuation allowance are unknown at this time and will be subject to the earnings level we achieve as well as our projected income in future periods.

Recently Issued Accounting Pronouncements

Refer to Note 2 for disclosure of the effects of recently issued accounting guidance.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Commodity Price Risk

Some contracts with our suppliers for raw materials, component parts and other goods are short-term contracts, which are subject to termination on a relatively short-term basis. The prices of our raw materials and component parts fluctuate depending on market conditions, and substantial increases in prices could increase our operating costs, which, as a result of our fixed-price contracts, we may not be able to recoup through increases in the prices of our products. We generally do not employ forward contracts or other financial instruments to hedge commodity price risk, although we continue to review a full range of business options focused on strategic risk management for all material commodities.

Any failure by our suppliers to provide acceptable raw materials, components, kits or subassemblies could adversely affect our production schedules and contract profitability. We assess qualification of suppliers and continually monitor them to control risk associated with such supply base reliance.

To a lesser extent, we also are exposed to fluctuations in the prices of certain utilities and services, such as electricity, natural gas, chemicals and freight. We utilize a range of long-term agreements to minimize procurement expense and supply risk in these areas.

Foreign Exchange Risk

In addition, even when revenues and expenses are matched, we must translate foreign denominated results of operations, assets and liabilities for our foreign subsidiaries to U.S. dollars in our consolidated financial statements. Consequently, increases and decreases in the value of the U.S. dollar as compared with the respective foreign currencies will affect our reported results of operations and the value of our assets and liabilities on our consolidated balance sheets, even if our results of operations or the value of those assets and liabilities has not changed in its original currency. These transactions could significantly affect the comparability of our results between financial periods and/or result in significant changes to the carrying value of our assets, liabilities and stockholders' equity.

We are subject to foreign currency exchange rate risk relating to receipts from customers and payments to suppliers in foreign currencies. We use foreign currency forward contracts to hedge the price risk associated with forecasted foreign denominated payments related to our ongoing business. Foreign currency forward contracts are sensitive to changes in foreign currency exchange rates. At March 31, 2020, a 10% change in the exchange rate in our portfolio of foreign currency contracts would not have material impact on our unrealized gains. Consistent with the use of these contracts to neutralize the effect of exchange rate fluctuations, such unrealized losses or gains would be offset by corresponding gains or losses, respectively, in the remeasurement of the underlying transactions being hedged. When taken together, these forward currency contracts and the offsetting underlying commitments do not create material market risk.

Interest Rate Risk

Our primary exposure to market risk consists of changes in interest rates on borrowings. An increase in interest rates would adversely affect our operating results and the cash flow available after debt service to fund operations and expansion. In addition, an increase in interest rates would adversely affect our ability to pay dividends on our common stock, if permitted to do so under certain of our debt arrangements, including the Amended Credit Agreement. We manage exposure to interest rate fluctuations by optimizing the use of fixed and variable rate debt. As of March 31, 2020, approximately 74% of our debt was fixed-rate debt. Our financing policy states that we generally maintain between 50% and 75% of our debt as fixed-rate debt on a fully leveraged basis. The information below summarizes our market risks associated with debt obligations and should be read in conjunction with Note 10 of notes to consolidated financial statements.

The following table presents principal cash flows and the related interest rates. Fixed interest rates disclosed represent the weighted average rate as of March 31, 2020. Variable interest rates disclosed fluctuate with the LIBOR, federal funds rates, and other weekly rates and represent the weighted average rate at March 31, 2020.

Expected Years of Maturity

	Next 12 Months	13 - 24 Months	25 - 36 Months	37 - 48 Months	49 - 60 Months	Thereafter	Total
Fixed rate cash flows (in thousands)	\$ 7,336	\$ 4,659	\$301,952	\$ 1,486	\$525,730	\$507,770	\$1,348,933
Weighted average interest rate (%)	6.58%	5.71%	6.10%	6.98%	7.23%	7.92%	
Variable rate cash flows (in thousands)	\$ —	\$ —	\$ 75,000	\$400,000	\$ —	\$ —	\$ 475,000
Weighted average interest rate (%)	4.61%	4.61%	4.69%	4.97%	—%	—%	

There are no other significant market risk exposures.

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Triumph Group, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Triumph Group, Inc. (“the Company”) as of March 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, stockholders' (deficit) equity and cash flows for each of the three years in the period ended March 31, 2020, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at March 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended March 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of March 31, 2020, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated May 28, 2020, expressed an unqualified opinion thereon.

Adoption of New Accounting Standards

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for accounting for revenue in the year ended March 31, 2019.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the 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.

Revenue Recognition for Performance Obligations Satisfied Over Time

Description of the Matter

As described in Notes 2 and 4 of the consolidated financial statements, the Company’s Aerospace Structures reportable segment recognizes revenue for performance obligations that are satisfied over time using an input method with revenue recognized proportionately as costs are incurred relative to the total expected costs to satisfy the performance obligation (“estimate-at-completion”). This method of revenue recognition requires management to continuously update estimate-at-completion costs, changes to which affect the amount of profit and loss recognized each period. During fiscal year 2020, approximately \$1.4 billion of the revenue for Aerospace Structures represent revenues from performance obligations that have been satisfied over time.

Auditing the revenue recognition for performance obligations satisfied over time within the Aerospace Structures reportable segment, including its estimate-at-completion analyses, was especially challenging

due to the significant judgment involved in evaluating the key assumptions, including materials, labor and overhead costs, made by management in its estimates of the total expected costs to satisfy the performance obligations. The estimate-at-completion analyses and resultant forecasted profit or loss of each performance obligation are sensitive to assumptions surrounding the Company's ability to achieve the technical requirements, schedule requirements, internal and subcontractor performance projections, anticipated business volume, anticipated asset utilization, and anticipated labor agreements, as well as the accuracy of estimated inflation trends, each of which can materially change the key cost assumptions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's process to recognize revenue for performance obligations that are satisfied over time within the Aerospace Structures reportable segment. In particular, we tested controls over management's review of the key assumptions in the estimate-at-completion analyses, which are describe above. We also tested management's controls over the completeness and accuracy of the data used in the estimate-at-completion analyses.

To test the recognition of revenue for performance obligations that are satisfied over time within the Aerospace Structures reportable segment, our audit procedures included, among others, evaluating the key assumptions used to develop the estimate-at-completion analyses and the completeness and accuracy of the underlying data used in management's calculations. For example, we compared estimated costs to satisfy performance obligations in the estimate-at-completion analyses to historical results and source documentation including supplier agreements, current and projected labor rates, expected inflation rates, as well as overhead costs including rent expense and depreciation of long-lived assets. We recalculated the revenue recognized and resulting profit or loss based on actual costs and estimate-at-completion assumptions. When testing the significant assumptions, we involved our engineering specialists to assist in evaluating key judgments including cost projections related to management's determination of estimate-at-completion costs. In addition, we assessed the accuracy of the Company's historical estimates by comparing them to actual costs incurred. When there was a significant change in estimate, we inspected underlying evidence for the reason for the change in the estimate and the timing of the change in estimate.

Realizability of Deferred Tax Assets

Description of the Matter

As described in Note 12 of the consolidated financial statements, at March 31, 2020 the Company had deferred tax assets for deductible temporary differences and tax attributes of \$162 million (net of a \$439 million valuation allowance). Deferred tax assets are reduced by a valuation allowance if, based upon the weight of all available evidence, it is more likely than not that some portion, or all, of the deferred tax assets will not be realized.

Auditing the Company's analysis of the realizability of its deferred tax assets required complex auditor judgment because the amounts are material to the financial statements and the assessment process involves significant judgment to apply changes in the tax law, determine the future reversal pattern of existing taxable temporary differences and other assumptions of future taxable income that may be affected by future market or economic conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls that address the risks of material misstatement relating to the realizability of deferred tax assets. This included controls over management's evaluation and application of the effects of changes in the tax law and the scheduling of the future reversal pattern of existing taxable temporary differences that have been identified as a source of future taxable income.

To test the Company's assessment of the realizability of deferred tax assets and the resulting valuation allowance, our audit procedures included, among others, testing the Company's calculation of future taxable income from the reversal of existing temporary taxable differences and evaluating the scheduling of the reversal patterns. In addition, we compared taxable income in prior carryback years, if any, to the Company's income tax returns; considered the feasibility of tax planning strategies; and, evaluated projected future taxable income exclusive of reversing temporary differences and carryforwards. We involved our tax professionals to assist in evaluating the application of tax law, including any changes in the tax law, in the Company's consideration of the sources of future taxable income.

Defined Benefit Pension and Other Postretirement Benefit Obligations

Description of the Matter

At March 31, 2020, the Company's aggregate defined benefit pension and other postretirement benefit obligation was \$2.3 billion and the net periodic benefit income was \$39 million. As described in Note 15 of the consolidated financial statements, the Company updates the estimates used to measure the defined benefit pension obligation and plan assets in the fourth quarter and upon a remeasurement event to reflect the actual return on plan assets and updated actuarial assumptions. The Company had a remeasurement event in the second quarter of fiscal year 2020.

Auditing the defined benefit pension and other postretirement benefit obligations and the related net periodic benefit income required complex auditor judgment and technical expertise due to the highly judgmental nature of the actuarial assumptions (e.g., discount rate, mortality rate, expected return on plan assets) used in the measurement process. These assumptions had a significant effect on the projected benefit obligation and the net periodic benefit income. Further, the accounting guidance for remeasurement events, including plan amendments, curtailments, and special termination benefits was complex and required significant judgment.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over management's determination of the defined benefit pension and other post-retirement benefit obligation calculations, the significant actuarial assumptions described above and the data inputs provided to the Company's actuarial specialists, as well as management's evaluation of the relevant authoritative accounting literature to recognize the effects of plan amendments, curtailments and special termination benefits.

To test the defined benefit pension and other postretirement benefit obligation, and the related net periodic benefit income, our audit procedures included, among others, evaluating the methodology used, the significant actuarial assumptions described above, the underlying data used by management and its actuaries and the appropriateness of management's judgments in applying the authoritative accounting literature. We compared the actuarial assumptions used by management with historical trends and evaluated the change in the defined benefit pension and other postretirement obligation from prior year resulting from the change in service cost, interest cost, benefit payments, actuarial gains and losses, participant contributions, special termination benefits and plan amendments. In addition, we involved our actuarial specialists to assist in evaluating management's methodology for determining the actuarial assumptions. For example, we evaluated management's methodology for determining the discount rate that reflects the maturity and duration of the benefit payments and is used to measure the defined benefit pension obligation. As part of this assessment, we compared the projected defined benefit pension and other postretirement obligation cash flows with prior year amounts and compared the current year benefits paid to the prior year projected cash flows. To evaluate the mortality rate, we assessed whether the information is consistent with publicly available information, and whether any market data adjusted for entity-specific adjustments were applied. We also tested the completeness and accuracy of the underlying data, including the participant data provided to the Company's actuarial specialists. Lastly, to evaluate the expected return on plan assets, we assessed whether management's assumptions were consistent with a range of returns for a portfolio of comparative investments.

We have served as the Company's auditor since 1993.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania
May 28, 2020

TRIUMPH GROUP, INC.
Consolidated Balance Sheets
(Dollars in thousands, except per share data)

	March 31,	
	2020	2019
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 485,463	\$ 92,807
Trade and other receivables, less allowance for doubtful accounts of \$4,293 and \$3,646	359,487	373,590
Contract assets	244,417	326,667
Inventory, net	452,976	413,560
Prepaid expenses and other current assets	19,289	34,446
Total current assets	1,561,632	1,241,070
Property and equipment, net	418,141	543,710
Goodwill	513,527	583,225
Intangible assets, net	381,968	430,954
Other, net	105,065	55,615
Total assets	\$ 2,980,333	\$ 2,854,574
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Current portion of long-term debt	\$ 7,336	\$ 8,201
Accounts payable	457,694	433,783
Contract liabilities	295,320	293,719
Accrued expenses	227,403	239,572
Total current liabilities	987,753	975,275
Long-term debt, less current portion	1,800,171	1,480,620
Accrued pension and other postretirement benefits	660,065	540,479
Deferred income taxes	7,439	6,964
Other noncurrent liabilities	306,169	424,549
Stockholders' deficit:		
Common stock, \$.001 par value, 100,000,000 shares authorized, 52,460,920 and 52,460,920 shares issued; 51,858,089 and 49,887,268 shares outstanding	52	52
Capital in excess of par value	804,830	867,545
Treasury stock, at cost, 602,831 and 2,573,652 shares	(36,217)	(159,154)
Accumulated other comprehensive loss	(719,428)	(487,684)
Accumulated deficit	(830,501)	(794,072)
Total stockholders' deficit	(781,264)	(573,313)
Total liabilities and stockholders' deficit	\$ 2,980,333	\$ 2,854,574

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

TRIUMPH GROUP, INC.
Consolidated Statements of Operations
(In thousands, except per share data)

	Year ended March 31,		
	2020	2019	2018
Net sales	\$ 2,900,117	\$ 3,364,930	\$ 3,198,951
Operating costs and expenses:			
Cost of sales (exclusive of depreciation shown separately below)	2,307,393	2,924,920	2,607,556
Selling, general and administrative	257,529	298,386	292,630
Depreciation and amortization	138,168	149,904	158,368
Legal judgment gain, net of expenses	(9,257)	—	—
Impairment of goodwill	66,121	—	535,227
Restructuring	25,340	31,098	40,069
Loss on sale of assets and businesses	56,916	235,301	30,741
	<u>2,842,210</u>	<u>3,639,609</u>	<u>3,664,591</u>
Operating income (loss)	57,907	(274,679)	(465,640)
Non-service defined benefit income	(41,894)	(62,105)	(103,234)
Interest expense and other, net	122,129	114,619	99,442
Loss from continuing operations before income taxes	(22,328)	(327,193)	(461,848)
Income tax expense (benefit)	5,798	(5,426)	(36,457)
Net loss	<u>\$ (28,126)</u>	<u>\$ (321,767)</u>	<u>\$ (425,391)</u>
Loss per share—basic:			
Net loss	<u>\$ (0.56)</u>	<u>\$ (6.47)</u>	<u>\$ (8.60)</u>
Weighted average common shares outstanding—basic	<u>50,494</u>	<u>49,698</u>	<u>49,442</u>
Loss per share—diluted:			
Net loss	<u>\$ (0.56)</u>	<u>\$ (6.47)</u>	<u>\$ (8.60)</u>
Weighted average common shares outstanding—diluted	<u>50,494</u>	<u>49,698</u>	<u>49,442</u>

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

TRIUMPH GROUP, INC.
Consolidated Statements of Comprehensive Loss
(in thousands)

	Year ended March 31,		
	2020	2019	2018
Net loss	\$ (28,126)	\$ (321,767)	\$ (425,391)
Other comprehensive (loss) income:			
Foreign currency translation adjustment	(13,439)	10,077	28,529
Defined benefit pension plans and other postretirement benefits:			
Amounts arising during the period - net of tax (expense) benefit			
Prior service credit (cost), net of taxes of \$0, \$0, and \$0, respectively	94,182	(1,139)	21,980
Actuarial (loss) gain, net of taxes of \$0, \$0, and \$(283), respectively	(304,324)	(125,540)	10,306
Reclassification to net loss - net of expense (benefit)			
Amortization of net loss, net of taxes of \$0, \$(656), and \$(5), respectively	49,290	6,314	7,147
Recognized prior service credits, net of taxes of \$0, \$0, and \$0, respectively	(54,280)	(8,274)	(37,623)
Total defined benefit pension plans and other postretirement benefits, net of taxes	(215,132)	(128,639)	1,810
Cash flow hedges:			
Unrealized (loss) gain arising during the period, net of tax benefit of \$0, \$(228), and \$(25), respectively	(1,611)	30	133
Reclassification of loss included in net earnings, net of tax expense of \$0, \$228, and \$14, respectively	(1,562)	(1,282)	(2,164)
Net unrealized loss on cash flow hedges, net of tax	(3,173)	(1,252)	(2,031)
Total other comprehensive (loss) income	(231,744)	(119,814)	28,308
Total comprehensive loss	\$ (259,870)	\$ (441,581)	\$ (397,083)

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

TRIUMPH GROUP, INC.
Consolidated Statements of Stockholders' (Deficit) Equity
(Dollars in thousands)

	Outstanding Shares	Common Stock All Classes	Capital in Excess of Par Value	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings (Accumulated Deficit)	Total
March 31, 2017	49,573,029	\$ 51	\$846,807	\$(183,696)	\$ (396,178)	\$ 579,489	\$ 846,473
Net loss	—	—	—	—	—	(425,391)	(425,391)
Foreign currency translation adjustment	—	—	—	—	28,529	—	28,529
Pension liability adjustment, net of income taxes of (\$288)	—	—	—	—	1,810	—	1,810
Change in fair value of derivatives	—	—	—	—	(2,013)	—	(2,013)
Change in fair value of foreign currency hedges, net of income taxes of \$11	—	—	—	—	(18)	—	(18)
Cash dividends (\$0.16 per share)	—	—	—	—	—	(7,943)	(7,943)
Share-based compensation	56,548	—	6,662	1,287	—	—	7,949
Repurchase of restricted shares for minimum tax obligation	(19,361)	—	—	(483)	—	—	(483)
Employee stock purchase plan	59,632	—	(2,189)	3,810	—	—	1,621
March 31, 2018	49,669,848	51	851,280	(179,082)	(367,870)	146,155	450,534
Net loss	—	—	—	—	—	(321,767)	(321,767)
Adoption of ASC 606	—	—	—	—	—	(585,015)	(585,015)
Foreign currency translation adjustment	—	—	—	—	10,077	—	10,077
Pension liability adjustment, net of income taxes of (\$656)	—	—	—	—	(128,639)	—	(128,639)
Change in fair value of foreign currency hedges, net of income taxes of \$228	—	—	—	—	(1,252)	—	(1,252)
Cash dividends (\$0.16 per share)	—	—	—	—	—	(7,971)	(7,971)
Share-based compensation	186,572	—	(1,448)	11,707	—	—	10,259
Repurchase of restricted shares for minimum tax obligation	(42,146)	—	—	(860)	—	—	(860)
Employee stock purchase plan	72,994	—	(3,354)	4,675	—	—	1,321
Other	—	1	21,067	4,406	—	(25,474)	—
March 31, 2019	49,887,268	52	867,545	(159,154)	(487,684)	(794,072)	(573,313)
Net loss	—	—	—	—	—	(28,126)	(28,126)
Adoption of ASC 842	—	—	—	—	—	(225)	(225)
Foreign currency translation adjustment	—	—	—	—	(13,439)	—	(13,439)
Pension liability adjustment, net of income taxes of \$0	—	—	—	—	(215,132)	—	(215,132)
Change in fair value of foreign currency hedges, net of income taxes of \$0	—	—	—	—	(3,173)	—	(3,173)
Cash dividends (\$0.16 per share)	—	—	—	—	—	(8,078)	(8,078)
Share-based compensation	264,658	—	(5,508)	16,222	—	—	10,714
Repurchase of restricted shares for minimum tax obligation	(69,601)	—	—	(1,442)	—	—	(1,442)
Employee stock purchase plan	45,061	—	(1,811)	2,761	—	—	950
Contribution of treasury shares to pension plan	1,730,703	—	(55,396)	105,396	—	—	50,000
March 31, 2020	51,858,089	\$ 52	\$804,830	\$(36,217)	\$ (719,428)	\$ (830,501)	\$(781,264)

