

TransDigm Group INC  
Form 10-K  
November 15, 2016  
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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
FORM 10-K  
x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended September 30, 2016  
..TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF  
1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission File Number 001-32833

TransDigm  
Group  
Incorporated  
(Exact name  
of registrant  
as specified  
in its charter)

Delaware  
(State or other jurisdiction of incorporation or organization)  
41-2101738  
(I.R.S. Employer Identification No.)  
1301 East 9<sup>th</sup> Street, Suite 3000, Cleveland, Ohio 44114  
(Address of principal executive offices) (Zip Code)  
(216) 706-2960  
(Registrants' telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:  
Common Stock New York Stock Exchange  
(Title) (Name of exchange on which registered)  
Securities registered pursuant to Section 12(g) of the Act:  
None

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes  No

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Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. "

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of March 31, 2016, based upon the last sale price of such voting and non-voting common stock on that date, was \$10,869,510,353.

The number of shares outstanding of TransDigm Group Incorporated's common stock, par value \$.01 per share, was 53,347,732 as of November 6, 2016.

Documents incorporated by reference: The registrant incorporates by reference in Part III hereof portions of its definitive Proxy Statement for its 2017 Annual Meeting of Stockholders.

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Special Note Regarding Forward-Looking Statements

This report on Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and 27A of the Securities Act of 1933, as amended. Discussions containing such forward-looking statements may be found in Items 1, 1A, 2, 3, 5, 7 and 7A hereof and elsewhere within this Report generally. In addition, when used in this Report, the words “believe,” “may,” “will,” “should,” “expect,” “intend,” “plan,” “predict,” “anticipate,” “estimate” or “continue” and other words and terms of similar meaning are intended to identify forward-looking statements. Although the Company (as defined below) believes that its plans, intentions and expectations reflected in or suggested by such forward-looking statements are reasonable, such forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from the forward-looking statements made in this Report. The more important of such risks and uncertainties are set forth under the caption “Risk Factors” and elsewhere in this Report. Many such factors are outside the control of the Company. Consequently, such forward-looking statements should be regarded solely as our current plans, estimates and beliefs. We do not undertake, and specifically decline, any obligation, to publicly release the results of any revisions to these forward-looking statements that may be made to reflect any future events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events. All forward-looking statements attributable to the Company or persons acting on its behalf are expressly qualified in their entirety by these cautionary statements.

Important factors that could cause actual results to differ materially from the forward-looking statements made in this Annual Report on Form 10-K include but are not limited to: the sensitivity of our business to the number of flight hours that our customers’ planes spend aloft and our customers’ profitability, both of which are affected by general economic conditions; future geopolitical or other worldwide events; cyber-security threats and natural disasters; our reliance on certain customers; the U.S. defense budget and risks associated with being a government supplier; failure to maintain government or industry approvals; failure to complete or successfully integrate acquisitions; our indebtedness; potential environmental liabilities; increases in raw material costs, taxes and labor costs that cannot be recovered in product pricing; risks and costs associated with our international sales and operations; and other factors. In this report, the term “TD Group” refers to TransDigm Group Incorporated, which holds all of the outstanding capital stock of TransDigm Inc. The terms “Company,” “TransDigm,” “we,” “us,” “our” and similar terms refer to TD Group, together with TransDigm Inc. and its direct and indirect subsidiaries. References to “fiscal year” mean the year ending or ended September 30. For example, “fiscal year 2016” or “fiscal 2016” means the period from October 1, 2015 to September 30, 2016.

PART I

ITEM 1. BUSINESS

The Company

TransDigm Inc. was formed in 1993 in connection with a leveraged buyout transaction. TD Group was formed in 2003 to facilitate a leveraged buyout of TransDigm Inc. The Company was owned by private equity funds until its initial public offering in 2006. TD Group’s common stock is publicly traded on the New York Stock Exchange, or NYSE, under the ticker symbol “TDG.”

We believe we are a leading global designer, producer and supplier of highly engineered aircraft components for use on nearly all commercial and military aircraft in service today. Our business is well diversified due to the broad range of products we offer to our customers. We estimate that about 90% of our net sales for fiscal year 2016 were generated by proprietary products. In addition, for fiscal year 2016, we estimate that we generated about 80% of our net sales from products for which we are the sole source provider.