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

TRIUMPH GROUP, INC.
Consolidated Statements of Cash Flows
(Dollars in thousands)

	Year ended March 31,		
	2020	2019	2018
Operating Activities			
Net loss	\$ (28,126)	\$ (321,767)	\$ (425,391)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Depreciation and amortization	138,168	149,904	158,368
Impairment of goodwill	66,121	—	535,227
Amortization of acquired contract liability	(75,286)	(67,314)	(125,148)
Loss on sale of assets and businesses	56,916	235,301	30,741
Curtailments, settlements and early retirement incentives	14,293	4,032	(25,722)
Other amortization included in interest expense	11,157	8,770	11,677
Provision (recovery) for doubtful accounts receivable	1,554	(495)	(242)
Provision (benefit) for deferred income taxes	2,823	(7,939)	(43,108)
Share-based compensation	11,062	10,259	7,949
Changes in other assets and liabilities, excluding the effects of acquisitions and divestitures:			
Trade and other receivables	5,001	(89,728)	(99,620)
Contract assets	50,440	65,191	(5,484)
Inventories	(48,802)	(15,930)	(163,417)
Prepaid expenses and other current assets	16,376	(3,144)	(4,239)
Accounts payable, accrued expenses and income taxes payable	(61,338)	(71,767)	(43,696)
Accrued pension and other postretirement benefits	(67,826)	(79,911)	(88,464)
Other	4,133	10,118	(8,325)
Net cash provided by (used in) operating activities	96,666	(174,420)	(288,894)
Investing Activities			
Capital expenditures	(39,834)	(47,099)	(42,050)
Proceeds from sale of assets and businesses	47,229	247,647	83,082
Acquisitions, net of cash acquired	—	—	(2,818)
Net cash provided by investing activities	7,395	200,548	38,214
Financing Activities			
Net increase in revolving credit facility	185,000	102,113	82,888
Proceeds from issuance of long-term debt	585,580	54,600	544,243
Retirement of debt and capital lease obligations	(449,650)	(113,425)	(387,373)
Payment of deferred financing costs	(17,718)	(1,982)	(17,729)
Dividends paid	(8,078)	(7,971)	(7,943)
Repurchase of restricted shares for minimum tax obligations	(1,442)	(860)	(483)
Net cash provided by financing activities	293,692	32,475	213,603
Effect of exchange rate changes on cash	(5,097)	(1,615)	3,263
Net change in cash and cash equivalents	392,656	56,988	(33,814)
Cash and cash equivalents at beginning of year	92,807	35,819	69,633
Cash and cash equivalents at end of year	\$ 485,463	\$ 92,807	\$ 35,819

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

Triumph Group, Inc.
Notes to Consolidated Financial Statements
(Dollars in thousands, except per share data)

1. BACKGROUND AND BASIS OF PRESENTATION

Triumph Group, Inc. ("Triumph") is a Delaware corporation which, through its operating subsidiaries, designs, engineers, manufactures and sells products for the global aerospace original equipment manufacturers ("OEMs") of aircraft and aircraft components and repairs and overhauls aircraft components and accessories for commercial airline, air cargo carrier and military customers on a worldwide basis. Triumph and its subsidiaries (collectively, the "Company") are organized based on the products and services that they provide. Effective February 17, 2020, the Company combined its Integrated Systems and Product Support operating segments into one operating segment, Systems & Support. Under this organizational structure, the Company has two reportable segments: Systems & Support and Aerospace Structures. Segment information for prior periods has been recast to conform to this organizational structure.

Systems & Support consists of the Company's operations that provide integrated solutions, including design, development, and support of proprietary components, subsystems and systems, as well as production of complex assemblies using external designs. Capabilities include hydraulic, mechanical and electromechanical actuation, power and control; a complete suite of aerospace gearbox solutions, including engine accessory gearboxes and helicopter transmissions; active and passive heat exchange technology; fuel pumps, fuel metering units and Full Authority Digital Electronic Control fuel systems; hydromechanical and electromechanical primary and secondary flight controls. Systems & Support also provides full life cycle solutions for commercial, regional and military aircraft. The Company's extensive product and service offerings include full post-delivery value chain services that simplify the MRO supply chain. Through its ground support equipment maintenance, component MRO and post-production supply chain activities, Systems & Support is positioned to provide integrated planeside repair solutions globally. Capabilities include metallic and composite aircraft structures; nacelles; thrust reversers; interiors; auxiliary power units; and a wide variety of pneumatic, hydraulic, fuel and mechanical accessories. Repair services generally involve the replacement and/or remanufacturing of parts, which is similar to the original manufacture of the part. The processes that the Company performs related to repair and overhaul services are essentially the repair of wear parts or replacement of parts that are beyond economic repair. The repair service generally involves remanufacturing a complete part or a component of a part.

Aerospace Structures consists of the Company's operations that supply commercial, business, regional and military manufacturers with large metallic and composite structures and aircraft interior systems, including air ducting and thermal acoustic insulations systems. Products include wings, wing boxes, fuselage panels, horizontal and vertical tails, subassemblies such as floor grids, and aircraft interior systems, including air ducting and thermal acoustic insulations systems. Aerospace Structures also has the capability to engineer detailed structural designs in metal and composites. Capabilities include advanced composite and interior structures, joining processes such as welding, autoclave bonding, and conventional mechanical fasteners.

The accompanying consolidated financial statements include the accounts of Triumph and its wholly-owned subsidiaries. Intercompany accounts and transactions have been eliminated from the consolidated financial statements.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Standards Recently Implemented

Adoption of ASU 2016-02

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-02, *Leases (Topic 842)*. This ASU requires lessees to recognize most leases on their balance sheets as lease liabilities with corresponding right-of-use ("ROU") assets. The Company adopted the standard as of April 1, 2019, using the modified retrospective approach and applying the standard's transition provisions at the adoption date. Reporting periods beginning on or after April 1, 2019, are presented in accordance with Accounting Standards Codification ("ASC") 842, *Leases*. Prior periods have not been adjusted and continue to be reported in accordance with previous accounting standards. The Company elected the package of practical expedients permitted under the transition guidance, which among other things, allows the Company to not reassess the historical lease classification.

Adoption of the new standard resulted in the recognition of operating lease ROU assets and lease liabilities of \$76,444 and \$84,663, respectively, with the difference due to prepaid and deferred rent that were reclassified to the ROU asset value. An adjustment to opening retained earnings of \$225 was also recognized. The standard did not materially affect the Company's consolidated statements of operations or cash flows. See Note 9 for further details.

Adoption of ASU 2018-02

In February 2018, the FASB issued ASU 2018-02, *Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. This ASU permits a company to reclassify the income tax effects of the 2017 Tax Cuts and Jobs Act ("U.S. tax reform") on items within AOCI to retained earnings. The Company adopted the provisions of this ASU in the first quarter of 2019 and elected not to reclassify the income tax effects of U.S. tax reform from items in accumulated other comprehensive income. The Company's policy is to release the tax effects from accumulated other comprehensive income when the all of the related assets or liabilities that gave rise to the accumulated other comprehensive income have been derecognized.

Standards Issued Not Yet Implemented

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This ASU modifies the measurement of expected credit losses of certain financial instruments. ASU 2016-13 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods. The amendments in this ASU should be applied on a modified retrospective basis to all periods presented. The Company adopted ASU 2016-13 effective April 1, 2020, and the impact on our consolidated financial statements of adoption was not significant.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement*. This ASU modifies the disclosure requirements for fair value measurements by removing, modifying or adding certain disclosures. ASU 2018-13 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods, with early adoption permitted. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. The Company adopted ASU 2018-13 effective April 1, 2020, and does not expect the adoption to have a significant impact on its consolidated financial statement disclosures.

In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. This ASU aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). ASU 2018-15 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods, with early adoption permitted. The amendments in this ASU should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The Company adopted ASU 2018-15 effective April 1, 2020, electing to apply the standard prospectively. As a result of applying the standard prospectively, there was no impact on the Company's consolidated financial statements and disclosures upon adoption.

In August 2018, the FASB issued ASU 2018-14, *Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans*, which modifies the disclosure requirements for defined benefit pension plans and other postretirement plans. ASU 2018-14 is effective for annual periods beginning after December 15, 2020, with early adoption permitted. The amendments in this ASU should be applied on a retrospective basis to all periods presented. The Company is currently evaluating the effect that ASU 2018-14 will have on its consolidated financial statements and related disclosures.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Cash and Cash Equivalents

Cash equivalents consist of highly liquid investments with a maturity of three months or less at the time of purchase. Fair value of cash equivalents approximates carrying value.

Trade and Other Receivables, net

Trade and other receivables are recorded net of an allowance for doubtful accounts. Trade and other receivables include amounts billed and currently due from customers and amounts retained by the customer pending contract completion. The Company performs ongoing credit evaluations of its customers and generally does not require collateral. The Company records the allowance for doubtful accounts based on prior experience and for specific collectibility matters when they arise. The Company writes off balances against the reserve when collectibility is deemed remote. The Company's trade and other receivables are exposed to credit risk; however, the risk is limited due to the diversity of the customer base.

Triumph Group, Inc.
Notes to Consolidated Financial Statements
(Dollars in thousands, except per share data)

Trade and other receivables, net composed of the following:

	March 31,	
	2020	2019
Total trade receivables	\$ 314,007	\$ 336,888
Other receivables	49,773	40,348
Total trade and other receivables	363,780	377,236
Less: Allowance for doubtful accounts	(4,293)	(3,646)
Total trade and other receivables, net	\$ 359,487	\$ 373,590

Goodwill and Intangible Assets

The Company accounts for goodwill and intangible assets in accordance with Accounting Standards Codification ("ASC") 350, *Intangibles—Goodwill and Other*. Under ASC 350, goodwill and intangible assets with indefinite lives are not amortized; rather, they are tested for impairment on at least an annual basis. Intangible assets with finite lives are amortized over their useful lives.

The Company assesses whether goodwill impairment exists using both the qualitative and quantitative assessments. The qualitative assessment involves determining whether events or circumstances exist that indicate it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. If based on this qualitative assessment the Company determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount or if the Company elects not to perform a qualitative assessment, a quantitative assessment is performed as required by ASC 350 to determine whether a goodwill impairment exists at the reporting unit.

The quantitative test is used to compare the carrying amount of the reporting unit's assets to the fair value of the reporting unit. If the fair value exceeds the carrying value, no further evaluation is required, and no impairment loss is recognized. If the carrying amount exceeds the fair value, then an impairment loss occurs. The impairment is measured by using the amount by which the carrying value exceeds the fair value not to exceed the amount of recorded goodwill. The determination of the fair value of its reporting units is based, among other things, on estimates of future operating performance of the reporting unit being valued. The Company is required to complete an impairment test for goodwill and record any resulting impairment losses at least annually. Changes in market conditions, among other factors, may have an impact on these estimates and require interim impairment assessments.

When performing the quantitative impairment test, the Company's methodology includes the use of an income approach which discounts future net cash flows to their present value at a rate that reflects the Company's cost of capital, otherwise known as the discounted cash flow method ("DCF"). These estimated fair values are based on estimates of future cash flows of the businesses. Factors affecting these future cash flows include the continued market acceptance of the products and services offered by the businesses, the development of new products and services by the businesses and the underlying cost of development, the future cost structure of the businesses and future technological changes. The Company also incorporates market multiples for comparable companies in determining the fair value of its reporting units. Any such impairment would be recognized in full in the reporting period in which it has been identified. The fair value estimates resulting from the application of these methodologies are based on inputs classified within Level 3 of the fair value hierarchy, as described below.

During the fourth quarter of the fiscal year ended March 31, 2020, the Company performed its annual goodwill impairment assessment for each of its reporting units with no impairment identified.

Subsequent to its annual testing date and at March 31, 2020, the Company identified indicators of impairment due to the decline in the Company's share price as well as potential negative impacts due to the uncertainty of the impact of the COVID-19 pandemic. As a result of these indicators, the Company performed an interim assessment of goodwill, which included using a combination of both market and income approaches to estimate the fair value of each reporting unit. The Company concluded that its Product Support reporting unit had a fair value that was lower than its carrying value by an amount that exceeded the remaining goodwill for the reporting unit. Therefore, the Company recorded a noncash impairment charge during the fiscal quarter ended March 31, 2020, of \$66,121, which is presented on the consolidated statements of operations as "Impairment of goodwill" for the fiscal year ended March 31, 2020. The decline in fair value is the result of expected declines in revenues from MRO services and the uncertainty in the rate and timing of recovery and therefore the timing of associated earnings and cash flows. The assessment of the Company's Integrated Systems reporting unit indicated that its fair value exceeded its carrying amount.

Finite-lived intangible assets are amortized over their useful lives ranging from 7 to 30 years. The Company continually evaluates whether events or circumstances have occurred that would indicate that the remaining estimated useful lives of long-lived assets, including intangible assets, may warrant revision or that the remaining balance may not be recoverable. Long-lived assets are evaluated for indicators of impairment. When factors indicate that long-lived assets, including intangible assets, should be evaluated for possible impairment, an estimate of the related undiscounted cash flows over the remaining life of the long-lived assets, including intangible assets, is used to measure recoverability based on the primary asset of the asset group. Some of the more important factors management considers include the Company's financial performance relative to expected and historical performance, significant changes in the way the Company manages its operations, negative events that have occurred, and negative industry and economic trends. If the estimated undiscounted cash flows are less than the carrying amount, measurement of the impairment will be based on the difference between the carrying value and fair value of the asset group, generally determined based on the present value of expected future cash flows associated with the use of the asset.

Refer to below for the Company's accounting policy regarding fair value measurements and the definition of fair value levels.

Revenue Recognition and Contract Balances

The Company adopted ASC 606 on April 1, 2018. The Company's revenue is principally from contracts with customers to provide design, development, manufacturing, and support services associated with specific customer programs. The Company regularly enters into long-term master supply agreements that establish general terms and conditions and may define specific program requirements. Many agreements include clauses that provide sole supplier status to the Company for the duration of the program's life. Purchase orders (or authorizations to proceed) are issued pursuant to the master supply agreements. Additionally, a majority of the Company's agreements with customers include options for future purchases. Such options primarily reduce the administrative effort of issuing subsequent purchase orders and do not represent material rights granted to customers. The Company generally enters into agreements directly with its customers and is the principal in all current contracts.

The identification of a contract with a customer for purposes of accounting and financial reporting requires an evaluation of the terms and conditions of agreements to determine whether presently enforceable rights and obligations exist. Management considers a number of factors when making this evaluation that include, but are not limited to, the nature and substance of the business exchange, the specific contractual terms and conditions, the promised products and services, the termination provisions in the contract, as well as the nature and execution of the customer's ordering process and how the Company is authorized to perform work. Generally, presently enforceable rights and obligations are not created until a purchase order is issued by a customer for a specified number of units of product or services. Therefore, the issuance of a purchase order is generally the point at which a contract is identified for accounting and financial reporting purposes.

Management identifies the promises to the customer. Promises are generally explicitly stated in each contract, but management also evaluates whether any promises are implied based on the terms of the agreement, past business practice, or other facts and circumstances. Each promise is evaluated to determine if it is a performance obligation. A performance obligation is a promise in a contract to transfer a distinct good or service. The Company considers a number of factors when determining whether a promise is a distinct performance obligation, including whether the customer can benefit from the good or service on its own or together with other resources that are readily available to the customer, whether the Company provides a significant service of integrating goods or services to deliver a combined output to the customer, or whether the goods or services are highly interdependent. The Company's performance obligations consist of a wide range of engineering design services and manufactured components, as well as spare parts and repairs for original equipment manufacturers ("OEMs").

The transaction price for a contract reflects the consideration the Company expects to receive for fully satisfying the performance obligations in the contract. Typically, the transaction price consists solely of fixed consideration but may include variable consideration for contractual provisions such as unpriced contract modifications, cost-sharing provisions, and other receipts or payments to customers. The Company identifies and estimates variable consideration, typically at the most likely amount the Company expects to receive from its customers. Variable consideration is only included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized for the contract will not occur, or when the uncertainty associated with the variable consideration is resolved. The Company's contracts with customers generally require payment under normal commercial terms after delivery with payment typically required within 30 to 120 days of delivery. However, a subset of the Company's current contracts includes significant financing components because the timing of the transfer of the underlying products and services under contract are at the customers' discretion. For these contracts, the Company adjusts the transaction price to reflect the effects of the time value of money.

The Company generally is not subject to collecting sales tax and has made an accounting policy election to exclude from the transaction price any sales and other similar taxes collected from customers. As a result, any such collections are accounted for on a net basis.

The total transaction price is allocated to each of the identified performance obligations using the relative stand-alone selling price. The objective of the allocation is to reflect the consideration that the Company expects to receive in exchange for the products or services associated with each performance obligation. Stand-alone selling price is the price at which the Company would sell a promised good or service separately to a customer. Stand-alone selling prices are established at contract inception, and subsequent changes in transaction price are allocated on the same basis as at contract inception. When stand-alone selling prices for the Company's products and services are not observable, the Company uses either the "Expected Cost Plus a Margin" or "Adjusted Market Assessment" approaches to estimate stand-alone selling price. Expected costs are typically derived from the available periodic forecast information.

Revenue is recognized when or as control of promised products or services transfers to a customer and is recognized at the amount allocated to each performance obligation associated with the transferred products or services. Service sales, principally representing repair, maintenance, and engineering activities are recognized over the contractual period or as services are rendered. Sales under long-term contracts with performance obligations satisfied over time are recognized using either an input or output method. The Company recognizes revenue over time as it performs on these contracts because of the continuous transfer of control to the customer as represented by contractual terms that entitle the Company to the reimbursement of costs plus a reasonable profit for work performed to manufacture products for which the Company has no alternate use or for work performed on a customer-owned asset.

With control transferring over time, revenue is recognized based on the extent of progress toward completion of the performance obligation. The Company generally uses the cost-to-cost input method of progress for its contracts because it best depicts the transfer of control to the customer that occurs as work progresses. Under the cost-to-cost method, the extent of progress toward completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. The Company reviews its cost estimates on contracts on a periodic basis, or when circumstances change and warrant a modification to a previous estimate. Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections. Significant factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements.

Revenue and cost estimates are regularly monitored and revised based on changes in circumstances. Impacts from changes in estimates of net sales and cost of sales are recognized on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a performance obligation's percentage of completion. Forward loss reserves for anticipated losses on long-term contracts are recorded in full when such losses become evident, to the extent required, and are included in contract liabilities on the accompanying consolidated balance sheets. The Company believes that the accounting estimates and assumptions made by management are appropriate given the increased uncertainties surrounding the severity and duration of the impacts of the COVID-19 pandemic, however actual results could differ materially from those estimates.

For the fiscal year ended March 31, 2020, cumulative catch-up adjustments resulting from changes in contract values and estimated costs that arose during the fiscal year increased revenue, operating loss, net loss and loss per share by approximately \$12,011, (\$22,844), (\$22,844), and (\$0.45), respectively. The cumulative catch-up adjustments to operating income for the fiscal year ended March 31, 2020, included gross favorable adjustments of approximately \$43,405 and gross unfavorable adjustments of approximately \$66,249.

For the fiscal year ended March 31, 2019, cumulative catch-up adjustments resulting from changes in estimates increased net sales, decreased operating loss, net loss and earnings per share by approximately \$7,944, (\$68,694), (\$68,694), and (\$1.38), respectively. The cumulative catch-up adjustments to operating income for the fiscal year ended March 31, 2019, included gross favorable adjustments of approximately \$46,074 and gross unfavorable adjustments of approximately \$114,768. These cumulative catch-up adjustments do not include a noncash charge the Company recorded as a result of the adoption of ASU 2017-07 of \$87,241 due to a change in estimate from a change in accounting principles, which is presented on the accompanying consolidated statements of operations within cost of sales.

For the fiscal year ended March 31, 2018, cumulative catch-up adjustments resulting from changes in estimates decreased operating loss, net loss and decreased loss per share by approximately \$19,677, \$13,479, and \$0.27, respectively. The cumulative catch-up adjustments to operating income for the fiscal year ended March 31, 2018, included gross favorable adjustments of approximately \$85,844 and gross unfavorable adjustments of approximately \$66,167.

Revenues for performance obligations that are not recognized over time are recognized at the point in time when control transfers to the customer. For performance obligations that are satisfied at a point in time, the Company evaluates the point in time when the customer can direct the use of and obtain the benefits from the products and services. Generally, the shipping terms determine the point in time when control transfers to customers. Shipping and handling activities are not considered performance obligations and related costs are included in cost of sales as incurred.

Differences in the timing of revenue recognition and contractual billing and payment terms result in the recognition contract assets and liabilities. Refer to Note 4 for further discussion.

In connection with several of prior acquisitions, the Company assumed existing long-term contracts. Based on review of these contracts, the Company concluded that the terms of certain contracts to be either more or less favorable than could be realized in market transactions as of the date of the acquisition. As a result, the Company recognized acquired contract liabilities, net of acquired contract assets as of the acquisition date of each respective acquisition, based on the present value of the difference between the contractual cash flows of the executory contracts and the estimated cash flows had the contracts been executed at the acquisition date. The liabilities principally relate to long-term contracts that were initially executed several years prior to the respective acquisition. The Company measured these net liabilities in the year they were acquired under the measurement provisions of ASC 820, *Fair Value Measurement*, which is based on the price to transfer the obligation to a market participant at the measurement date, assuming that the net liabilities will remain outstanding in the marketplace. The portion of the Company's revenue resulting from transactions other than contracts with customers pertains to the amortization of these acquired contract liabilities.

The balance of the liability as of March 31, 2020, is \$92,962 and, based on the expected delivery schedule of the underlying contracts, the Company estimates annual amortization of the liability as follows: 2021 — \$44,958; 2022 — \$17,568; 2023 — \$7,302; 2024 — \$3,512; 2025 — \$1,690; thereafter \$17,932.

Leases

The Company leases office space, manufacturing facilities, land, vehicles, and equipment. The Company determines if an agreement is or contains a lease at the lease inception date and recognizes right-of-use assets and lease liabilities at the lease commencement date. A ROU asset and corresponding lease liability are not recorded for leases with an initial term of 12 months or less ("short-term leases").

ROU assets represent the Company's right to use an underlying asset during the lease term, and lease liabilities represent the Company's obligation to make lease payments arising from the lease. The determination of the length of lease terms is affected by options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. The existence of significant economic incentive is the primary consideration when assessing whether the Company is reasonably certain of exercising an option in a lease. Both finance and operating lease ROU assets and liabilities are recognized at commencement date and measured as the present value of lease payments to be made over the lease term. As the interest rate implicit in the lease is not readily available for most of the Company's leases, the Company uses its estimated incremental borrowing rate in determining the present value of lease payments. The estimated incremental borrowing rate is derived from information available at the lease commencement date. The lease ROU asset recognized at commencement is adjusted for any lease payments related to initial direct costs, prepayments, and lease incentives.

For operating leases, lease expense is recognized on a straight-line basis over the lease term. For finance leases, lease expense comprises the amortization of the ROU assets recognized on a straight-line basis generally over the shorter of the lease term or the estimated useful life of the underlying asset and interest on the lease liability. Variable lease payments not dependent on a rate or index are recognized when the event, activity, or circumstance in the lease agreement upon which those payments are contingent is probable of occurring and are presented in the same line of the consolidated balance sheet as the rent expense arising from fixed payments. The Company has lease agreements with lease and non-lease components. Non-lease components are combined with the related lease components and accounted for as lease components for all classes of underlying assets.

Retirement Benefits

Defined benefit pension plans are recognized in the consolidated financial statements on an actuarial basis. A significant element in determining the Company's pension income (expense) is the expected long-term rate of return on plan assets. This expected return is an assumption as to the average rate of earnings expected on the funds invested or to be invested to provide for the benefits included in the projected pension benefit obligation. The Company applies this assumed long-term rate of return to a calculated value of plan assets, which recognizes changes in the fair value of plan assets in a systematic manner over five years. This produces the expected return on plan assets that is included in pension income (expense). The difference between this expected return and the actual return on plan assets is deferred. The net deferral of past asset gains (losses) affects the calculated value of plan assets and, ultimately, future pension income (expense).

The Company periodically experiences events or makes changes to its benefit plans that result in curtailment or special charges. Curtailments are recognized when events occur that significantly reduce the expected years of future service of present employees or eliminates the benefits for a significant number of employees for some or all of their future service.

Curtailment losses are recognized when it is probable the curtailment will occur and the effects are reasonably estimable. Curtailment gains are recognized when the related employees are terminated or a plan amendment is adopted, whichever is applicable.

From time to time, the Company may enter into transactions that relieve it of primary responsibility for all or more than a minor portion of certain of its pension benefit obligations. When these transactions are effected through an irrevocable action that relieves the Company of primary responsibility for its pension or other postretirement benefit obligations and eliminates significant risks related to the obligation and the related assets used to effect the transaction, they are considered settlements, as defined by ASC 715, *Compensation – Retirement Benefits*. When a transaction meets the definition of a settlement, at the time of settlement the Company recognizes as a gain or loss the pro rata amount of the net gain or loss in accumulated other comprehensive income based on the proportion of the projected benefit obligation settled to the total projected benefit obligation.

As required under ASC 715, the Company remeasures plan assets and obligations during an interim period whenever a significant event occurs that results in a material change in the net periodic pension cost. The determination of significance is based on judgment and consideration of events and circumstances impacting the pension costs.

At March 31 of each year, the Company determines the fair value of its pension plan assets as well as the discount rate to be used to calculate the present value of plan liabilities. The discount rate is an estimate of the interest rate at which the pension benefits could be effectively settled. In estimating the discount rate, the Company looks to rates of return on high-quality, fixed-income investments currently available and expected to be available during the period to maturity of the pension benefits. The Company uses a portfolio of fixed-income securities, which receive at least the second-highest rating given by a recognized ratings agency.

Fair Value Measurements

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. When determining fair value measurements for assets and liabilities required to be recorded at fair value, the Company considers the principal or most advantageous market in which it would transact and also considers assumptions that market participants would use when pricing an asset or liability. The fair value hierarchy has three levels of inputs that may be used to measure fair value: Level 1—Unadjusted quoted prices in active markets for identical assets or liabilities; Level 2—Unadjusted quoted prices in active markets for similar assets or liabilities, or unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are observable for the asset or liability; and Level 3—Unobservable inputs for the asset or liability. The Company has applied fair value measurements when measuring goodwill impairment in fiscal year 2018 and fiscal year 2020 (see Note 7), and to its pension and postretirement plan assets (see Note 15).

Income Taxes

The Company accounts for income taxes using the asset and liability method. The asset and liability method requires recognition of deferred tax assets and liabilities for expected future tax consequences of temporary differences that currently exist between tax bases and financial reporting bases of the Company's assets and liabilities. A valuation allowance is provided on deferred taxes if it is determined that it is more likely than not that the asset will not be realized.

Management judgment is required to determine the amount of benefit to be recognized in relation to an uncertain tax position. The Company uses a two-step process to evaluate tax positions. The first step requires an entity to determine whether it is more likely than not (greater than 50% chance) that the tax position will be sustained. The second step requires an entity to recognize in the financial statements the benefit of a tax position that meets the more-likely-than-not recognition criterion. The amounts ultimately paid upon resolution of issues raised by taxing authorities may differ materially from the amounts accrued and may materially impact the financial statements of the Company in future periods. The Company recognizes penalties and interest accrued related to income tax liabilities in the provision for income taxes on its consolidated statements of operations.

Supplemental Cash Flow Information

For the fiscal year ended March 31, 2020, the Company paid \$4,005 for income taxes, net of income tax refunds received. For the fiscal year ended March 31, 2019, the Company received \$4,701 as income tax refunds, net of taxes paid. For the fiscal year ended March 31, 2018, the Company paid \$11,190 for income taxes, net of income tax refunds received.

3. DIVESTED OPERATIONS AND ASSETS HELD FOR SALE

Fiscal 2020 Divestitures

In December 2019, the Company completed the sale of its manufacturing operations at its Nashville, TN, facility for cash proceeds net of transaction costs of approximately \$58,000, including approximately \$7,000 allocated as a premium paid by the buyer in exchange for a specified performance guarantee. The Company recognized a loss of approximately \$64,000, which is presented on the accompanying consolidated statements of operations within loss on sale of assets and businesses. The operating results of the Nashville manufacturing operations are included in Aerospace Structures through the date of divestiture. Additionally, as part of the transaction, the Company agreed to transfer to the buyer, within 120 days from the date of closing, certain defined benefit pension assets and obligations of approximately \$55,000 associated with the Nashville manufacturing operations. In accordance with applicable defined benefit pension plan accounting guidance, the transfer was treated as a settlement for purposes of the Company's financial statements and resulted in accelerated recognition of previously unrecognized actuarial losses. The Company completed the transfer of the defined benefit pension assets and obligations in March 2020 and recognized a one-time settlement loss of approximately \$28,000.

In September 2019, the Company completed the assignment of its E-2 Jets contract with Embraer for the manufacture of structural components for their program to AeroSpace Technologies of Korea Inc. ("ASTK"). As part of this transaction, the Company transferred certain assets and liabilities to ASTK and recognized a gain of approximately \$10,000, which is presented on the accompanying consolidated statements of operations within loss on sale of assets and businesses. The assets and liabilities transferred were included within Aerospace Structures through the date of divestiture.

Fiscal 2019 Divestitures

In March 2019, the Company sold all of the shares of Triumph Structures – Kansas City, Inc.; Triumph Structures – Wichita, Inc.; Triumph Gear Systems – Toronto; ULC; and Triumph Northwest (The Triumph Group Operations, Inc.) (together, "Machining"). Total cash proceeds net of transaction costs for the sale of Machining was approximately \$43,000. A portion of the proceeds associated with the sale of Machining included consideration in the form of a note receivable of \$10,000. Upon closing, the Company recognized a loss of approximately \$116,000. An additional loss of approximately \$3,000 was recognized during the fiscal 2020, as a result of working capital adjustments and additional transaction costs and is presented within loss on sale of assets and businesses on the accompanying condensed consolidated statements of operations.

In March 2019, the Company sold all of the shares of (i) Triumph Fabrications - San Diego, Inc. and Triumph Fabrications - Ft. Worth, Inc. (together, "Fabrications"), and (ii) Triumph Aviation Services - NAAS Division, Inc. ("NAAS"). Total cash proceeds net of transaction costs for the sales of Fabrications and NAAS were approximately \$133,000 and \$18,000, respectively. As a result of the sales of Fabrications, the Company recognized a gain of approximately \$54,000. The sale of NAAS resulted in an immaterial gain.

In February 2019, the Company transitioned responsibility for the Global 7500 wing program manufacturing operations of Aerospace Structures to Bombardier at which point Bombardier assumed the program's assets and obligations. As a result of this transfer, the Company recognized a loss of approximately \$169,000. The Company continues to provide transition services related to infrastructure support reducing in scope over the next several months, as well as a lease of the building in Red Oak, Texas, dedicated to the manufacturer of the Global 7500 wing to Bombardier.

In July and August 2018, respectively, the Company sold all of the shares of Triumph Structures - East Texas, Inc. as well as all of the shares of Triumph Structures - Los Angeles, Inc., and Triumph Processing, Inc. for combined cash proceeds net of transactions costs of approximately \$43,000 and a note receivable of \$7,000. The note receivable was collected in October 2018. As a result of these sales, the Company recognized losses of approximately \$17,000, which are presented on the accompanying consolidated statements of operations within loss on sale of assets and businesses.

Fiscal 2018 Divestitures

In March 2018, the Company sold all of the shares of Triumph Structures - Long Island, LLC ("TS-LI") for cash proceeds of \$9,500 and a note receivable of \$1,400. The note receivable was collected in July 2018. As a result of the sale of TS-LI, the Company recognized a loss of \$10,370. The operating results of TS-LI were included in Aerospace Structures through the date of divestiture.

In September 2017, the Company sold all of the shares of Triumph Processing - Embee Division, Inc. ("Embee") for total cash proceeds of \$64,986. As a result of the sale of Embee, the Company recognized a loss of \$17,857. The operating results of Embee were included in Integrated Systems through the date of divestiture.

4. REVENUE RECOGNITION AND CONTRACTS WITH CUSTOMERS

Disaggregation of Revenue

The Company disaggregates revenue based on the method of measuring satisfaction of the performance obligation either over time or at a point in time. Additionally, the Company disaggregates revenue based upon the end market where products and services are transferred to the customer. The Company's principal operating segments and related revenue are discussed in Note 13, Segments.

The following table shows disaggregated net sales satisfied overtime and at a point in time (excluding intercompany sales) for the year ended March 31, 2020 and 2019:

	Year Ended March 31,	
	2020	2019
Systems & Support		
Satisfied over time	\$ 578,117	\$ 548,562
Satisfied at a point in time	738,158	726,791
Revenue from contracts with customers	1,316,275	1,275,353
Amortization of acquired contract liabilities	34,486	34,121
Total revenue	1,350,761	1,309,474
Aerospace Structures		
Satisfied over time	\$ 1,378,866	\$ 1,832,422
Satisfied at a point in time	129,690	189,841
Revenue from contracts with customers	1,508,556	2,022,263
Amortization of acquired contract liabilities	40,800	33,193
Total revenue	1,549,356	2,055,456
	\$ 2,900,117	\$ 3,364,930

The following table shows disaggregated net sales by end market (excluding intercompany sales) for the year ended March 31, 2020 and 2019:

	Year Ended March 31,	
	2020	2019
Systems & Support		
Commercial aerospace	\$ 737,885	\$ 730,562
Military	436,166	409,027
Business jets	61,338	63,649
Regional	43,761	45,397
Non-aviation	37,125	26,718
Revenue from contracts with customers	1,316,275	1,275,353
Amortization of acquired contract liabilities	34,486	34,121
Total revenue	\$ 1,350,761	\$ 1,309,474
Aerospace Structures		
Commercial aerospace	\$ 879,690	\$ 1,020,649
Military	116,846	237,501
Business jets	422,681	699,747
Regional	89,318	36,038
Non-aviation	21	28,328
Revenue from contracts with customers	1,508,556	2,022,263
Amortization of acquired contract liabilities	40,800	33,193
Total revenue	1,549,356	2,055,456
	\$ 2,900,117	\$ 3,364,930

Contract Assets and Liabilities

Contract assets primarily represent revenues recognized for performance obligations that have been satisfied or partially satisfied but for which amounts have not been billed. This typically occurs when revenue is recognized over time but the Company's contractual right to bill the customer and receive payment is conditional upon the satisfaction of additional performance obligations in the contract, such as final delivery of the product. Contract assets are recognized when the revenue associated with the contract is recognized prior to billing and derecognized when billed in accordance with the terms of the contract. The Company performs ongoing evaluations of the potential impairment of its contract assets based on prior experience and specific matters when they arise. No impairments to contract assets were recorded for the years ended March 31, 2020 or 2019.

Contract liabilities are recorded when customers remit contractual cash payments in advance of the Company satisfying performance obligations under contractual arrangements, including those with performance obligations to be satisfied over a period of time. Contract liabilities other than those pertaining to forward loss reserves are derecognized when or as revenue is recognized.

Contract modifications can also impact contract asset and liability balances. When contracts are modified to account for changes in contract specifications and requirements, the Company considers whether the modification either creates new or changes the existing enforceable rights and obligations. Contract modifications that are for goods or services that are not distinct from the existing contract, due to the significant integration with the original good or service provided, are accounted for as if they were part of that existing contract. The effect of a contract modification to an existing contract on the transaction price and our 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. When the modifications include additional performance obligations that are distinct and at relative stand-alone selling price, they are accounted for as a new contract and performance obligation, which are recognized prospectively.

Contract balances are classified as assets or liabilities on a contract-by-contract basis at the end of each reporting period. The following table summarizes our contract assets and liabilities balances:

	March 31, 2020	March 31, 2019	Change
Contract assets	\$ 267,079	\$ 326,667	\$ (59,588)
Contract liabilities	(386,585)	(450,051)	63,466
Net contract liability	\$ (119,506)	\$ (123,384)	\$ 3,878

The Company recognized revenue due to changes in estimates associated with performance obligations satisfied or partially satisfied in previous periods of \$12,011. The decrease in contract assets is the result of \$76,667 and \$39,753 in contract assets liquidated as part of the assignment of the E2-Jets contract to ASTK and the sale of the Nashville manufacturing operations, respectively, partially offset by revenue recognized in excess of amounts billed during the year ended March 31, 2020. The decrease in contract liabilities is the result of revenue recognized in excess of the receipt of additional customer advances during the period as well as \$12,641 in contract liabilities liquidated as part of the assignment of the E2-Jets contract to ASTK. For the period ended March 31, 2020, the Company recognized \$89,012 of revenue that was included in the contract liability balance at the beginning of the period. Noncurrent contract assets presented in other, net on the accompanying consolidated balance sheets as of March 31, 2020 and 2019, were \$22,662 and \$34,185, respectively. Noncurrent contract liabilities presented in other noncurrent liabilities on the accompanying consolidated balance sheets as of March 31, 2020 and 2019, were \$91,265 and \$156,332, respectively.

Performance Obligations

Customers generally contract with the Company for requirements in a segment relating to a specific program, and the Company's performance obligations consist of a wide range of engineering design services and manufactured components, as well as spare parts and repairs for OEMs. A single contract may contain multiple performance obligations consisting of both recurring and nonrecurring elements.

As of March 31, 2020, the Company has the following unsatisfied, or partially unsatisfied, performance obligations that are expected to be recognized in the future as noted in the table below. The Company expects options to be exercised in addition to the amounts presented below.