Most of our products generate significant aftermarket revenue. Once our parts are designed into and sold on a new aircraft, we generate net sales from aftermarket consumption over the life of that aircraft, which is generally estimated to be approximately 25 to 30 years. A typical platform can be produced for 20 to 30 years, giving us an estimated product life cycle in excess of 50 years. We estimate that approximately 54% of our net sales in fiscal year 2016 were generated from aftermarket sales, the vast majority of which come from the commercial and military aftermarkets.

These aftermarket revenues have historically produced a higher gross margin and been more stable than sales to original equipment manufacturers, or OEMs.

Products

We primarily design, produce and supply highly engineered proprietary aerospace components (and certain systems/subsystems) with significant aftermarket content. We seek to develop highly customized products to solve specific needs for aircraft operators and manufacturers. We attempt to differentiate ourselves based on engineering, service and manufacturing capabilities. We typically choose not to compete for non-proprietary “build to print” business because it frequently offers lower

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margins than proprietary products. We believe that our products have strong brand names within the industry and that we have a reputation for high quality, reliability and customer support.

Our business is well diversified due to the broad range of products that we offer to our customers. Some of our more significant product offerings, substantially all of which are ultimately provided to end-users in the aerospace industry, include mechanical/electro-mechanical actuators and controls, ignition systems and engine technology, specialized pumps and valves, power conditioning devices, specialized AC/DC electric motors and generators, NiCad batteries and chargers, engineered latching and locking devices, rods and locking devices, engineered connectors and elastomers, databus and power controls, cockpit security components and systems, specialized cockpit displays, aircraft audio systems, specialized lavatory components, seat belts and safety restraints, engineered interior surfaces and related components, lighting and control technology, military personnel parachutes, high performance hoists, winches and lifting devices and cargo loading, handling and delivery systems.

### Segments

The Company's businesses are organized and managed in three reporting segments: Power & Control, Airframe and Non-aviation.

The Power & Control segment includes operations that primarily develop, produce and market systems and components that predominately provide power to or control power of the aircraft utilizing electronic, fluid, power and mechanical motion control technologies. Major product offerings include mechanical/electro-mechanical actuators and controls, ignition systems and engine technology, specialized pumps and valves, power conditioning devices, specialized AC/DC electric motors and generators, databus and power controls, high performance hoists, winches and lifting devices and cargo loading and handling systems. Primary customers of this segment are engine and power system and subsystem suppliers, airlines, third party maintenance suppliers, military buying agencies and repair depots. Products are sold in the OEM and aftermarket market channels.

The Airframe segment includes operations that primarily develop, produce and market systems and components that are used in non-power airframe applications utilizing airframe and cabin structure technologies. Major product offerings include engineered latching and locking devices, rods and locking devices, engineered connectors and elastomers, cockpit security components and systems, aircraft audio systems, specialized lavatory components, seat belts and safety restraints, engineered interior surfaces and related components, lighting and control technology, military personnel parachutes and cargo delivery systems. Primary customers of this segment are airframe manufacturers and cabin system suppliers and subsystem suppliers, airlines, third party maintenance suppliers, military buying agencies and repair depots. Products are sold in the OEM and aftermarket market channels.

The Non-aviation segment includes operations that primarily develop, produce and market products for non-aviation markets. Major product offerings include seat belts and safety restraints for ground transportation applications, mechanical/electro-mechanical actuators and controls for space applications, and refueling systems for heavy equipment used in mining, construction and other industries. Primary customers of this segment are off-road vehicle suppliers and subsystem suppliers, child restraint system suppliers, satellite and space system suppliers and manufacturers of heavy equipment used in mining, construction and other industries.

For financial information about our segments, see Note 16, "Segments" to our consolidated financial statements included herein.

### Sales and Marketing

Consistent with our overall strategy, our sales and marketing organization is structured to continually develop technical solutions that meet customer needs. In particular, we attempt to focus on products and programs that will lead to high-margin, repeatable sales in the aftermarket.

We have structured our sales efforts along our major product offerings, assigning a business unit manager to certain products. Each business unit manager is expected to grow the sales and profitability of the products for which he or she is responsible and to achieve the targeted annual level of bookings, sales, new business and profitability for such products. The business unit managers are assisted by account managers and sales engineers who are responsible for covering major OEM and aftermarket accounts. Account managers and sales engineers are expected to be familiar with the personnel, organization and needs of specific customers to achieve total bookings and new business goals at each account and, together with the business unit managers, to determine when additional resources are required at

customer locations. Most of our sales personnel are evaluated, in part, on their bookings and their ability to identify and obtain new business opportunities.