	Total	Less than 1 year	1-3 years	4-5 years	More than 5 years
Unsatisfied performance obligations	\$3,875,679	\$1,956,289	\$1,104,754	\$ 441,808	\$ 372,828

5. INVENTORIES

The Company records inventories at the lower of cost (average-cost or specific-identification methods) or market. The Company expenses general and administrative costs related to products and services provided essentially under commercial terms and conditions as incurred. The Company determines the costs of inventories sold by the first-in, first-out or average cost methods.

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The components of inventories are as follows:

	March 31,	
	2020	2019
Raw materials	\$ 32,552	\$ 35,883
Work-in-process, including manufactured and purchased components	312,953	277,996
Finished goods	50,011	42,399
Rotable assets	57,460	57,282
Total inventories	\$ 452,976	\$ 413,560

6. PROPERTY AND EQUIPMENT

Property and equipment, which include equipment under finance lease and leasehold improvements, are recorded at cost and depreciated over the estimated useful lives of the related assets, or the lease term if shorter in the case of leasehold improvements, using the straight-line method. Buildings and improvements are depreciated over a period of 15 to 39.5 years, and machinery and equipment are depreciated over a period of 7 to 15 years (except for furniture, fixtures and computer equipment which are depreciated over a period of 3 to 10 years).

Net property and equipment is:

	March 31,	
	2020	2019
Land	\$ 42,438	\$ 52,333
Construction-in-process	19,231	25,310
Buildings and improvements	285,407	320,289
Machinery and equipment	701,018	814,040
	1,048,094	1,211,972
Less: accumulated depreciation	629,953	668,262
	\$ 418,141	\$ 543,710

Depreciation expense for the fiscal years ended March 31, 2020, 2019, and 2018, was \$89,857, \$97,323 and \$101,873, respectively, which includes depreciation of assets under finance lease.

7. GOODWILL AND OTHER INTANGIBLE ASSETS

The following is a summary of the changes in the carrying value of goodwill by reportable segment, for the fiscal years ended March 31, 2020 and 2019:

	Systems & Support
March 31, 2019	\$ 583,225
Effect of exchange rate changes	(3,577)
Impairment of goodwill	(66,121)
March 31, 2020	\$ 513,527
	Systems & Support
March 31, 2018	\$ 592,828
Goodwill associated with dispositions	(2,788)
Effect of exchange rate changes	(6,815)
March 31, 2019	\$ 583,225

As of March 31, 2020 and 2019, Aerospace Structures had gross goodwill of \$1,166,773 and \$1,246,454, respectively, which was fully impaired. As of March 31, 2020 and 2019, Systems & Support had gross goodwill of \$579,649 and \$583,225, respectively, and accumulated goodwill impairment of \$66,121 and \$0, respectively.

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Intangible Assets

The components of intangible assets, net are as follows:

	March 31, 2020			
	Weighted-Average Life (in Years)	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	17.7	\$ 550,131	\$ (276,980)	\$ 273,151
Product rights, technology and licenses	11.4	54,676	(46,180)	8,496
Noncompete agreements and other	16.7	2,656	(1,208)	1,448
Tradenames	10.0	150,000	(51,127)	98,873
Total intangibles, net		\$ 757,463	\$ (375,495)	\$ 381,968

	March 31, 2019			
	Weighted-Average Life (in Years)	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	17.7	\$ 551,093	\$ (245,626)	\$ 305,467
Product rights, technology and licenses	11.4	54,850	(43,978)	10,872
Noncompete agreements and other	16.7	2,656	(1,041)	1,615
Tradenames	10.0	150,000	(37,000)	113,000
Total intangibles, net		\$ 758,599	\$ (327,645)	\$ 430,954

Amortization expense for the fiscal years ended March 31, 2020, 2019, and 2018, was \$48,311, \$52,581, and \$56,495, respectively. Amortization expense for the five fiscal years succeeding March 31, 2020, by year is expected to be as follows: 2021: \$48,139; 2022: \$47,898; 2023: \$47,898; 2024: \$47,898; 2025: \$47,898, and thereafter: \$142,237.

8. ACCRUED EXPENSES

Accrued expenses consist of the following items:

	March 31,	
	2020	2019
Accrued pension	\$ 753	\$ 742
Accrued other postretirement benefits	4,775	10,758
Accrued compensation and benefits	84,404	102,009
Accrued interest	13,252	12,374
Accrued warranties	30,079	18,977
Accrued workers' compensation	16,583	17,635
Accrued income tax	3,796	5,974
Operating lease liabilities	13,139	—
All other	60,622	71,103
Total accrued expenses	\$ 227,403	\$ 239,572

9. LEASES

The components of lease expense for the year ended March 31, 2020, are disclosed in the table below.

Lease Cost	Financial Statement Classification	Year ended March 31, 2020
Operating lease cost	Cost of sales or Selling, general and administrative expense	\$ 24,539
Variable lease cost	Cost of sales or Selling, general and administrative expense	8,382
Financing Lease Cost:		
Amortization of right-of-use assets	Depreciation and amortization	5,317
Interest on lease liability	Interest expense and other	2,307
Total lease cost (1)		\$ 40,545

(1) Total lease cost does not include short-term leases or sublease income, both of which are immaterial.

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Supplemental cash flow information for the year ended March 31, 2020, is disclosed in the table below.

	Year ended March 31, 2020	
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows used in operating leases	\$	21,430
Operating cash flows used in finance leases		2,327
Financing cash flows used in finance leases		8,370
ROU assets obtained in exchange for lease liabilities		
Operating leases		3,826
Finance leases	\$	1,039

Supplemental balance sheet information related to leases as of March 31, 2020, is disclosed in the table below.

Leases	Classification	March 31, 2020	
Assets			
Operating lease ROU assets	Other, net	\$	61,461
Finance lease ROU assets, cost	Property and equipment, net		39,461
Accumulated amortization	Property and equipment, net		(18,650)
Finance lease ROU assets, net			20,811
Total lease assets		\$	82,272
Liabilities			
Current			
Operating	Accrued expenses	\$	13,139
Finance	Current portion of long-term debt		7,336
Noncurrent			
Operating	Other noncurrent liabilities		54,687
Finance	Long-term debt, less current portion		16,597
Total lease liabilities		\$	91,759

Information related to lease terms and discount rates as of March 31, 2020, is disclosed in the table below.

	March 31, 2020
Weighted average remaining lease term (years)	
Operating leases	7.2
Finance leases	6.9
Weighted average discount rate	
Operating leases	6.2%
Finance leases	5.9%

The maturity of the Company's lease liabilities as of March 31, 2020, is disclosed in the table below.

	Operating leases	Finance leases	Total
FY2021	\$ 16,843	\$ 8,545	\$ 25,388
FY2022	14,523	5,571	20,094
FY2023	11,072	2,707	13,779
FY2024	8,311	2,138	10,449
FY2025	7,042	1,308	8,350
Thereafter	27,192	9,954	37,146
Total lease payments	84,983	30,223	115,206
Less: Imputed interest	(17,157)	(6,290)	(23,447)
Total lease liabilities	\$ 67,826	\$ 23,933	\$ 91,759

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At March 31, 2019, future minimum payments under noncancelable operating leases with initial or remaining terms of more than one year were as follows: 2020—\$21,543; 2021—\$18,516; 2022—\$14,394; 2023—\$11,037; 2024—\$8,409 and thereafter—\$34,828 through 2031. In the normal course of business, operating leases are generally renewed or replaced by other leases.

10. LONG-TERM DEBT

Long-term debt consists of the following:

	March 31,	
	2020	2019
Revolving credit facility	\$ 400,000	\$ 215,000
Receivable securitization facility	75,000	80,700
Finance leases	23,933	31,292
Senior secured notes due 2024	525,000	—
Senior notes due 2021	—	375,000
Senior notes due 2022	300,000	300,000
Senior notes due 2025	500,000	500,000
Less: debt issuance costs	(16,426)	(13,171)
	1,807,507	1,488,821
Less: current portion	7,336	8,201
	\$ 1,800,171	\$ 1,480,620

Revolving Credit Facility

On September 23, 2019, the Company and its subsidiary co-borrowers and guarantors entered into an Eleventh Amendment to the Credit Agreement (the "Eleventh Amendment" and the existing Credit Agreement as amended by the Eleventh Amendment, the "Credit Agreement") with the Administrative Agent and the Lenders party thereto. Among other things, the Eleventh Amendment:

- (i) permits the Company to incur indebtedness in respect of the Senior Secured Notes due 2024 (the "2024 Notes") in an aggregate principal amount of up to \$525,000, subject to the terms and conditions of the Intercreditor Agreement;
- (ii) lowers the aggregate amount of revolving credit commitments from \$700,000 to \$600,000 upon the earlier of (a) the completion by the Company of \$100,000 in certain asset sales or divestitures or (b) March 31, 2020;
- (iii) extends, with respect to extending banks representing approximately \$406,500 of \$600,000 total commitments outstanding as of March 31, 2020, the expiration date for the revolving line of credit available to the Company pursuant to the Credit Agreement to March 15, 2024; and retains an accordion feature that permits the Company to request an increase to the revolving credit commitments by up to \$200,000;
- (iv) adds an additional mandatory prepayment provision requiring that the Company prepay any outstanding revolving credit loans in an amount equal to (a) with respect to an Identified Asset Sale (as defined in the Credit Agreement) the greater of (x) \$50,000 and (y) 100% of the net asset sale proceeds received in connection therewith, and (b) with respect to other Specified Asset Sales (as defined in the Credit Agreement), 100% of the net asset proceeds received from such other Specified Asset Sales; and
- (v) modifies certain financial covenants and other terms.

In connection with the Eleventh Amendment to the Credit Agreement, the Company incurred \$6,944 of financing costs. These costs, along with the \$6,222 of unamortized financing costs subsequent to the Tenth Amendment, are being amortized over the remaining term of the Credit Agreement on a lender-by-lender basis. As a result of the reduction in the capacity of the Credit Agreement, the Company wrote off a proportional amount of unamortized financing fees existing prior to the Eleventh Amendment. As of March 31, 2020, revolving credit commitments are \$600,000.

The obligations under the Credit Agreement and related documents are secured by liens on substantially all assets of the Company and its domestic subsidiaries pursuant to a Second Amended and Restated Guarantee and Collateral Agreement, dated as of November 19, 2013, among the administrative agent, the Company and the subsidiaries of the Company party thereto.

Pursuant to the Credit Agreement, the Company can borrow, repay and re-borrow revolving credit loans, and cause to be issued letters of credit, in an aggregate principal amount not to exceed \$600,000 outstanding at any time as such revolving credit commitments are or have been reduced as discussed above. The Credit Agreement bears interest at either: (i) London Interbank Offered Rate ("LIBOR") plus between 1.50% and 3.50%; (ii) the prime rate; or (iii) an overnight rate at the option of the Company. The applicable interest rate is based upon the Company's ratio of total indebtedness to earnings before interest, taxes, depreciation and amortization provided, however, that during the Pricing Restriction Period (as defined in the Credit Agreement), the loans will bear interest at the highest rate above LIBOR. In addition, the Company is required to pay a commitment fee of 0.50% on the unused portion of the Credit Agreement. The Company's obligations under the Credit Agreement are guaranteed by the Company's domestic subsidiaries.

At March 31, 2020, there were \$400,000 in borrowings and \$22,338 in letters of credit outstanding under the Revolving Line of Credit provisions of the Credit Agreement, primarily to support insurance policies. We have since repaid approximately \$200,000 of the borrowings. At March 31, 2019, there were \$215,000 in outstanding borrowings and \$30,773 in letters of credit outstanding under the Revolving Line of Credit provisions of the Credit Agreement, primarily to support insurance policies. The level of unused borrowing capacity under the Revolving Line of Credit provisions of the Credit Agreement varies from time to time depending in part upon its compliance with financial and other covenants set forth in the related agreement. The Credit Agreement contains certain affirmative and negative covenants, including limitations on specified levels of indebtedness to earnings before interest, taxes, depreciation and amortization, and interest coverage requirements, and includes limitations on, among other things, liens, mergers, consolidations, sales of assets, and incurrence of debt. If an event of default were to occur under the Credit Agreement, the lenders would be entitled to declare all amounts borrowed under it immediately due and payable. The occurrence of an event of default under the Credit Agreement could also cause the acceleration of obligations under certain other agreements. The Company is currently in compliance with all such covenants. As of March 31, 2020, the Company had borrowing capacity under this agreement of \$70,271 after reductions for borrowings, letters of credit outstanding under the facility and consideration of covenant limitations.

On May 22, 2020, the Company and its subsidiary co-borrowers and guarantors entered into an Twelfth Amendment to the Credit Agreement (the "Twelfth Amendment" and the existing Credit Agreement as amended by the Twelfth Amendment, the "Amended Credit Agreement") with the Administrative Agent and the Lenders party thereto. Among other things, the Twelfth Amendment (i) limits the amount of cash in the United States the Company can hold on its balance sheet to \$50,000, (ii) authorizes the sale of any Specified TAS Business Unit (as defined in the Amended Credit Agreement); (iii) provides for a reserve against the availability of up to 75% of the proceeds of Specified Asset Sales (as defined in the Amended Credit Agreement); and (iv) modifies certain financial covenants and other terms over the quarterly periods ending June 2020 through March 2022.

Receivables Securitization Program

In December 2019, the Company amended its receivable securitization facility (the "Securitization Facility") decreasing the purchase limit from \$125,000 to \$75,000 and extending the term through December 2022. In connection with the Securitization Facility, the Company sells on a revolving basis certain eligible accounts receivable to Triumph Receivables, LLC, a wholly-owned special-purpose entity, which in turn sells a percentage ownership interest in the receivables to commercial paper conduits sponsored by financial institutions. The Company is the servicer of the trade accounts receivable under the Securitization Facility. As of March 31, 2020, the maximum amount available under the Securitization Facility was \$75,000. Interest rates are based on LIBOR plus a program fee and a commitment fee. The program fee is 0.13% on the amount outstanding under the Securitization Facility. Additionally, the commitment fee is 0.50% on 100.00% of the maximum amount available under the Securitization Facility. The Company secures its trade accounts receivable, which are generally non-interest-bearing, in transactions that are accounted for as borrowings pursuant to ASC 860, *Transfers and Servicing*.

The agreement governing the Securitization Facility contains restrictions and covenants, including limitations on the making of certain restricted payments; creation of certain liens; and certain corporate acts such as mergers, consolidations and the sale of all or substantially all the Company's assets.

Senior Secured Notes Due 2024

On September 23, 2019, the Company issued \$525,000 principal amount of 6.250% Senior Secured Notes due September 15, 2024. The 2024 Notes were sold at 100% of principal amount and have an effective interest yield of 6.250%. Interest is payable semiannually in cash in arrears on March 15 and September 15 of each year, commencing on March 15, 2020. In connection with the issuance of the 2024 Notes, the Company incurred approximately \$9,300 of costs, which were deferred and are being amortized over the term of the 2024 Notes.

The 2024 Notes are second lien secured obligations of the Company and its subsidiary guarantors. The 2024 Notes:

- (i) rank equal in right of payment to existing and future senior indebtedness of the Company and its subsidiary guarantors, including the obligations of the Company and its subsidiary guarantors under the Company's credit facility;

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- (ii) are effectively subordinated to all obligations of the Company and its subsidiary guarantors that are either (A) secured by a lien on the Collateral (as defined below) that is senior or prior to the second-priority liens securing the 2024 Notes, including the first-priority liens securing borrowings under the Company's credit facility and certain cash management and hedging obligations, or (B) secured by assets that do not constitute the Collateral, in each case to the extent of the value of the assets securing such obligations;
- (iii) are senior in right of payment to existing and future subordinated indebtedness of the Company and its subsidiary guarantors;
- (iv) are effectively senior to all existing and future unsecured debt of the Company and its subsidiary guarantors, but only to the extent of the value of the Collateral (after giving effect to any senior liens on the Collateral); and
- (v) are structurally subordinated in right of payment to all indebtedness and other liabilities of the Company's existing and future subsidiaries that do not guarantee the 2024 Notes.

The 2024 Notes are guaranteed on a full, senior secured, joint and several basis by each of the Company's domestic restricted subsidiaries that is a borrower under the Company's credit facility or that guarantees any of the Company's debt or that of any of the Company's domestic restricted subsidiaries under the Company's credit facility and in the future by any of the Company's domestic restricted subsidiaries that are borrowers under any credit facility or that guarantee any debt of the Company or any of its domestic restricted subsidiaries incurred under any credit facility (the "Guarantor Subsidiaries").

The Company may redeem the 2024 Notes, in whole or in part, at any time or from time to time on or after September 15, 2020, at specified redemption prices, plus accrued and unpaid interest, if any, to the redemption date. At any time or from time to time prior to September 15, 2020, the Company may redeem the 2024 Notes, in whole or in part, at a redemption price equal to 100% of their principal amount plus a make whole premium, together with accrued and unpaid interest, if any, to the redemption date. In addition, the Company may redeem up to 40% of the aggregate principal amount of the outstanding 2024 Notes prior to September 15, 2020, with the net cash proceeds from certain equity offerings at a redemption price equal to 106.250% of their principal amount, together with accrued and unpaid interest, if any, to the redemption date.

If the Company experiences specific kinds of changes of control, the Company is required to offer to purchase all of the 2024 Notes at a purchase price of 101% of their principal amount, plus accrued and unpaid interest, if any, to the date of purchase.

The 2024 Notes were issued pursuant to an indenture dated as of September 23, 2019 (the "Indenture"). The Indenture contains covenants that, among other things, limit the ability of the Company and its restricted subsidiaries to: (i) incur additional indebtedness; (ii) pay dividends or make other distributions; (iii) make other restricted payments and investments; (iv) create liens; (v) incur restrictions on the ability of restricted subsidiaries to pay dividends or make certain other payments; (vi) sell assets, including capital stock of restricted subsidiaries; (vii) enter into sale and leaseback transactions; (viii) merge or consolidate with other entities; and (ix) enter into transactions with affiliates.

Senior Notes due 2021

On September 23, 2019, the Company called all outstanding 4.875% Senior Notes due 2021 (the "2021 Notes") and discharged the 2021 Notes by irrevocably depositing with the 2021 Notes trustee sufficient funds to pay all principal and accrued interest through October 23, 2019. On October 23, 2019, the Company redeemed \$375,000 principal amount of the 2021 Notes with the proceeds of the 2024 Notes.

Senior Notes due 2022

On June 3, 2014, the Company issued \$300,000 principal amount of 5.25% Senior Notes due June 1, 2022 (the "2022 Notes"). The 2022 Notes were sold at 100% of principal amount and have an effective interest yield of 5.25%. Interest is payable semiannually in cash in arrears on June 1 and December 1 of each year, commencing on December 1, 2014. In connection with the issuance of the 2022 Notes, the Company incurred approximately \$4,990 of costs, which were deferred and are being amortized on the effective interest method over the term of the 2022 Notes.

The 2022 Notes are the Company's senior unsecured obligations and rank equally in right of payment with all of its other existing and future senior unsecured indebtedness and senior in right of payment to all of its existing and future subordinated indebtedness. The 2022 Notes are guaranteed on a full, joint and several basis by each of the Guarantor Subsidiaries.

The Company is obligated to offer to repurchase the 2022 Notes at a price of (i) 101% of their principal amount plus accrued and unpaid interest, if any, as a result of certain change-of-control events and (ii) 100% of their principal amount plus accrued and unpaid interest, if any, in the event of certain asset sales. These restrictions and prohibitions are subject to certain qualifications and exceptions.

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The 2022 Indenture contains covenants that, among other things, limit the Company's ability and the ability of any of the Guarantor Subsidiaries to (i) grant liens on its assets, (ii) make dividend payments, other distributions or other restricted payments, (iii) incur restrictions on the ability of the Guarantor Subsidiaries to pay dividends or make other payments, (iv) enter into sale and leaseback transactions, (v) merge, consolidate, transfer or dispose of substantially all of their assets, (vi) incur additional indebtedness, (vii) use the proceeds from sales of assets, including capital stock of restricted subsidiaries, and (viii) enter into transactions with affiliates.

Senior Notes Due 2025

On August 17, 2017, the Company issued \$500,000 principal amount of 7.75% Senior Notes due August 15, 2025 (the "2025 Notes"). The 2025 Notes were sold at 100% of principal amount and have an effective interest yield of 7.75%. Interest is payable semiannually in cash in arrears on February 15 and August 15 of each year, commencing on February 15, 2018. In connection with the issuance of the 2025 Notes, the Company incurred approximately \$8,779 of costs, which were deferred and are being amortized on the effective interest method over the term of the 2025 Notes.

The 2025 Notes are the Company's senior unsecured obligations and rank equally in right of payment with all of its other existing and future senior unsecured indebtedness and senior in right of payment to all of its existing and future subordinated indebtedness. The 2025 Notes are guaranteed on a full, joint and several basis by each of the Guarantor Subsidiaries.

The Company may redeem some or all of the 2025 Notes prior to August 15, 2020, by paying a "make-whole" premium. The Company may redeem some or all of the 2025 Notes on or after August 15, 2020, at specified redemption prices. In addition, prior to August 15, 2020, the Company may redeem up to 35% of the 2025 Notes with the net proceeds of certain equity offerings at a redemption price equal to 107.75% of the aggregate principal amount plus accrued and unpaid interest, if any, subject to certain limitations set forth in the indenture governing the 2025 Notes (the "2025 Indenture").

The Company is obligated to offer to repurchase the 2025 Notes at a price of (i) 101% of their principal amount plus accrued and unpaid interest, if any, as a result of certain change-of-control events and (ii) 100% of their principal amount plus accrued and unpaid interest, if any, in the event of certain asset sales. These restrictions and prohibitions are subject to certain qualifications and exceptions.

The 2025 Indenture contains covenants that, among other things, limit the Company's ability and the ability of any of the guarantor subsidiaries to (i) grant liens on its assets, (ii) make dividend payments, other distributions or other restricted payments, (iii) incur restrictions on the ability of the Guarantor Subsidiaries to pay dividends or make other payments, (iv) enter into sale and leaseback transactions, (v) merge, consolidate, transfer or dispose of substantially all of their assets, (vi) incur additional indebtedness, (vii) use the proceeds from sales of assets, including capital stock of restricted subsidiaries, and (viii) enter into transactions with affiliates.

Financial Instruments Not Recorded at Fair Value

Carrying amounts and the related estimated fair values of the Company's long-term debt not recorded at fair value in the consolidated financial statements are as follows:

March 31, 2020		March 31, 2019	
Carrying Value	Fair Value	Carrying Value	Fair Value
\$ 1,807,507	\$ 1,559,455	\$ 1,488,821	\$ 1,568,037

The fair value of the long-term debt was calculated based on either interest rates available for debt with terms and maturities similar to the Company's existing debt arrangements or broker quotes on our existing debt (Level 2 inputs).

Interest paid on indebtedness during the fiscal years ended March 31, 2020, 2019, and 2018, amounted to \$99,438, \$99,981 and \$86,345, respectively.

As of March 31, 2020, the maturities of long-term debt are as follows: 2021 — \$7,336; 2022 — \$4,659; 2023 — \$376,952; 2024 — \$401,486; 2025 — \$525,730; and thereafter— \$507,770 through 2032.

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11. OTHER NONCURRENT LIABILITIES

Other noncurrent liabilities are composed of the following items:

	March 31,	
	2020	2019
Acquired contract liabilities, net	\$ 92,962	\$ 184,612
Accrued warranties	31,036	39,418
Accrued workers' compensation	13,603	13,501
Noncurrent contract liabilities	91,265	156,332
Operating lease liabilities	54,687	—
Environmental contingencies	18,060	16,040
Income tax reserves	594	551
All other	3,962	14,095
Total other noncurrent liabilities	\$ 306,169	\$ 424,549

12. INCOME TAXES

The components of loss from continuing operations before income taxes are as follows:

	Year ended March 31,		
	2020	2019	2018
Foreign	\$ 33,399	\$ (18,336)	\$ (57,673)
Domestic	(55,727)	(308,857)	(404,175)
	\$ (22,328)	\$ (327,193)	\$ (461,848)

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

	Year ended March 31,		
	2020	2019	2018
Current:			
Federal	\$ (654)	\$ (1,253)	\$ 1,130
State	27	431	88
Foreign	3,602	3,335	5,433
	2,975	2,513	6,651
Deferred:			
Federal	2,748	(9,076)	(44,262)
State	73	1,593	(14,672)
Foreign	2	(456)	15,826
	2,823	(7,939)	(43,108)
	\$ 5,798	\$ (5,426)	\$ (36,457)

A reconciliation of the statutory federal income tax rate to the effective tax rate is as follows:

	Year ended March 31,		
	2020	2019	2018
Statutory federal income tax rate	21.0%	21.0%	31.5%
State and local income taxes, net of federal tax benefit	(12.1)	4.6	3.2
Goodwill impairment	(37.4)	—	(29.6)
Disposition of business	—	3.2	(0.3)
Miscellaneous permanent items and nondeductible accruals	3.9	(1.2)	(0.2)
Research and development tax credit	30.4	3.3	3.2
Foreign tax credits	(24.1)	(0.7)	1.2
Valuation allowance	27.9	(28.5)	(3.4)
Tax reform and CARES	(12.3)	0.4	5.1
Global Intangible Low-Taxed Income	(20.4)	(1.3)	—
Other (including foreign rate differential and FIN 48)	(2.8)	0.9	(2.8)
Effective income tax rate	(26.0)%	1.7%	7.9%

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The components of deferred tax assets and liabilities are as follows:

	March 31,	
	2020	2019
Deferred tax assets:		
Net operating loss and other credit carryforwards	\$ 318,341	\$ 309,961
Inventory	17,521	17,849
Accruals and reserves	40,492	41,091
Interest carryforward	38,383	24,457
Pension and other postretirement benefits	152,048	126,337
Lease right-of-use assets	11,495	—
Prepaid expenses and other	241	—
Acquired contract liabilities, net	21,771	45,479
	600,292	565,174
Valuation allowance	(438,667)	(399,013)
Net deferred tax assets	161,625	166,161
Deferred tax liabilities:		
Deferred revenue	38,458	27,159
Property and equipment	34,939	46,538
Goodwill and other intangible assets	80,740	93,272
Lease liabilities	14,928	—
Prepaid expenses and other	—	6,156
	169,065	173,125
Net deferred tax liabilities	\$ 7,440	\$ 6,964

The Company follows ASC 740, *Income Taxes*, which prescribes a recognition threshold and measurement attribute criteria for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return, as well as guidance on derecognition, classification, interest and penalties, disclosure and transition.

A valuation allowance, if needed, reduces deferred tax assets to the amount expected to be realized. When determining the amount of net deferred tax assets that are more likely than not to be realized, the Company assesses all available positive and negative evidence. This evidence includes, but is not limited to, prior earnings history, expected future earnings, carry-back and carry-forward periods and the feasibility of ongoing tax strategies that could potentially enhance the likelihood of the realization of a deferred tax asset. The weight given to the positive and negative evidence is commensurate with the extent the evidence may be objectively verified. As such, it is generally difficult for positive evidence regarding projected future taxable income exclusive of reversing taxable temporary differences to outweigh objective negative evidence of recent financial reporting losses.

Based on these criteria and the relative weighting of both the positive and negative evidence available, and in particular the activity surrounding the Company's prior earnings history, including the forward losses and intangible impairments previously recognized, management determined that it was necessary to establish a valuation allowance against principally all of its net deferred tax assets. Given the objective verifiable negative evidence of a three-year cumulative loss and the weighting of all available positive evidence, the Company excluded projected taxable income (aside from reversing taxable temporary differences) from the assessment of income that could be used as a source of taxable income to realize the deferred tax assets.

During fiscal year 2020, the Company adjusted the valuation allowance against the consolidated net deferred tax asset by \$39,654 primarily due to an increase in the net operating loss and changes to temporary differences related to the pension and other postretirement benefit plans. As of March 31, 2020, management determined that it was necessary to maintain a valuation allowance against principally all of its net deferred tax assets.

As of March 31, 2020, the Company has net operating loss carryforwards of \$658,146, \$1,369,092, and \$127,088 for U.S. federal, state, and foreign jurisdictions, respectively.

The effective income tax rate for the fiscal year ended March 31, 2020, was (26.0)% as compared with 1.7% for the fiscal year ended March 31, 2019. The effective income tax rate for the fiscal year ended March 31, 2020, included the benefit of the R&D tax credit of \$6,778, the benefit of the foreign tax rate differences of \$5,375, and the change in the valuation allowance of \$3,474. Due to the current year pretax loss, the effective tax rate drivers on a percentage basis are amplified. Accordingly, a year-over-year comparison of the effective tax rate may not be indicative of changes in the Company's tax position.

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The Company has been granted income tax holiday as an incentive to attract foreign investment by the Government of Thailand. The tax holidays expire in various years through 2026. We do not have any other tax holidays in the jurisdictions in which we operate. The income tax benefit attributable to the tax status of our subsidiaries in Thailand was approximately \$1,932 or \$0.04 per diluted share in fiscal 2020, \$2,160 or \$0.04 per diluted share in fiscal 2019 and \$1,530 or \$0.03 per diluted share in fiscal 2018.

At March 31, 2020, cumulative undistributed earnings of foreign subsidiaries, for which no U.S. income or foreign withholding taxes have been recorded is \$150,780. As the Company currently intends to indefinitely reinvest all such earnings, no provision has been made for income taxes that may become payable upon distribution of such earnings, and it is not practicable to determine the amount of the related unrecognized deferred income tax liability.

On March 27, 2020, the U.S. government enacted the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) which is aimed at providing emergency assistance and health care for individuals, families, and businesses affected by the COVID-19 pandemic and generally supporting the U.S. economy. The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss rules, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. Our income tax expense was increased by \$2,747 due to certain provisions relating to net operating loss carryforward periods.

The Company has classified uncertain tax positions as noncurrent income tax liabilities unless expected to be paid in one year.

As of March 31, 2020 and 2019, the total amount of unrecognized tax benefits was \$18,965 and \$19,152, respectively, all of which would impact the effective rate, if recognized. The Company anticipates that total unrecognized tax benefits may be reduced by zero in the next 12 months. With a few exceptions, the Company is no longer subject to U.S. federal, state, or local income tax examinations for fiscal years ended before March 31, 2014, or foreign income tax examinations by tax authorities for fiscal years ended before March 31, 2013.

As of March 31, 2020, the Company is not subject to any income tax examinations. The Company has filed appeals in a prior state examination related to fiscal years ended March 31, 1999 through March 31, 2005. The Company believes appropriate provisions for all outstanding issues have been made for all jurisdictions and all open years.

A reconciliation of the liability for uncertain tax positions, which are included in deferred taxes for the fiscal years ended March 31, 2020 and 2019, follows:

	Year ended March 31,		
	2020	2019	2018
Beginning balance	\$ 19,373	\$ 11,759	\$ 10,696
Adjustments for tax positions related to the current year	1,057	7,364	1,032
Adjustments for tax positions of prior years	(1,303)	250	31
Ending balance	\$ 19,127	\$ 19,373	\$ 11,759

13. STOCKHOLDERS' DEFICIT

In March 2019, the Company adopted a tax benefits preservation plan (the "Plan") designed to preserve Triumph's ability to utilize its net operating loss carryforwards and other tax attributes (collectively, "Tax Benefits"). The Plan is similar to plans adopted by other public companies with significant Tax Benefits. The Company obtained stockholder approval for the Plan as well as an amendment to the Company's amended and restated certificate of incorporation that permitted the issuance of Rights (as defined below) related to preferred stock, at its annual meeting of stockholders in 2019.

Under the Plan, Triumph declared a dividend distribution of one right (a "Right") for each share of its common stock outstanding at the close of business on March 25, 2019. The Rights trade with Triumph's common shares and will expire on March 13, 2022. The Rights also will expire: (i) if the Rights are redeemed or exchanged as provided in the Plan; (ii) if the Board determines that the Plan is no longer necessary or desirable for the preservation of the Tax Benefits; or (iii) if the Board determines that no Tax Benefits, once realized, as applicable, may be carried forward (in which case, the Rights will expire on the first date of the relevant taxable year for which such determination is made).

Pursuant to the Plan, if a stockholder (or group) becomes a 5% stockholder without meeting certain customary exceptions, the Rights become exercisable and entitle stockholders (other than the 5% stockholder or group causing the rights to become exercisable) to purchase additional shares of Triumph at a significant discount, resulting in significant dilution in the economic interest and voting power of the 5% stockholder or group causing the Rights to become exercisable. Stockholders owning five percent or more of Triumph's outstanding shares at the time the Plan was adopted were grandfathered and will only cause the Rights to distribute and become exercisable if they acquire an additional one percent or more of Triumph's outstanding shares. Under the Plan, the Board has the ability to determine in its sole discretion that any person shall not be deemed an acquiring person and therefore that the Rights shall not become exercisable if such person becomes a 5% stockholder. The adoption of the Plan and the dividend distribution did not have an impact on our consolidated financial statements.

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In 2014, the Company's Board of Directors authorized an increase in the Company's existing stock repurchase program by up to 5,000,000 shares of its common stock in addition to the 500,800 shares authorized under prior authorizations. As of March 31, 2020, the Company remains able to purchase an additional 2,277,789 shares. Repurchases may be made from time to time in open market transactions, block purchases, privately negotiated transactions or otherwise at prevailing prices. No time limit has been set for completion of the program.

The holders of the common stock are entitled to one vote per share on all matters to be voted upon by the stockholders of Triumph.

The Company has preferred stock of \$0.01 par value, 250,000 shares authorized. At March 31, 2020 and 2019, zero shares of preferred stock were outstanding.

Accumulated Other Comprehensive Loss

Changes in accumulated other comprehensive loss ("AOCI") by component for the years ended March 31, 2020 and 2019, were as follows:

	Currency Translation Adjustment	Unrealized Gains and Losses on Derivative Instruments	Defined Benefit Pension Plans and Other Postretirement Benefits	Total ⁽¹⁾
March 31, 2018	\$ (58,683)	\$ 122	\$ (309,309)	\$ (367,870)
AOCI before reclassifications	(15,770)	30	(126,679)	(142,419)
Amounts reclassified from AOCI	⁽³⁾ 25,847	(1,282)	(1,960) ⁽²⁾	22,605
Net current period OCI	10,077	(1,252)	(128,639)	(119,814)
March 31, 2019	(48,606)	(1,130)	(437,948)	(487,684)
AOCI before reclassifications	(13,439)	(1,611)	(210,142)	(225,192)
Amounts reclassified from AOCI	—	(1,562)	(4,990) ⁽²⁾	(6,552)
Net current period OCI	(13,439)	(3,173)	(215,132)	(231,744)
March 31, 2020	\$ (62,045)	\$ (4,303)	\$ (653,080)	\$ (719,428)

(1) Net of tax.

(2) Includes amortization of actuarial losses and recognized prior service (credits) costs, which are included in the net periodic pension cost of which a portion is allocated to production as inventoried costs.

(3) Includes amounts transferred from cumulative translation adjustments as a result of the sale of Triumph Gear Systems – Toronto.

14. LOSS PER SHARE

The following is a reconciliation between the weighted average common shares outstanding used in the calculation of basic and diluted loss per share:

	Year ended March 31,		
	2020	2019	2018
	(thousands)		
Weighted average common shares outstanding—basic	50,494	49,698	49,442
Net effect of dilutive stock options and non-vested stock ⁽¹⁾	—	—	—
Weighted average common shares outstanding—diluted	50,494	49,698	49,442

(1) For the fiscal years ended March 31, 2020, 2019, and 2018, the shares that could potentially dilute earnings per share in the future but were not included in diluted weighted average common shares outstanding because to do so would have been anti-dilutive were immaterial.

15. EMPLOYEE BENEFIT PLANS

Defined Contribution Pension Plan

The Company sponsors a defined contribution 401(k) plan, under which salaried and certain hourly employees may defer a portion of their compensation. Eligible participants may contribute to the plan up to the allowable amount as determined by the plan of their regular compensation before taxes. The Company generally matches contributions up to 75% of the first 6% of compensation contributed by the participant. All contributions and Company matches are invested at the direction of the employee in one or more investment options offered under the plan. Company matching contributions vest immediately and aggregated to \$14,763, \$13,685, and \$13,616 for the fiscal years ended March 31, 2020, 2019, and 2018, respectively. Effective April 1, 2020, the Company suspended its 401(k) match program for fiscal year 2021.

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Defined Benefit Pension and Other Postretirement Benefit Plans

The Company sponsors several defined benefit pension plans covering some of its employees. Most employees are ineligible to participate in the plans or have ceased to accrue additional benefits under the plans. Benefits under the defined benefit plans are based on years of service and, for most non-represented employees, on average compensation for certain years. It is the Company's policy to fund at least the minimum amount required for all qualified plans, using actuarial cost methods and assumptions acceptable under applicable government regulations, by making payments into a trust separate from us.

In addition to the defined benefit pension plans, the Company provides certain health care benefits for eligible retired employees. Such benefits are unfunded as of March 31, 2020. Employees achieve eligibility to participate in these contributory plans upon retirement from active service if they meet specified age and years of service requirements. Current plan documents reserve the right to amend or terminate the plans at any time, subject to applicable collective bargaining requirements for represented employees. During the fiscal year, the Company reached agreement with two unions whose members make up the vast majority of participants eligible for retiree healthcare benefits. Under the terms of these agreements, the right to benefits under the current program ceased for all represented participants (actively employed and retired) by April 1, 2020. Company-funded notional health reimbursement accounts were provided to retired participants (and their dependents) whose eligibility for current benefits ended under the new agreement. The average size of each account is immaterial and the Company anticipates that these accounts will be fully drawn down in two years. These changes served to reduce the Company's other postretirement benefit ("OPEB") liability by approximately \$99,000.