Though typically performed by employees, the account manager function may be performed by independent representatives depending on the specific customer, product and geographic location. We also use a number of distributors to

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provide logistical support as well as serve as a primary customer contact with certain smaller accounts. Our major distributors are Aviall, Inc. (a subsidiary of The Boeing Company) and Satair A/S (a subsidiary of Airbus S.A.S.).

Manufacturing and Engineering

We maintain 57 principal manufacturing facilities. Most of our manufacturing facilities are comprised of manufacturing, distribution and engineering functions, and most facilities have certain administrative functions, including management, sales and finance. We continually strive to improve productivity and reduce costs, including rationalization of operations, developing improved control systems that allow for accurate accounting and reporting, investing in equipment, tooling, information systems and implementing broad-based employee training programs. Management believes that our manufacturing systems and equipment contribute to our ability to compete by permitting us to meet the rigorous tolerances and cost sensitive price structure of aircraft component customers. We attempt to differentiate ourselves from our competitors by producing uniquely engineered products with high quality and timely delivery. Our engineering costs are recorded in cost of sales and in selling and administrative expenses and research and development costs are recorded in selling and administrative expenses in our consolidated statements of income. The aggregate of engineering expense and research and development expense represents approximately 7% of our operating units' aggregate costs, or approximately 4% of our consolidated net sales. Our proprietary products, and particularly our new product initiatives, are designed by our engineers and are intended to serve the needs of the aircraft component industry. These proprietary designs must withstand the extraordinary conditions and stresses that will be endured by products during use and meet the rigorous demands of our customers' tolerance and quality requirements.

We use sophisticated equipment and procedures to comply with quality requirements, specifications and Federal Aviation Administration ("FAA") and OEM requirements. We perform a variety of testing procedures as required by our customers, such as testing under different temperature, humidity and altitude levels, shock and vibration testing and X-ray fluorescent measurement. These procedures, together with other customer approved techniques for document, process and quality control, are used throughout our manufacturing facilities. Refer to Note 3, "Summary of Significant Accounting Policies" to the consolidated financial statements included herein with respect to total costs of research and development, which is incorporated herein by reference.

Customers

We predominantly serve customers in the commercial, regional, business jet and general aviation aftermarket, which accounts for approximately 37% of total sales; the commercial aerospace OEM market, comprising large commercial transport manufacturers and regional and business jet manufacturers, which accounts for approximately 29% of total sales; and the defense market, which accounts for approximately 30% of total sales. Non-aerospace sales comprise approximately 4% of our total sales.

Our customers include: (1) distributors of aerospace components; (2) worldwide commercial airlines, including national and regional airlines; (3) large commercial transport and regional and business aircraft OEMs; (4) various armed forces of the United States and friendly foreign governments; (5) defense OEMs; (6) system suppliers; and (7) various other industrial customers. For the year ended September 30, 2016, Airbus S.A.S. (which includes Satair A/S, a distributor of commercial aftermarket parts to airlines throughout the world) accounted for approximately 13% of our net sales and The Boeing Company (which includes Aviall, Inc., also a distributor of commercial aftermarket parts to airlines throughout the world) accounted for approximately 12% of our net sales. Our top ten customers for fiscal year 2016 accounted for approximately 45% of our net sales. Products supplied to many of our customers are used on multiple platforms.

Active commercial production programs include the Boeing 737, 747, 767, 777 and 787, the Airbus A318/19/20/21 (including neo), A330/A340, A350 and A380, the Bombardier CRJ's, Challenger and Learjets, the Embraer RJ's, the Cessna Citation family, the Raytheon Premier and Hawker and most Gulfstream airframes. Military platforms include aircraft such as the Boeing C-17, F-15, F-18, P-8 and V-22, the Airbus A400M, the Lockheed Martin C-130J, F-16 and F-35 Joint Strikefighter, the Northrop Grumman E-2C Hawkeye, the Sikorsky UH-60 helicopter, CH-47 Chinook and AH-64 Apache helicopters, the General Atomics Predator Drone and the Raytheon Patriot Missile. TransDigm has been awarded numerous contracts for the development of engineered products for production on the Airbus A330neo, the Boeing 737 MAX and 777X, the Embraer 175/190/195 E2, the Sikorsky S-97 and JMR helicopter.



The markets in which we sell our products are, to varying degrees, cyclical and have experienced upswings and downturns. The demand for our commercial aftermarket parts and services depends on, among other things, the breadth of our installed OEM base, revenue passenger miles (“RPMs”), the size and age of the worldwide aircraft fleet and, to a lesser extent, airline profitability. The demand for defense products is specifically dependent on government budget trends, military campaigns and political pressures.

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### Competition

The niche markets within the aerospace industry that we serve are relatively fragmented and we face several competitors for many of the products and services we provide. Due to the global nature of the commercial aircraft industry, competition in these categories comes from both U.S. and foreign companies. Competitors in our product offerings range in size from divisions of large public corporations to small privately-held entities with only one or two components in their entire product portfolios.

We compete on the basis of engineering, manufacturing and marketing high quality products, which we believe meet or exceed the performance and maintenance requirements of our customers, consistent and timely delivery, and superior customer service and support. The industry's stringent regulatory, certification and technical requirements, and the investments necessary in the development and certification of products, create barriers to entry for potential new competitors. As long as customers receive products that meet or exceed expectations and performance standards, we believe that they will have a reduced incentive to certify another supplier because of the cost and time of the technical design and testing certification process. In addition, we believe that the availability, dependability and safety of our products are reasons for our customers to continue long-term supplier relationships.

### Government Contracts

Companies engaged in supplying defense-related equipment and services to U.S. Government agencies are subject to business risks specific to the defense industry. These risks include the ability of the U.S. Government to unilaterally: (1) suspend us from receiving new contracts based on alleged violations of procurement laws or regulations; (2) terminate existing contracts; (3) reduce the value of existing contracts; (4) audit our contract-related costs and fees, including allocated indirect costs; and (5) control and potentially prohibit the export of our products.

### Governmental Regulation

The commercial aircraft component industry is highly regulated by the FAA in the United States and by the Joint Aviation Authorities in Europe and other agencies throughout the world, while the military aircraft component industry is governed by military quality specifications. We, and the components we manufacture, are required to be certified by one or more of these entities or agencies, and, in many cases, by individual OEMs, in order to engineer and service parts and components used in specific aircraft models.

We must also satisfy the requirements of our customers, including OEMs and airlines that are subject to FAA regulations, and provide these customers with products and services that comply with the government regulations applicable to commercial flight operations. In addition, the FAA requires that various maintenance routines be performed on aircraft components. We believe that we currently satisfy or exceed these maintenance standards in our repair and overhaul services. We also maintain several FAA approved repair stations.

In addition, our businesses are subject to many other laws and requirements typically applicable to manufacturers and exporters. Without limiting the foregoing, sales of many of our products that will be used on aircraft owned by foreign entities are subject to compliance with export control laws and the manufacture of our products and the operations of our businesses, including the disposal of hazardous wastes, are subject to compliance with applicable environmental laws.

### Market Channels

The commercial aerospace industry, including the aftermarket and OEM market, is impacted by the health of the global economy and geo-political events around the world. The commercial aerospace industry had shown strength with increases in revenue passenger miles, or RPMs, between 2003 and 2008, as well as increases in OEM production and backlog. However, in 2009, the global economic downturn negatively impacted the commercial aerospace industry causing RPMs to decline slightly. This market sector began to rebound in 2010 and positive growth has continued through 2016 with increases in RPMs, as well as the growth in the large commercial OEM sector (aircraft with 100 or more seats) with order announcements by The Boeing Company and Airbus S.A.S. leading to planned increases in production. The 2017 leading indicators and industry consensus suggest a continuation of current trends in the commercial transport market sector supported by continued RPM growth and increases in production at the OEM level.

The defense aerospace market is dependent on government budget constraints, the timing of orders and the extent of global conflicts. It is not necessarily affected by general economic conditions that affect the commercial aerospace

industry.

Our presence in both the commercial aerospace and military sectors of the aerospace industry may mitigate the impact on our business of any specific industry risk. We service a diversified customer base in the commercial and military aerospace industry, and we provide components to a diverse installed base of aircraft, which mitigates our exposure to any individual airframe platform. At times, declines in sales in one channel have been offset by increased sales in another. However, due to differences between the profitability of our products sold to OEM and aftermarket customers, variation in product mix can cause variation in gross margin.