In accordance with ASC 715, the Company has recognized the funded status of the benefit obligation as of March 31, 2020 and 2019, on the accompanying consolidated balance sheets. The funded status is measured as the difference between the fair value of the plans' assets and the PBO or accumulated postretirement benefit obligation of the plan. The majority of the plan assets are publicly traded investments which were valued based on the market price as of the measurement date. Investments that are not publicly traded were valued based on the estimated fair value of those investments based on our evaluation of data from fund managers and comparable market data.

The following table sets forth the Company's consolidated defined benefit pension plans for its union and non-union employees as of March 31, 2020 and 2019, and the amounts recorded on the consolidated balance sheets at March 31, 2020 and 2019. Company contributions include amounts contributed directly to plan assets and indirectly as benefits paid from the Company's assets. Benefit payments reflect the total benefits paid from the plans and the Company's assets. Information on the plans includes both the domestic qualified and nonqualified plans and the foreign qualified plans.

	Pension Benefits		Other Postretirement Benefits	
	Year ended March 31,		Year ended March 31,	
	2020	2019	2020	2019
Change in projected benefit obligations				
Projected benefit obligation at beginning of year	\$ 2,234,734	\$ 2,277,816	\$ 109,455	\$ 119,164
Service cost	2,336	3,292	62	227
Interest cost	68,446	79,446	1,559	4,039
Actuarial loss (gain)	138,652	48,931	3,472	(2,576)
Plan amendments	4,898	1,138	(99,080)	—
Curtailments	22,732	—	—	—
Divestitures	(55,354)	—	—	—
Participant contributions	204	196	252	833
Settlements	(14,579)	—	—	—
Special termination benefits	11,642	4,032	—	—
Benefits paid	(156,084)	(176,398)	(8,570)	(12,232)
Currency translation adjustment	(2,642)	(3,719)	—	—
Projected benefit obligation at end of year	\$ 2,254,985	\$ 2,234,734	\$ 7,150	\$ 109,455
Accumulated benefit obligation at end of year	\$ 2,252,126	\$ 2,229,188	\$ 7,150	\$ 109,455
Assumptions used to determine benefit obligations at end of year				
Discount rate	2.47 - 3.32%	2.54 - 3.88%	3.00%	3.77%
Rate of compensation increase	3.50 - 4.50%	3.50 - 4.50%	N/A	N/A

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	Pension Benefits		Other Postretirement Benefits	
	Year ended March 31,		Year ended March 31,	
	2020	2019	2020	2019
Change in fair value of plan assets				
Fair value of plan assets at beginning of year	\$ 1,796,111	\$ 1,903,901	\$ —	\$ —
Actual return on plan assets	(20,869)	67,753	—	—
Settlements	(14,579)	—	—	—
Participant contributions	204	196	252	833
Divestitures	(55,354)	—	—	—
Company contributions	51,372	4,580	8,319	11,399
Benefits paid	(156,084)	(176,398)	(8,571)	(12,232)
Currency translation adjustment	(2,756)	(3,921)	—	—
Fair value of plan assets at end of year	\$ 1,598,045	\$ 1,796,111	\$ —	\$ —
Funded status (underfunded)				
Funded status	\$ (656,940)	\$ (438,623)	\$ (7,150)	\$ (109,455)
Reconciliation of amounts recognized on the consolidated balance sheets				
Pension asset—noncurrent	\$ 1,503	\$ 3,900	\$ —	\$ —
Accrued benefit liability—current	(753)	(742)	(4,775)	(10,758)
Accrued benefit liability—noncurrent	(657,690)	(441,781)	(2,375)	(98,697)
Net amount recognized	\$ (656,940)	\$ (438,623)	\$ (7,150)	\$ (109,455)
Reconciliation of amounts recognized in accumulated other comprehensive income				
Prior service credits	\$ 5,595	\$ 780	\$ (59,214)	\$ (14,497)
Actuarial losses (gains)	926,893	682,226	(58,151)	(67,985)
Income tax (benefits) expenses related to above items	(204,594)	(204,594)	42,016	42,016
Unamortized benefit plan costs (gains)	\$ 727,894	\$ 478,412	\$ (75,349)	\$ (40,466)

The components of net periodic benefit cost for fiscal years ended March 31, 2020, 2019, and 2018, are as follows:

	Pension Benefits			Other Postretirement Benefits		
	Year Ended March 31,			Year Ended March 31,		
	2020	2019	2018	2020	2019	2018
Components of net periodic pension cost						
Service cost	\$ 2,336	\$ 3,292	\$ 4,505	\$ 62	\$ 227	\$ 391
Interest cost	68,446	79,446	75,189	1,559	4,039	4,393
Expected return on plan assets	(141,329)	(147,411)	(152,346)	—	—	—
Amortization of prior service credit cost	(874)	(3,619)	(2,841)	(4,872)	(4,655)	(8,537)
Amortization of net loss	27,199	16,822	13,905	(6,361)	(9,851)	(7,275)
Curtailment loss (gain)	23,690	—	29	(49,491)	—	(26,274)
Settlements	28,452	—	523	—	—	—
Special termination benefits	11,642	4,032	—	—	—	—
Total net periodic benefit (income) expense	\$ 19,562	\$ (47,438)	\$ (61,036)	\$ (59,103)	\$ (10,240)	\$ (37,302)
Assumptions used to determine net periodic pension cost						
Discount rate	2.54 - 3.88%	2.65 - 4.01%	2.87 - 4.06%	2.68 - 3.77%	3.93%	3.62 - 3.93%
Expected long-term rate of return on plan assets	5.00 - 8.00%	5.00 - 8.00%	6.50 - 8.00%	N/A	N/A	N/A
Rate of compensation increase	3.50 - 4.50%	3.50 - 4.50%	3.50 - 4.50%	N/A	N/A	N/A

The discount rate is determined annually as of each measurement date, based on a review of yield rates associated with long-term, high-quality corporate bonds. At the end of each year, the discount rate is primarily determined using the results of bond yield curve models based on a portfolio of high-quality bonds matching notional cash inflows with the expected benefit payments for each significant benefit plan.

The expected return on plan assets is determined based on a market-related value of plan assets, which is a smoothed asset value. The market-related value of assets is calculated by recognizing investment performance that is different from that expected on a straight-line basis over five years. Actuarial gains and losses are amortized over the average remaining life expectancy of inactive participants for plans that are predominantly inactive and over the expected future service for active participants for other plans, but only to the extent unrecognized gains or losses exceed a corridor equal to 10% of the greater of the projected benefit obligation or market-related value of assets.

The Company estimates the service and interest cost of its pension and OPEB plans by using the specific spot rates derived from the yield curve used to discount the cash flows reflected in the measurement of the benefit obligation. The Company believes this approach provides a precise measurement of service and interest costs due to the correlation between projected benefit cash flows to the corresponding spot yield curve rates. The Company amortizes actuarial gains and losses over the average life expectancy of inactive plan participants because almost all plan participants are inactive.

During the fiscal year ended March 31, 2020, the Society of Actuaries released new base mortality tables and an updated projection scale. The Company has reflected these new releases in the measurement of our U.S. pension and OPEB plans as of March 31, 2020. This change resulted in a decrease in the benefit obligation.

The Company periodically experiences events or makes changes to its benefit plans that result in curtailment or special charges. Curtailments are recognized when events occur that significantly reduce the expected years of future service of present employees or eliminates the benefits for a significant number of employees for some or all of their future service.

Curtailment losses are recognized when it is probable the curtailment will occur and the effects are reasonably estimable. Curtailment gains are recognized when the related employees are terminated or a plan amendment is adopted, whichever is applicable.

As required under ASC 715, the Company remeasures plan assets and obligations during an interim period whenever a significant event occurs that results in a material change in the net periodic pension cost. The determination of significance is based on judgment and consideration of events and circumstances impacting the pension costs.

The following summarizes the key events whose effects on net periodic benefit cost and obligations are included in the tables above:

- As disclosed in Note 3, in March 2020, the Company transferred approximately \$55,354 of pension assets and liabilities to the buyer of its Nashville manufacturing operations. The divestiture transaction and resulting transfer resulted in a settlement charge of approximately \$28,452 and a curtailment charge of approximately \$214. These amounts are included in non-service defined benefit income on the consolidated statements of operations for the year ended March 31, 2020.
- In September 2019, the Company and the union which represents a portion of the workforce at the Company's Grand Prairie, TX, facility, in conjunction with an announced shutdown of this facility, agreed to changes to the pension and retiree welfare plans for represented plan members. Effective April 1, 2020, all current retiree welfare benefits for the union-represented retirees and active employees will cease. A new benefit consisting of a one-time credit to Health Reimbursement Accounts for the current retirees and their covered dependents will be provided. The Company and the union also agreed to increased pension benefits which are effective with the ratification of the agreement. This agreement resulted in a decrease of the projected other post-employment benefits ("OPEB") benefit obligation of \$61,766. It also resulted in a one-time OPEB curtailment gain of \$41,128. As a result of the planned shutdown, subsidized early retirement provisions within the retirement plan and the agreed-to pension benefit increases, a pension curtailment loss of \$23,476 was recognized, along with a one-time charge of \$11,642 for special termination benefits. The net curtailment gain and charge for special termination benefits are included in non-service defined benefit income on the consolidated statements of operations for the year ended March 31, 2020.
- In August 2019, the Company and the union which represents a portion of the workforce at the Company's Nashville, TN, facility agreed to changes to the pension and retiree welfare plans for represented plan members. Effective January 1, 2020, all current retiree welfare benefits for the union-represented retirees and active employees will cease. A new benefit consisting of a one-time credit to Health Reimbursement Accounts for the current retirees and their covered dependents will be provided. The Company and the union also agreed to increased pension benefits which are effective on February 1, 2020, and the union also agreed to increased pension benefits which are effective with the ratification of the agreement. This agreement resulted in a decrease of the projected OPEB benefit obligation of \$34,731. It also resulted in a one-time OPEB curtailment gain of \$8,363. The agreed-to pension benefit increases resulted in an increase of the projected pension benefit obligation of \$4,898. The curtailment gain is included in non-service defined benefit income on the consolidated statements of operations for the year ended March 31, 2020.

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- In February 2019, the Company transferred its Global 7500 wing manufacturing operations to Bombardier. In conjunction with this transaction, the Company provided special termination pension benefits to certain pension participants who transferred employment from Triumph to Bombardier. This change resulted in the recognition of a charge of \$4,032 for special termination benefits. The special termination benefits charge is included in non-service defined benefit income on the consolidated statements of operations for the year ended March 31, 2019.
- In March 2018, the Company ratified a new collective bargaining agreement with a group of union-represented employees, who were working without an agreement. The agreement resulted in plan amendments for one of our pension plans and our postretirement welfare benefit plan. These amendments eliminated future service under the plans and generated curtailments, which accelerated \$11,146 of prior service credits for the postretirement welfare benefits plan and accelerates \$29 of prior service costs for the pension plan. These amounts are included in non-service defined benefit income on the consolidated statements of operations for the year ended March 31, 2018.
- In November 2017, the Company announced an amendment to the postretirement welfare benefits plan for its non-represented employee participants. Effective January 1, 2018, the Company eliminated and reduced certain welfare benefits for non-represented retirees and active participants. Those changes resulted in a decrease in the OPEB obligation of \$17,652 and a curtailment gain of \$15,099 included in non-service defined benefit income on the consolidated statements of operations for the year ended March 31, 2018.

The following table shows those amounts expected to be recognized in net periodic benefit costs during the fiscal year ending March 31, 2021:

	Pension Benefits	Other Postretirement Benefits
Amounts expected to be recognized in FY 2021 net periodic benefit costs		
Prior service credit	\$ 974	\$ (5,105)
Actuarial loss	\$ 32,899	\$ (4,766)

Expected Pension Benefit Payments

The total estimated future benefit payments for the pension plans are expected to be paid from the plan assets and company funds. The OPEB payments reflect the Company's portion of the funding. Estimated future benefit payments from plan assets and Company funds for the next ten years are as follows:

Year	Pension Benefits	Other Postretirement Benefits*
2021	\$ 200,097	\$ 4,824
2022	163,389	813
2023	159,963	182
2024	155,123	171
2025	150,985	162
2026 – 2030	690,383	666

* Net of expected Medicare Part D subsidies of \$400 and \$70 in the years ended March 31, 2021 and 2022, respectively.

Plan Assets, Investment Policy and Strategy

The table below sets forth the Company's target asset allocation for fiscal 2020 and the actual asset allocations at March 31, 2020 and 2019.

Asset Category	Target Allocation Fiscal 2020	Actual Allocation	
		2020	March 31, 2019
Equity securities	40% - 50%	42%	45%
Fixed income securities	40% - 50%	50	48
Alternative investment funds	0% - 10%	6	5
Other	0% - 5%	2	2
Total		100%	100%

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(Dollars in thousands, except per share data)

Pension plan assets are invested in various asset classes that are expected to produce a sufficient level of diversification and investment return over the long-term. The investment goals are to exceed the assumed actuarial rate of return over the long-term within reasonable and prudent levels of risks and to meet future obligations.

Asset/liability studies are conducted on a regular basis to provide guidance in setting investment goals for the pension portfolio and its asset allocation. The asset allocation aims to prudently achieve a strong, risk-adjusted return while seeking to minimize funding level volatility and improve the funded status of the plans. The pension plans currently employ a liability-driven investment ("LDI") approach, where assets and liabilities move in the same direction. The goal is to limit the volatility of the funding status and cover part, but not all, of the changes in liabilities. Most of the liabilities' changes are due to interest rate movements.

To balance expected risk and return, allocation targets are established and monitored against acceptable ranges. All investment policies and procedures are designed to ensure that the plans' investments are in compliance with the Employee Retirement Income Security Act of 1974 ("ERISA"). Guidelines are established defining permitted investments within each asset class. Each investment manager has contractual guidelines to ensure that investments are made within the parameters of their asset class or in the case of multi-asset class managers, the parameters of their multi-asset class strategy. Certain investments are not permitted at any time, including investment directly in employer securities and uncovered short sales.

The tables below provide the fair values of the Company's plan assets at March 31, 2020 and 2019, by asset category. The table also identifies the level of inputs used to determine the fair value of assets in each category (refer to Note 2 for definition of levels).

	March 31, 2020			Total
	Level 1	Level 2	Level 3	
Assets				
Cash and cash equivalents	\$ 35,110	\$ —	\$ —	\$ 35,110
Equity securities				
International	155,389	—	—	155,389
U.S. equity	2	—	—	2
U.S. commingled fund	400,131	—	—	400,131
International commingled fund	34,014	—	—	34,014
Fixed income securities				
Corporate bonds	—	23,672	—	23,672
Government securities	—	93,677	—	93,677
U.S. commingled fund	605,487	—	—	605,487
Other				
Insurance contracts	—	—	910	910
Total investment in securities—assets	\$ 1,230,133	\$ 117,349	\$ 910	\$ 1,348,392
U.S. equity commingled fund				8,180
International equity commingled fund				67,101
U.S. fixed income commingled fund				73,838
International fixed income commingled fund				1,380
Government securities commingled fund				8,333
Private equity and infrastructure				89,797
Other				1,534
Total investment measured at NAV as a practical expedient				\$ 250,163
Receivables				3,292
Payables				(3,802)
Total plan assets				\$ 1,598,045

Triumph Group, Inc.
Notes to Consolidated Financial Statements
(Dollars in thousands, except per share data)

	March 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	\$ 25,798	\$ 6,189	\$ —	\$ 31,987
Equity securities				
International	161,132	—	—	161,132
U.S. equity	8,464	—	—	8,464
U.S. commingled fund	489,463	—	—	489,463
International commingled fund	39,797	—	—	39,797
Fixed income securities				
Corporate bonds	—	24,942	—	24,942
Government securities	—	109,306	—	109,306
U.S. commingled fund	654,269	—	—	654,269
Other				
Insurance contracts	—	—	1,021	1,021
Total investment in securities—assets	\$ 1,378,923	\$ 140,437	\$ 1,021	\$ 1,520,381
U.S. equity commingled fund				4,690
International equity commingled fund				96,867
U.S. fixed income commingled fund				76,766
Private equity and infrastructure				95,760
Other				1,693
Total investment measured at NAV as a practical expedient				\$ 275,776
Receivables				1,238
Payables				(1,284)
Total plan assets				\$ 1,796,111

Cash equivalents and other short-term investments are primarily held in registered short-term investment vehicles which are valued using a market approach based on quoted market prices of similar instruments.

Public equity securities, including common stock, are primarily valued using a market approach based on the closing fair market prices of identical instruments in the principal market on which they are traded. Commingled funds that are open-ended mutual funds for which the fair value per share is determined and published by the respective mutual fund sponsor and is the basis for current observable transactions are categorized as Level 1 fair value measures.

Investments in commingled funds and private equity and infrastructure funds are carried at net asset value ("NAV") as a practical expedient to estimate fair value. The NAV is the total value of the fund divided by the number of shares outstanding. Adjustments to NAV, if any, are determined based on evaluation of data provided by fund managers, including valuation of the underlying investments derived using inputs such as cost, operating results, discounted future cash flows and market-based comparable data. In accordance with ASC 820-10, investments that are measured at NAV practical expedient are not classified in the fair value hierarchy; however, their fair value amounts are presented in these tables to permit reconciliation of the fair value hierarchy to the total plan assets disclosed in this footnote.

Corporate, government agency bonds and mortgage-backed securities are primarily valued using a market approach with inputs that include broker quotes, benchmark yields, base spreads and reported observable trades for identical or comparable instruments.

Other investments include private equity and infrastructure funds and insurance contracts. Investments in private equity and infrastructure funds are carried at estimated fair value based on NAV as a practical expedient and other appropriate adjustments to NAV as determined based on an evaluation of data provided by fund managers, including valuations of the underlying investments derived using inputs such as cost, operating results, discounted future cash flows, and market-based comparable data.

Assumptions and Sensitivities

The discount rate is determined as of each measurement date, based on a review of yield rates associated with long-term, high-quality corporate bonds. The calculation separately discounts benefit payments using the spot rates from a long-term, high-quality corporate bond yield curve.

Triumph Group, Inc.
Notes to Consolidated Financial Statements
(Dollars in thousands, except per share data)

The effect of a 25 basis-point change in discount rates as of March 31, 2020, is shown below:

		Pension Benefits		Other Postretirement Benefits
Increase of 25 basis points				
Obligation	*\$	(56,208)	\$	(44)
Net periodic expense		104		(144)
Decrease of 25 basis points				
Obligation	*\$	58,058	\$	46
Net periodic expense		(235)		149

* Excludes impact to plan assets due to the LDI investment approach discussed above under "Plan Assets, Investment Policy and Strategy."

The long-term rate of return assumption represents the expected average rate of earnings on the funds invested to provide for the benefits included in the benefit obligations. The long-term rate of return assumption is determined based on a number of factors, including historical market index returns, the anticipated long-term asset allocation of the plans, historical plan return data, plan expenses and the potential to outperform market index returns. For fiscal 2021, the expected long-term rate of return is 5.00%-8.00%.