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There are many short-term factors (including inventory corrections, unannounced changes in order patterns, strikes and mergers and acquisitions) that can cause short-term disruptions in our quarterly shipment patterns as compared to previous quarters and the same periods in prior years. As such, it can be difficult to determine longer-term trends in our business based on quarterly comparisons. To normalize for short-term fluctuations, we tend to look at our performance over several quarters or years of activity rather than discrete short-term periods.

There are also fluctuations in OEM and aftermarket ordering and delivery requests from quarter-to-quarter, as well as variations in product mix from quarter-to-quarter, that may cause positive or negative variations in gross profit margins since commercial aftermarket sales have historically produced a higher gross margin than sales to commercial OEMs. Again, in many instances these are timing events between quarters and must be balanced with macro aerospace industry indicators.

### Commercial Aftermarket

The key growth factors in the commercial aftermarket include worldwide RPMs and the size and activity level of the worldwide fleet of aircraft. After a decline in RPMs in 2009, worldwide RPMs returned to growth between 2010 and 2016 and current industry consensus indicates that positive RPM growth will continue in 2017.

### Commercial OEM Market

The commercial transport market sector, the largest sector in the commercial OEM market, grew modestly during 2016. Our commercial transport OEM shipments and revenues generally run ahead of the Boeing and Airbus airframe delivery schedules. As a result and consistent with prior years, our fiscal 2017 shipments will be a function of, among other things, the estimated 2017 and 2018 commercial airframe production rates. We have been experiencing increased sales in the large commercial OEM sector (aircraft with 100 or more seats) driven by an increase in production by The Boeing Company and Airbus S.A.S tied to previous order announcements. Industry consensus indicates this production increase will continue in 2017 and 2018, though the growth may continue to moderate and begin to flatten.

### Defense

Our military business fluctuates from year to year, and is dependent, to a degree, on government budget constraints, the timing of orders and the extent of global conflicts. In recent years, defense spending has reached historic highs, due in part to the military engagements in Afghanistan and Iraq and the war on terrorism. For a variety of reasons, the military spending outlook is very uncertain. For planning purposes we assume that military related sales of our types of products to be flat in future years over the recent high levels.

### Raw Materials

We require the use of various raw materials in our manufacturing processes. We also purchase a variety of manufactured component parts from various suppliers. At times, we concentrate our orders among a few suppliers in order to strengthen our supplier relationships. Most of our raw materials and component parts are generally available from multiple suppliers at competitive prices.

### Intellectual Property

We have various trade secrets, proprietary information, trademarks, trade names, patents, copyrights and other intellectual property rights, which we believe, in the aggregate but not individually, are important to our business.

### Backlog

As of September 30, 2016, the Company estimated its sales order backlog at \$1,554 million compared to an estimated sales order backlog of \$1,428 million as of September 30, 2015. The increase in estimated sales order backlog is primarily due to acquisitions. The majority of the purchase orders outstanding as of September 30, 2016 are scheduled for delivery within the next twelve months. Purchase orders may be subject to cancellation or deferral by the customer prior to shipment. The level of unfilled purchase orders at any given date during the year will be materially affected by the timing of the Company's receipt of purchase orders and the speed with which those orders are filled. Accordingly, the Company's backlog as of September 30, 2016 may not necessarily represent the actual amount of shipments or sales for any future period.

### Foreign Operations

Although we manufacture a significant portion of our products in the United States, we manufacture some products in Belgium, China, Germany, Hungary, Malaysia, Mexico, Norway, Sri Lanka, Sweden, and the United Kingdom.

Although the majority of sales of our products are made to customers (including distributors) located in the United States, our products are ultimately sold to and used by customers (including airlines and other end users of aircraft) throughout the world. A number of risks inherent in international operations could have a material adverse effect on our results of operations, including currency fluctuations, difficulties in staffing and managing multi-national operations, general economic and political uncertainties and potential for social unrest in countries in which we operate, limitations on our ability to enforce legal rights and remedies,

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restrictions on the repatriation of funds, change in trade policies, tariff regulation, difficulties in obtaining export and import licenses and the risk of government financed competition.

Environmental Matters

Our operations and facilities are subject to a number of federal, state, local and foreign environmental laws and regulations that govern, among other things, discharges of pollutants into the air and water, the generation, handling, storage and disposal of hazardous materials and wastes, the remediation of contamination and the health and safety of our employees. Environmental laws and regulations may require that the Company investigate and remediate the effects of the release or disposal of materials at sites associated with past and present operations. Certain facilities and third-party sites utilized by the Company have been identified as potentially responsible parties under the federal superfund laws and comparable state laws. The Company is currently involved in the investigation and remediation of a number of sites under applicable laws.