Anticipated Contributions to Defined Benefit and Postretirement Welfare Benefit Plans

The Company does not expect to contribute to its qualified U.S. defined benefit pension plans during fiscal 2021. The Company expects to contribute \$4,824 to its postretirement welfare benefits plan during fiscal 2021. No plan assets are expected to be returned to the Company in fiscal 2021.

16. STOCK COMPENSATION PLANS

The Company has stock incentive plans under which employees and non-employee directors may be granted equity awards to acquire shares of the Company's common stock at the fair value at the time of the grant. The stock incentive and compensation plans under which outstanding equity awards have been granted to employees, officers and non-employee directors are the Triumph Group 2018 Equity Plan (the "2018 Plan"), the Triumph Group 2013 Equity and Cash Incentive Plan (the "2013 Plan"), the 2016 Directors' Equity Compensation Plan, as amended (the "Directors' Plan"), and the Amended and Restated Directors' Stock Incentive Plan (the "Prior Directors' Plan"). The Prior Directors' Plan expired by its terms during fiscal 2017. The current stock incentive and compensation plans used for future awards are the 2013 Plan for employees, officers and consultants, the Directors' Plan, and the 2018 Plan. The 2018 Plan, the 2013 Plan, the Directors' Plan, and the Prior Directors' Plan are collectively referred to in this note as the plans.

Management and the compensation committee have utilized restricted stock and restricted stock units as its primary form of share-based incentive compensation. The restricted stock and restricted stock units are subject to graded vesting, generally over a three year period and are subject to forfeiture should the grantee's employment be terminated prior to an applicable vesting date. The share-based payment expense arising from restricted stock and restricted stock unit expense is included in capital in excess of par value. The fair value of restricted shares under the Company's restricted stock plans is determined by the product of the number of shares granted and the grant date market price of the Company's common stock. The fair value of share-based compensation granted to employees was \$13,249, \$15,911, and \$18,122 during the fiscal years ended March 31, 2020, 2019, and 2018, respectively. The awards contain service conditions and may also contain performance or market conditions that affect the number of shares that vest. The fair value of restricted stock and restricted stock unit awards is expensed on a straight-line basis over the requisite service period which is typically the vesting period. The Company recognized \$11,062, \$10,259 and \$7,949 of share-based compensation expense during the fiscal years ended March 31, 2020, 2019, and 2018, respectively. The Company has classified share-based compensation within selling, general and administrative expenses to correspond with the same line item as the majority of the cash compensation paid to employees.

Triumph Group, Inc.
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At March 31, 2020 and 2019, 1,564,791 shares and 5,586,421 shares of common stock, respectively, were available for issuance under the plans. A summary of the status of the Company's non-vested shares/units of restricted stock and deferred stock units as of March 31, 2020, and changes during the fiscal year ended March 31, 2020, is presented below.

	Shares	Weighted- Average Grant Date Fair Value
Non-vested restricted awards and deferred stock units at March 31, 2019	1,081,379	\$ 26.01
Granted	598,879	22.12
Vested	(282,330)	24.98
Forfeited	(238,298)	22.18
Non-vested restricted awards and deferred stock units at March 31, 2020	1,159,630	\$ 24.40

The fair value of employee restricted stock which vested during fiscal 2020, 2019 and 2018 was \$7,052, \$7,031, and \$2,081, respectively. Upon the vesting of restricted stock units, the Company first transfers treasury stock, then will issue new shares. Expected future compensation expense on restricted stock net of expected forfeitures, is approximately \$10,320, which is expected to be recognized over the remaining weighted average vesting period of 1.5 years.

17. COMMITMENTS AND CONTINGENCIES

Certain of the Company's business operations and facilities are subject to a number of federal, state, local and foreign environmental laws and regulations. Former owners generally indemnify the Company for environmental liabilities related to the assets and businesses acquired which existed prior to the acquisition dates. In the opinion of management, there are no significant environmental contingent liabilities which would have a material effect on the financial condition or operating results of the Company which are not covered by such indemnification. As the Company completes its restructuring plans as disclosed in Note 18, including the disposal of certain facilities, the Company may be exposed to additional costs such as environmental remediation obligations, lease termination costs, or supplier claims which may have a material effect on its financial position or results of operations when such matters arise and a reasonable estimate of the costs can be made.

The Company's risk related to pension projected obligations as of March 31, 2020, is significant. This amount is currently in excess of the related plan assets. Benefit plan assets are invested in a diversified portfolio of investments in both the equity and debt categories, as well as limited investments in real estate and other alternative investments. The market value of all of these investment categories may be adversely affected by external events and the movements and volatility in the financial markets, including such events as the current credit and real estate market conditions. Declines in the market values of our plan assets could expose the total asset balance to significant risk which may cause an increase to future funding requirements.

Some raw materials and operating supplies are subject to price and supply fluctuations caused by market dynamics. The Company's strategic sourcing initiatives seek to find ways of mitigating the inflationary pressures of the marketplace. In recent years, these inflationary pressures have affected the market for raw materials. However, the Company believes that raw material prices will remain stable through the remainder of fiscal 2021 and after that, experience increases that are in line with inflation. Additionally, the Company generally does not employ forward contracts or other financial instruments to hedge commodity price risk.

The Company's suppliers' failure to provide acceptable raw materials, components, kits and subassemblies would adversely affect production schedules and contract profitability. The Company maintains an extensive qualification and performance surveillance system to control risk associated with such supply base reliance. The Company is dependent on third parties for certain information technology services. To a lesser extent, the Company is also exposed to fluctuations in the prices of certain utilities and services, such as electricity, natural gas, chemical processing and freight. The Company utilizes a range of long-term agreements and strategic aggregated sourcing to optimize procurement expense and supply risk in these categories.

In the ordinary course of business, the Company is involved in disputes, claims and lawsuits with employees, suppliers and customers, as well as governmental and regulatory inquiries, that it deems to be immaterial. Some may involve claims or potential claims of substantial damages, fines, penalties or injunctive relief. While the Company cannot predict the outcome of any pending or future litigation or proceeding and no assurances can be given, the Company does not believe that any pending matter will have a material effect, individually or in the aggregate, on its financial position or results of operations. In fiscal year 2020, the Company was awarded \$9,257 in a legal judgment associated with a longstanding litigation matter arising from a prior acquisition.

18. RESTRUCTURING COSTS

The Company committed to various restructuring plans involving certain of its businesses, as well as the consolidation of certain of its facilities over the past several years. With the exception of certain consolidations to be completed in future years, these plans were substantially complete as of March 31, 2019. The Company incurred costs of \$25,340 associated with new restructuring plans during fiscal year 2020. These costs, the majority of which are being incurred within the Systems & Support reportable segment and relate to third-party consulting costs, are substantially complete as of March 31, 2020.

19. CUSTOMER CONCENTRATION

Trade and other accounts receivable from Boeing represented approximately 21% and 18% of total accounts receivable as of March 31, 2020 and 2019, respectively. Trade and other accounts receivable from Gulfstream represented approximately 6% and 11% of total accounts receivable as of March 31, 2020 and 2019, respectively. Trade and other accounts receivables from Bombardier represented approximately 16% and 13% of total accounts receivable as of March 31, 2020 and 2019, respectively, and include receivables from transition services. The Company had no other significant concentrations of credit risk.

Sales to Boeing for fiscal 2020 were \$983,762, or 34% of net sales, of which \$254,659 and \$729,103 were from Systems & Support and Aerospace Structures, respectively. Sales to Boeing for fiscal 2019 were \$1,031,107, or 31% of net sales, of which \$243,047 and \$788,061 were from Systems & Support and Aerospace Structures, respectively. Sales to Boeing for fiscal 2018 were \$1,004,274, or 31% of net sales, of which \$216,122 and \$788,151 were from Systems & Support and Aerospace Structures, respectively.

Sales to Gulfstream for fiscal 2020 were \$337,173, or 12% of net sales, of which \$3,250 and \$333,924 were from Systems & Support and Aerospace Structures, respectively. Sales to Gulfstream for fiscal 2019 were \$361,451, or 11% of net sales, of which \$3,068 and \$358,382 were from Systems & Support and Aerospace Structures, respectively. Sales to Gulfstream for fiscal 2018 were \$421,985, or 13% of net sales, of which \$1,780 and \$420,204 were from Systems & Support and Aerospace Structures, respectively.

No other single customer accounted for more than 10% of the Company's net sales; however, the loss of any significant customer, including Boeing and/or Gulfstream, could have a material adverse effect on the Company and its operating subsidiaries.

The Company currently generates a majority of its revenue from clients in the commercial aerospace industry, the business jet industry and the military. The Company's growth and financial results are largely dependent on continued demand for its products and services from clients in these industries. If any of these industries experiences a downturn, clients in these sectors may conduct less business with the Company.

20. COLLECTIVE BARGAINING AGREEMENTS

Approximately 18% of the Company's labor force is covered under collective bargaining agreements. As of March 31, 2020, none of the Company's collectively bargained workforce are working under contracts that have expired, and 5% of the Company's collectively bargained workforce are working under contracts that are set to expire within one year.

During the fiscal year ended March 31, 2018, the Company ratified a collective bargaining agreement with its union employees with United Autoworkers of America and its Local Union 848 at its Red Oak, Texas, facility.

During the fiscal year ended March 31, 2019, the Company ratified a collective bargaining agreement with its union employees with United Autoworkers of America and its Local Union 952 at its Tulsa, Oklahoma facility. Also occurring during the fiscal year ended March 31, 2019, the Stuart Florida facility production and maintenance employees elected the United Autoworkers of America, Local #2505, to represent them in collective bargaining with the Company. As of the March 31, 2020, the union and the Company have not reached an agreement.

During the fiscal year ended March 31, 2020, effects and closure agreements were made for the Tulsa, Oklahoma, and Grand Prairie, Texas, locations. In addition, the Company and leadership of Aero Lodge No.735 of the International Association of Machinists and Aerospace Workers ("IAM") agreed to negotiate a Memorandum of Agreement to sunset the retiree medical plans. Both the Company and the IAM leadership full endorsed this agreement, and local IAM members voted to ratify it on August 10, 2019.

21. SEGMENTS

The Company reports financial performance based on the following two reportable segments: Systems & Support and Aerospace Structures. The Company's reportable segments are aligned with how the business is managed, and the Company's views of the markets it serves. The Chief Operating Decision Maker (the "CODM") evaluates performance and allocates resources based upon review of segment information. The CODM utilizes earnings before interest, income taxes, depreciation and amortization, and pension ("Adjusted EBITDAP") as a primary measure of segment profitability to evaluate performance of its segments and allocate resources.

Segment Adjusted EBITDAP is total segment revenue reduced by operating expenses (less depreciation and amortization) identifiable with that segment. Corporate includes general corporate administrative costs and any other costs not identifiable with one of the Company's segments, including loss on sale of assets and businesses of \$67,037 for the year ended March 31, 2020.

The Company does not accumulate net sales information by product or service or groups of similar products and services, and therefore the Company does not disclose net sales by product or service because to do so would be impracticable.

Selected financial information for each reportable segment is as follows:

	Year Ended March 31, 2020			
	Total	Corporate & Eliminations	Systems & Support	Aerospace Structures
Net sales to external customers	\$ 2,900,117	\$ —	\$ 1,350,761	\$ 1,549,356
Intersegment sales (eliminated in consolidation)	—	(13,334)	6,803	6,531
Segment profit and reconciliation to consolidated income before income taxes:				
Adjusted EBITDAP	305,784	—	205,352	100,432
Reconciliation of segment profit to income (loss) before income taxes				
Depreciation and amortization	(138,168)	(3,374)	(32,376)	(102,418)
Interest expense and other, net	(122,129)			
Corporate expenses	(53,082)			
Share-based compensation expense	(11,062)			
Loss on sale of assets and businesses	(56,916)			
Amortization of acquired contract liabilities	75,286			
Non-service defined benefit income	41,894			
Union represented employee incentives	(7,071)			
Legal judgment gain, net	9,257			
Impairment of goodwill	(66,121)			
Income before income taxes	<u>(22,328)</u>			
Total capital expenditures	\$ 39,834	\$ 1,502	\$ 17,141	\$ 21,191
Total assets	\$ 2,980,333	\$ 481,162	\$ 1,478,679	\$ 1,020,492

Triumph Group, Inc.
Notes to Consolidated Financial Statements
(Dollars in thousands, except per share data)

	Year Ended March 31, 2019			
	Total	Corporate & Eliminations	Systems & Support	Aerospace Structures
Net sales to external customers	\$ 3,364,930	\$ —	\$ 1,309,474	\$ 2,055,456
Intersegment sales (eliminated in consolidation)	—	(22,485)	15,537	6,948
Segment profit and reconciliation to consolidated income before income taxes:				
Adjusted EBITDAP	215,418	—	202,346	13,072
Reconciliation of segment profit to income (loss) before income taxes				
Depreciation and amortization	(149,904)	(3,100)	(35,373)	(111,431)
Interest expense and other, net	(114,619)			
Corporate expenses	(74,706)			
Share-based compensation expense	(10,259)			
Loss on sale of assets and businesses	(235,301)			
Amortization of acquired contract liabilities	67,314			
Non-service defined benefit income	62,105			
Loss on adoption of ASU 2017-07	(87,241)			
Income before income taxes	<u>(327,193)</u>			
Total capital expenditures	\$ 47,099	\$ 784	\$ 15,734	\$ 30,581
Total assets	\$ 2,854,574	\$ 110,372	\$ 1,487,163	\$ 1,257,039
	Year Ended March 31, 2018			
	Total	Corporate & Eliminations	Systems & Support	Aerospace Structures
Net sales to external customers	\$ 3,198,951	\$ —	\$ 1,253,640	\$ 1,945,311
Intersegment sales (eliminated in consolidation)	—	(23,286)	13,868	9,418
Segment profit and reconciliation to consolidated income before income taxes:				
Adjusted EBITDAP	229,534	—	235,540	(6,006)
Reconciliation of segment profit to income (loss) before income taxes				
Depreciation and amortization	(158,368)	(1,852)	(42,730)	(113,786)
Interest expense and other, net	(99,442)			
Corporate expenses	(88,037)			
Share-based compensation expense	(7,949)			
Loss on sale of assets and businesses	(30,741)			
Amortization of acquired contract liabilities	125,148			
Non-service defined benefit income	103,234			
Impairment of goodwill	(535,227)			
Income before income taxes	<u>(461,848)</u>			
Total capital expenditures	\$ 42,050	\$ 4,179	\$ 8,352	\$ 29,519

During fiscal years ended March 31, 2020, 2019, and 2018, the Company had foreign sales of \$724,193, \$960,299, and \$758,936, respectively. The Company reports as foreign sales those sales with delivery points outside of the United States. As of March 31, 2020 and 2019, the Company had foreign long-lived assets of \$205,243 and \$294,990, respectively.

Triumph Group, Inc.
Notes to Consolidated Financial Statements
(Dollars in thousands, except per share data)

22. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

	Fiscal 2020				Fiscal 2019			
	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31
BUSINESS SEGMENT SALES								
Systems & Support	\$313,605	\$352,969	\$338,924	\$352,066	\$306,632	\$332,562	\$323,619	\$ 362,198
Aerospace Structures	419,178	422,579	368,972	345,158	532,387	528,366	490,337	511,314
Inter-segment Elimination	(2,552)	(3,438)	(3,230)	(4,114)	(6,119)	(5,820)	(6,061)	(4,485)
TOTAL SALES	\$730,231	\$772,110	\$704,666	\$693,110	\$832,900	\$855,108	\$807,895	\$ 869,027
GROSS PROFIT (1)	\$119,461	\$131,456	\$142,200	\$116,085	\$ 38,742	\$107,357	\$ 72,007	\$ 131,239
OPERATING INCOME (LOSS)								
Systems & Support	\$ 44,048	\$ 62,337	\$ 57,434	\$ (22,478)	\$ 43,078	\$ 51,380	\$ 51,368	\$ 55,270
Aerospace Structures	12,283	13,608	18,039	(2,066)	(79,587)	(22,744)	(49,813)	(264)
Corporate	(20,820)	(14,908)	(73,812)	(15,758)	(30,039)	(30,637)	(18,488)	(244,203)
TOTAL OPERATING INCOME (LOSS)	\$ 35,511	\$ 61,037	\$ 1,661	\$ (40,302)	\$ (66,548)	\$ (2,001)	\$ (16,933)	\$ (189,197)
NET LOSS	\$ 18,088	\$ 42,701	\$ (13,846)	\$ (75,069)	\$ (76,534)	\$ (14,676)	\$ (30,945)	\$ (199,612)
Basic Income (Loss) per share	\$ 0.36	\$ 0.85	\$ (0.27)	\$ (1.45)	\$ (1.54)	\$ (0.30)	\$ (0.62)	\$ (4.01)
Diluted Income (Loss) per share	\$ 0.36	\$ 0.85	\$ (0.27)	\$ (1.45)	\$ (1.54)	\$ (0.30)	\$ (0.62)	\$ (4.01)

* Difference due to rounding.

(1) Gross profit includes depreciation.

(2) Includes impairment of goodwill of \$66,121 in Systems & Support.

TRIUMPH GROUP, INC.
SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS
(in thousands)

	Balance at beginning of year	Additions charged to (income) expense	Other (1)	Balance at end of year
For year ended March 31, 2020:				
Deferred tax assets valuation allowance	\$ 399,013	(3,474)	43,128	\$ 438,667
For year ended March 31, 2019:				
Deferred tax assets valuation allowance	\$ 146,770	93,311	158,932	\$ 399,013
For year ended March 31, 2018:				
Deferred tax assets valuation allowance	\$ 141,214	6,885	(1,329)	\$ 146,770

(1) Adjustments relate to changes in defined benefit pension plan and other postretirement benefit plan obligations. The adjustment in the year ended March 31, 2019, also included an adjustment of approximately \$132,000 as a result of the adoption of ASC 606.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As of March 31, 2020, we completed an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on the foregoing, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of March 31, 2020.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Triumph Group, Inc. ("Triumph") is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Triumph's internal control system over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. The 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 U.S. 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 inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to risk that controls may become inadequate because of changes in condition, or that the degree of compliance with the policies or procedures may deteriorate.

Triumph's management assessed the effectiveness of Triumph's internal control over financial reporting as of March 31, 2020. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) ("COSO") in Internal Control—Integrated Framework. Based on management's assessment and those criteria, management believes that Triumph maintained effective internal control over financial reporting as of March 31, 2020.

Triumph's independent registered public accounting firm, Ernst & Young LLP, has audited Triumph's effectiveness of internal control over financial reporting. This report appears on the following page.

/s/ Daniel J. Crowley

Daniel J. Crowley

President, Chief Executive Officer and Director

/s/ James F. McCabe, Jr.

James F. McCabe, Jr.