Employees

As of September 30, 2016, we had approximately 9,300 full-time, part-time and temporary employees. Approximately 11% of our full-time and part-time employees were represented by labor unions. Collective bargaining agreements between us and these labor unions expire at various dates ranging from November 2016 to April 2020. We consider our relationship with our employees generally to be satisfactory.

Available Information

TD Group's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, including any amendments, will be made available free of charge on the Company's website, [www.transdigm.com](http://www.transdigm.com), as soon as reasonably practicable, following the filing of the reports with the Securities and Exchange Commission.

**ITEM 1A. RISK FACTORS**

Set forth below are important risks and uncertainties that could negatively affect our business and financial condition and could cause our actual results to differ materially from those expressed in forward-looking statements contained in this report.

Our commercial business is sensitive to the number of flight hours that our customers' planes spend aloft, the size and age of the worldwide aircraft fleet and our customers' profitability. These items are, in turn, affected by general economic and geopolitical and other worldwide conditions.

Our commercial business is directly affected by, among other factors, changes in revenue passenger miles (RPMs), the size and age of the worldwide aircraft fleet and, to a lesser extent, changes in the profitability of the commercial airline industry. RPMs and airline profitability have historically been correlated with the general economic environment, although national and international events also play a key role. For example, in the past, the airline industry has been severely affected by the downturn in the global economy, higher fuel prices, the increased security concerns among airline customers following the events of September 11, 2001, the Severe Acute Respiratory Syndrome (SARS) epidemic, and the conflicts in Afghanistan and Iraq, and could be impacted by future geopolitical or other worldwide events, such as war, terrorist acts, or a worldwide infectious disease outbreak. In addition, global market and economic conditions have been challenging with turbulence in the U.S. and international markets and economies and have prolonged declines in business and consumer spending. As a result of the substantial reduction in airline traffic resulting from these events, the airline industry incurred large losses and financial difficulties. Some carriers have also parked or retired a portion of their fleets and have reduced workforces and flights. During periods of reduced airline profitability, some airlines may delay purchases of spare parts, preferring instead to deplete existing inventories. If demand for new aircraft and spare parts decreases, there would be a decrease in demand for certain of our products. An adverse change in demand could impact our results of operations, collection of accounts receivable and our expected cash flow generation from current and acquired businesses which may adversely impact our financial condition and access to capital markets.

Our sales to manufacturers of aircraft are cyclical, and a downturn in sales to these manufacturers may adversely affect us.

Our sales to manufacturers of large commercial aircraft, such as The Boeing Company, Airbus S.A.S, and related OEM suppliers, as well as manufacturers of business jets (which accounted for approximately 27% of our net sales in

fiscal year 2016) have historically experienced periodic downturns. In the past, these sales have been affected by airline profitability, which is impacted by, among other things, fuel and labor costs, price competition, downturns in the global economy and national and international events. In addition, sales of our products to manufacturers of business jets are impacted by, among other things, downturns in the global economy. Downturns adversely affect our net sales, gross margin and net income.

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We rely heavily on certain customers for much of our sales.

Our two largest customers for fiscal year 2016 were Airbus S.A.S. (which includes Satair A/S) and The Boeing Company (which includes Aviall, Inc.). Airbus S.A.S. accounted for approximately 13% of our net sales and The Boeing Company accounted for approximately 12% of our net sales in fiscal year 2016. Our top ten customers for fiscal year 2016 accounted for approximately 45% of our net sales. A material reduction in purchasing by one of our larger customers for any reason, including but not limited to economic downturn, decreased production, strike or resourcing, could have a material adverse effect on our net sales, gross margin and net income.

We generally do not have guaranteed future sales of our products. Further, when we enter into fixed price contracts with some of our customers, we take the risk for cost overruns.

As is customary in our business, we do not generally have long-term contracts with most of our aftermarket customers and, therefore, do not have guaranteed future sales. Although we have long-term contracts with many of our OEM customers, many of those customers may terminate the contracts on short notice and, in most cases, our customers have not committed to buy any minimum quantity of our products. In addition, in certain cases, we 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, and this anticipated future volume of orders may not materialize. We also have entered into multi-year, fixed-price contracts with some of our customers, pursuant to which we have agreed to perform the work for a fixed price and, accordingly, realize all the benefit or detriment resulting from any decreases or increases in the costs of making these products. Sometimes we accept a fixed-price contract for a product that we have not yet produced, and this increases the risk of cost overruns or delays in the completion of the design and manufacturing of the product. Most of our contracts do not permit us to recover increases in raw material prices, taxes or labor costs.