*Senior Vice President and
Chief Financial Officer*

/s/ Thomas A. Quigley, III

Thomas A. Quigley, III

Vice President and Controller

May 28, 2020

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Triumph Group, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Triumph Group, Inc.'s internal control over financial reporting as of March 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO criteria"). In our opinion, Triumph Group, Inc. (the "Company") maintained, in all material respects, effective internal control over financial reporting as of March 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of Triumph Group, Inc. as of March 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, stockholders' (deficit) equity and cash flows for each of the three years in the period ended March 31, 2020, and the related notes and financial statement schedule listed in the Index at Item 15(a) and our report dated May 28, 2020, expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania
May 28, 2020

Changes in Internal Control Over Financial Reporting

In addition to management's evaluation of disclosure controls and procedures as discussed above, we continue to review and enhance our policies and procedures for internal control over financial reporting.

We have developed and implemented a formal set of internal controls and procedures for financial reporting in accordance with the SEC's rules regarding management's report on internal controls. As a result of continued review and testing by management and by our internal and independent auditors, or as a result of newly adopted accounting standards, additional changes may be made to our internal controls and procedures. However, we did not make any changes to our internal control over financial reporting in the fourth quarter of fiscal 2020 that has materially affected or is reasonably likely to materially affect our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required for directors and executive officers is incorporated herein by reference to our definitive 2020 Proxy Statement for our 2020 Annual Meeting of Stockholders.

Delinquent Section 16(a) Reports

The information required regarding Section 16(a) beneficial ownership reporting compliance is incorporated herein by reference to the 2020 Proxy Statement.

Code of Business Conduct

The information required regarding our Code of Business Conduct is incorporated herein by reference to the 2020 Proxy Statement.

Stockholder Nominations

The information required with respect to any material changes to the procedures by which stockholders may recommend nominees to the Company's board of directors is incorporated herein by reference to the 2020 Proxy Statement.

Audit Committee and Audit Committee Financial Expert

The information required with respect to the Audit Committee and Audit Committee financial experts is incorporated herein by reference to the 2020 Proxy Statement.

Item 11. Executive Compensation

The information required under this item is incorporated herein by reference to the 2020 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required under this item is incorporated herein by reference to the 2020 Proxy Statement.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required under this item is incorporated herein by reference to the 2020 Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required under this item is incorporated herein by reference to the 2020 Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) Financial Statements

(1) The following consolidated financial statements are included in Item 8 of this report:

Triumph Group, Inc.	Page
Consolidated Balance Sheets as of March 31, 2020 and 2019	44
Consolidated Statements of Operations for the Fiscal Years Ended March 31, 2020, 2019, and 2018	45
Consolidated Statements of Comprehensive Loss for the Fiscal Years Ended March 31, 2020, 2019, and 2018	46
Consolidated Statements of Stockholders' (Deficit) Equity for the Fiscal Years Ended March 31, 2020, 2019, and 2018	47
Consolidated Statements of Cash Flows for the Fiscal Years Ended March 31, 2020, 2019, and 2018	48
Notes to Consolidated Financial Statements	49
Report of Ernst & Young LLP, Independent Registered Public Accounting Firm	85

(2) The following financial statement schedule is included in this report:

	Page
Schedule II—Valuation and Qualifying Accounts	82

All other schedules have been omitted as not applicable or because the information is included elsewhere in the Consolidated Financial Statements or notes thereto.

(3) The following is a list of exhibits. Where so indicated, exhibits which were previously filed are incorporated by reference.

Exhibit Number	Exhibit Description	Incorporated by Reference to			
		Form	File No.	Exhibit(s)	Filing Date
3.1	Amended and Restated Certificate of Incorporation of Triumph Group, Inc.	10-K	001-12235	3.1	May 22, 2009
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation of Triumph Group, Inc.	8-K	001-12235	3.1	July 20, 2012
3.3	Form of Certificate of Designations, Preferences and Rights of Series B Junior Participating Preferred Stock	8-K	001-12235	3.1	March 13, 2019
3.4	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Triumph Group, Inc.	8-K/A	001-12235	3.1	August 5, 2019
3.5	Amended and Restated By-Laws of Triumph Group, Inc.	8-K	001-12235	3.1	April 26, 2019
4.1	Form of Certificate evidencing Common Stock of Triumph Group, Inc.	8-K	001-12235	4.2	March 13, 2019
4.2	Indenture, dated as of February 26, 2013, between Triumph Group, Inc. and U.S. Bank National Association, as trustee	8-K	001-12235	4.1	March 1, 2013
4.2.1	Form of 4.875% Senior Subordinated Notes due 2021 (included as Exhibit A to Exhibit 4.1)	8-K	001-12235	4.2	March 1, 2013
4.3	Indenture, dated as of June 3, 2014, between Triumph Group, Inc. and U.S. Bank National Association, as trustee	8-K	001-12235	4.1	June 5, 2014
4.3.1	Form of 5.250% Senior Notes due 2022 (included as Exhibit A to the Indenture filed as Exhibit 4.1)	8-K	001-12235	4.2	June 5, 2014
4.4	Second Supplemental Indenture dated as of May 18, 2016 by and among Triumph Group, Inc., the guarantors signatory thereto and U.S. Bank National Association, as trustee, relating to the 4.875% Senior Notes due 2021	10-K	001-12235	4.12	May 27, 2016
4.5	Indenture, dated as of August 17, 2017, between Triumph Group, Inc. and U.S. Bank National Association, as trustee	8-K	001-12235	4.1	August 18, 2017
4.6	Form of 7.750% Senior Notes due 2025 (included as Exhibit A to the Indenture filed as Exhibit 4.1).	8-K	001-12235	4.2	August 18, 2017
4.7	Indenture, dated as of September 23, 2019, between Triumph Group, Inc., the subsidiary guarantors signatory thereto and U.S. Bank National Association, as trustee.	10-Q	001-12235	4.1	November 7, 2019
4.8	Form of 6.250% Senior Secured Notes due 2024 (included as Exhibit A to the Indenture filed as Exhibit 4.1).	10-Q	001-12235	4.1	November 7, 2019
4.9	Tax Benefits Preservation Plan, dated as of March 13, 2019, between Triumph Group, Inc. and Computershare	8-K	001-12235	4.3	March 13, 2019

Exhibit Number	Exhibit Description	Incorporated by Reference to			
		Form	File No.	Exhibit(s)	Filing Date
4.10	Description of Securities	10-K	001-12235	4.8	May 23, 2019
10.1	Amended and Restated Directors' Stock Incentive Plan	10-K	001-12235	10.1	May 29, 2012
10.1.1	Form of Deferred Stock Unit Award Agreement under the Amended and Restated Directors' Stock Incentive Plan	10-K	001-12235	10.2	May 30, 2013
10.2	Triumph Group, Inc. 2004 Stock Incentive Plan*	10-K	001-12235	10.3	May 30, 2013
10.2.1	Form of Stock Award Agreement under the 2004 Stock Incentive Plan*	10-K	001-12235	10.7	May 22, 2009
10.2.2	Form of letter confirming Stock Award Agreement under the 2004 Stock Incentive Plan*	10-K	001-12235	10.8	May 22, 2009
10.3	Triumph Group, Inc. Supplemental Executive Retirement Plan effective January 1, 2003*	10-K	001-12235	10.17	June 12, 2003
10.4	Compensation for the non-employee members of the Board of Directors of Triumph Group, Inc.	8-K	001-12235	10.1	November 15, 2016
10.6	Form of Receivables Purchase Agreement, dated August 7, 2008, by and among the Triumph Group, Inc., as Initial Servicer, Triumph Receivables, LLC, as Seller, the various Purchasers and Purchase Agents from time to time party thereto and PNC National Association, as Administrative Agent.	8-K	001-12235	10.1	August 12, 2008
10.7	Third Amendment to Receivables Purchase Agreement, dated as of June 21, 2010, by and among Triumph Receivables LLC, Triumph Group, Inc., Market Street Funding LLC and PNC Bank, National Association	8-K	001-12235	10.1	June 25, 2010
10.8	Triumph Group, Inc. Executive Incentive Plan, effective September 28, 2010 *	10-Q	001-12235	10.1	November 5, 2010
10.9	Form of letter informing Triumph Group, Inc. executives they are eligible to participate in the Company's Long Term Incentive Plan *	10-K	001-12235	10.22	May 18, 2011
10.10	Form of letter informing Triumph Group, Inc. executives they have earned an award under the Company's Long Term Incentive Plan and the amount of the award *	10-K	001-12235	10.23	May 18, 2011
10.11	Sixth Amendment to Receivables Purchase Agreement, dated as of February 26, 2013, by and among Triumph Receivables LLC, Triumph Group, Inc., Market Street Funding LLC and PNC Bank, National Association	8-K	001-12235	10.1	March 1, 2013
10.12	Form of Third Amended and Restated Credit Agreement, dated as of November 19, 2013, by and among Triumph Group, Inc., and the other Borrowers party thereto and the Guarantors party thereto and the Banks party thereto and PNC Bank, National Association, as Administrative Agent, PNC Capital Markets LLC, J.P. Morgan Securities, LLC, RBC Capital Markets, RBS Citizens, N.A., and Santander Bank, N.A., as Joint Lead Arrangers and Joint Bookrunners, JPMorgan Chase Bank N.A., Royal Bank of Canada, Citizens Bank of Pennsylvania, and Santander Bank, N.A., as Syndication Agents, the Bank of Tokyo-Mitsubishi UFJ, Ltd, U.S. Bank National Association, TD Bank, N.A., and Manufacturers and Traders Trust Company, as Documentation Agents	8-K	001-12235	10.1	November 25, 2013
10.13	Form of Second Amended and Restated Guarantee and Collateral Agreement made by Triumph Group, Inc., and certain of its Subsidiaries in favor of PNC Bank, National Association, as Administrative Agent and as Collateral Agent for the other Secured Parties identified herein, dated as of November 19, 2013	8-K	001-12235	10.2	November 25, 2013
10.14	Triumph Group, Inc. 2013 Equity and Cash Incentive Plan, as amended and restated as of June 7, 2017*	8-K	001-12235	99.1	June 12, 2017
10.15	Form of letter regarding eligibility to participate in the	10-K	001-12235	10.24	May 19, 2014

10.16	Triumph Group, Inc. Restricted Stock Plan* Tenth Amendment to Receivables Purchase Agreement dated as of November 25, 2014	8-K	001-12235	10.1	November 26, 2014
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Exhibit Number	Exhibit Description	Incorporated by Reference to			
		Form	File No.	Exhibit(s)	Filing Date
10.17	Third Amendment to Third Amended and Restated Credit Agreement, dated as of February 3, 2015, by and among Triumph Group, Inc. and the other Borrowers party thereto and the Guarantors party thereto and the Banks party thereto and PNC Bank, National Association, as Administrative Agent	10-Q	001-12235	10.1	February 9, 2015
10.18	The First Amendment of the Triumph Group, Inc. Supplemental Executive Retirement Plan, effective as of May 1, 2015 *	8-K	001-12235	10.1	May 7, 2015
10.19	First Amendment to Triumph Group, Inc. 2013 Employee Stock Purchase Plan *	10-Q	001-12235	10.1	August 4, 2015
10.20	Employment Agreement between Triumph Group, Inc. and Daniel J. Crowley, dated as of April 1, 2016*	8-K	001-12235	10.1	April 7, 2016
10.21	Form of Sixth Amendment to Third Amended and Restated Credit Agreement, dated May 3, 2016	8-K	001-12235	10.1	May 4, 2016
10.22	Employment letter between Triumph Group, Inc. and James F. McCabe dated July 26, 2016 *	8-K	001-12235	10.1	July 27, 2016
10.23	Form of Seventh Amendment to Third Amended and Restated Credit Agreement, dated October 21, 2016	10-Q	001-12235	10.1	November 9, 2016
10.24	Triumph Group, Inc. Directors' Deferred Compensation Plan, effective January 1, 2017	8-K	001-12235	10.2	November 15, 2016
10.25	Eighth Amendment to the Third Amended and Restated Credit Agreement, dated May 1, 2017	8-K	001-12235	10.1	May 10, 2017
10.26	Form of the 2016 Directors' Equity Compensation Plan, as amended	10-K/A	001-12235	10.34	May 26, 2017
10.27	Form of Restricted Stock Unit Agreement under the 2016 Directors' Equity Compensation Plan, as amended	10-K/A	001-12235	10.35	May 26, 2017
10.28	Triumph Group, Inc. Directors' Deferred Compensation Plan, effective January 1, 2017	8-K	001-12235	10.2	November 15, 2016
10.29	Twentieth Amendment to Receivables Purchase Agreement dated as of November 3, 2017	8-K	001-12235	10.1	November 7, 2017
10.30	Ninth Amendment to the Third Amended and Restated Credit Agreement, dated July 31, 2017	10-Q	001-12235	10.1	November 8, 2017
10.31	Employment Letter between Triumph Group, Inc. and Peter Wick dated January 20, 2018 *	10-Q	001-12235	10.1	February 7, 2018
10.32	Triumph Group, Inc. 2018 Equity Incentive Plan, effective May 29, 2018*	8-K	001-12235	10.1	June 4, 2018
10.32.1	Amendment to Triumph Group, Inc. 2018 Equity Incentive Plan, effective February 19, 2018*	10-K	001-12235	10.32.1	May 23, 2019
10.32.2	Form of Long-Term Incentive Award Letter under the 2018 Equity Incentive Plan*	10-K	001-12235	10.32.2	May 23, 2019
10.33	Triumph Group, Inc. 2018 Executive Cash Incentive Compensation Plan, effective April 1, 2018*	8-K	001-12235	10.2	June 4, 2018
10.33.1	Form of Short-Term Cash Incentive Award Letter under the 2018 Executive Cash Incentive Compensation Plan*	10-K	001-12235	10.33.1	May 23, 2019
10.34	Tenth Amendment to the Third Amended and Restated Credit Agreement, dated July 19, 2018	8-K	001-12235	10.1	July 20, 2018
10.35	Separation Agreement Triumph Group, Inc. and John B. Wright, dated January 7, 2019*	8-K/A	001-12235	10.1	January 25, 2019
10.36	Separation Agreement Triumph Group, Inc. and Michael Abram, dated January 7, 2019*	8-K/A	001-12235	10.2	January 25, 2019
10.37	Separation Agreement between Triumph Group, Inc. and Thomas Holzthum, dated February 15, 2019*	8-K/A	001-12235	10.1	February 22, 2019
10.38	Employment Letter between Triumph Group, Inc. and Lance Turner, dated September 5, 2017*	10-K	001-12235	10.33.1	May 23, 2019
10.39	Employment Letter between Triumph Group, Inc. and Daniel Ostrosky, dated March 25, 2015, with Addendum	10-K	001-12235	10.33.1	May 23, 2019

	dated April 10, 2015*				
10.40	Triumph Group, Inc. Executive General Severance Plan, effective February 19, 2019*	10-K	001-12235	10.33.1	May 23, 2019

Exhibit Number	Exhibit Description	Incorporated by Reference to			
		Form	File No.	Exhibit(s)	Filing Date
10.41	Triumph Group, Inc. Executive Change in Control Severance Plan, effective February 19, 2019*	10-K	001-12235	10.33.1	May 23, 2019
10.42	Eleventh Amendment to the Third Amended and Restated Credit Agreement, dated September 23, 2019	10-Q	001-12235	10.1	November 7, 2019
10.43	Twelfth Amendment to the Third Amended and Restated Credit Agreement, dated May 22, 2020	#	#	#	#
10.44	Twenty-Fifth Amendment to the Receivables Purchase Agreement dated as of December 6, 2019 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 9, 2019)	8-K	001-12235	10.1	December 9, 2019
10.45	Employment Letter between Triumph Group, Inc. and Jennifer Allen, dated August 14, 2018	#	#	#	#
21.1	Subsidiaries of Triumph Group, Inc.	#	#	#	#
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm	#	#	#	#
31.1	Principal Executive Officer Certification Required by Rule 13a-14(a) or Rule 15d-14(a) under the Securities Exchange Act of 1934, as amended.	#	#	#	#
31.2	Principal Financial Officer Certification Required by Rule 13a-14(a) or Rule 15d-14(a) under the Securities Exchange Act of 1934, as amended.	#	#	#	#
32.1	Principal Executive Officer Certification Required by Rule 13a-14(b) or Rule 15d-14(b) under the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350.	##	##	##	##
32.2	Principal Financial Officer Certification Required by Rule 13a-14(b) or Rule 15d-14(b) under the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350.	##	##	##	##
101	The following financial information from Triumph Group, Inc.'s Annual Report on Form 10-K for the fiscal year ended March 31, 2020 formatted in iXBRL: (i) Consolidated Balance Sheets as of March 31, 2020 and 2019; (ii) Consolidated Statements of Operations for the fiscal years ended March 31, 2020, 2019, and 2018; (iii) Consolidated Statements of Stockholders' (Deficit) Equity for the fiscal years ended March 31, 2020, 2019, and 2018; (iv) Consolidated Statements of Cash Flows for the fiscal years ended March 31, 2020, 2019, and 2018; (v) Consolidated Statements of Comprehensive Loss for the fiscal years ended March 31, 2020, 2019, and 2018; and (vi) Notes to the Consolidated Financial Statements	#	#	#	#
104	Cover Page Interactive Data File, formatted in iXBRL and contained in Exhibit 101.	#	#	#	#

In accordance with Item 601(b)(4)(iii)(A) of Regulations S-K, copies of specific instruments defining the rights of holders of long-term debt of the Company or its subsidiaries are not filed herewith. Pursuant to this regulation, we hereby agree to furnish a copy of any such instrument to the SEC upon request

- * Indicates management contract or compensatory plan or arrangement
- # Filed herewith
- ## Furnished herewith

Item 16. Form 10-K Summary

The Registrant has elected not to include a summary.

SIGNATURES

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

TRIUMPH GROUP, INC.

Dated: May 28, 2020

/s/ Daniel J. Crowley
By: Daniel J. Crowley
President, Chief Executive Officer and Director
(Principal Executive Officer)

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

<u>/s/ Daniel J. Crowley</u> Daniel J. Crowley	President, Chief Executive Officer and Director (Principal Executive Officer)	May 28, 2020
<u>/s/ James F. McCabe, Jr.</u> James F. McCabe, Jr.	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	May 28, 2020
<u>/s/ Thomas A. Quigley III</u> Thomas A. Quigley III	Vice President, Investor Relations and Controller (Principal Accounting Officer)	May 28, 2020
<u>/s/ Ralph E. Eberhart</u> Ralph E. Eberhart	Chairman and Director	May 28, 2020
<u>/s/ Paul Bourgon</u> Paul Bourgon	Director	May 28, 2020
<u>/s/ Daniel P. Garton</u> Daniel P. Garton	Director	May 28, 2020
<u>/s/ Richard Goglia</u> Richard Goglia	Director	May 28, 2020
<u>/s/ Barbara Humpton</u> Barbara Humpton	Director	May 28, 2020
<u>/s/ William L. Mansfield</u> William L. Mansfield	Director	May 28, 2020
<u>/s/ Adam J. Palmer</u> Adam J. Palmer	Director	May 28, 2020
<u>/s/ Colleen C. Repplier</u> Colleen C. Repplier	Director	May 28, 2020
<u>/s/ Larry O. Spencer</u> Larry O. Spencer	Director	May 28, 2020