U.S. military spending is dependent upon the U.S. defense budget.

The military and defense market is significantly dependent upon government budget trends, particularly the U.S. Department of Defense (the "DOD") budget. In addition to normal business risks, our supply of products to the United States Government is subject to unique risks largely beyond our control. DOD budgets could be negatively impacted by several factors, including, but not limited to, a change in defense spending policy by the current presidential administration, the U.S. Government's budget deficits, spending priorities, the cost of sustaining the U.S. military presence in the Middle East and possible political pressure to reduce U.S. Government military spending, each of which could cause the DOD budget to remain unchanged or to decline. A significant decline in U.S. military expenditures could result in a reduction in the amount of our products sold to the various agencies and buying organizations of the U.S. Government.

We intend to pursue acquisitions. Our business may be adversely affected if we cannot consummate acquisitions on satisfactory terms, or if we cannot effectively integrate acquired operations.

A significant portion of our growth has occurred through acquisitions. Any future growth through acquisitions will be partially dependent upon the continued availability of suitable acquisition candidates at favorable prices and upon advantageous terms and conditions. We intend to pursue acquisitions that we believe will present opportunities consistent with our overall business strategy. However, we may not be able to find suitable acquisition candidates to purchase or may be unable to acquire desired businesses or assets on economically acceptable terms. In addition, we may not be able to raise the capital necessary to fund future acquisitions. Because we may actively pursue a number of opportunities simultaneously, we may encounter unforeseen expenses, complications and delays, including regulatory complications or difficulties in employing sufficient staff and maintaining operational and management oversight.

We regularly engage in discussions with respect to potential acquisition and investment opportunities. If we consummate an acquisition, our capitalization and results of operations may change significantly. Future acquisitions could result in margin dilution and further likely result in the incurrence of additional debt and contingent liabilities and an increase in interest and amortization expenses or periodic impairment charges related to goodwill and other intangible assets as well as significant charges relating to integration costs.

Acquisitions involve risks that the businesses acquired will not perform in accordance with expectations and that business judgments concerning the value, strengths and weaknesses of businesses acquired will prove incorrect. In addition, we may not be able to successfully integrate any business we acquire into our existing business. The



successful integration of new businesses depends on our ability to manage these new businesses and cut excess costs. The successful integration of future acquisitions may also require substantial attention from our senior management and the management of the acquired business, which could decrease the time that they have to service, attract customers and develop new products and services or attend to other acquisition opportunities.

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We are subject to certain unique business risks as a result of supplying equipment and services to the U.S. Government.

Companies engaged in supplying defense-related equipment and services to U.S. Government agencies are subject to business risks specific to the defense industry. These risks include the ability of the U.S. Government to unilaterally: suspend us from receiving new contracts based on alleged violations of procurement laws or regulations; terminate existing contracts; reduce the value of existing contracts; and audit our contract-related costs and fees, including allocated indirect costs.

Most of our U.S. Government contracts can be terminated by the U.S. Government for its convenience without significant notice. Termination for convenience provisions provide only for our recovery of costs incurred or committed, settlement expenses and profit on the work completed prior to termination.

On contracts for which 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, amortization of intangible assets, portions of research and development costs, and certain marketing expenses may not be subject to reimbursement.

Furthermore, even where the price is not based on cost, the U.S. Government may seek to review our costs to determine whether our pricing is “fair and reasonable.” Our subsidiaries are periodically subject to a pricing review. Such a review could be costly and time consuming for our management and could distract from our ability to effectively manage the business. As a result of such a review, we could be subject to providing a refund to the U.S. Government or we could be asked to enter into an arrangement whereby our prices would be based on cost or the DOD could seek to pursue alternative sources of supply for our parts. Any of those occurrences could lead to a reduction in our revenue from, or the profitability of certain of our supply arrangements with, certain agencies and buying organizations of the U.S. Government.

Moreover, U.S. Government purchasing regulations contain a number of additional operation requirements, which do not apply to entities not engaged in government contracting. Failure to comply with such government contracting requirements could result in civil and criminal penalties that could have a material adverse effect on the Company’s results of operations.

Our business may be adversely affected if we would lose our government or industry approvals or if more stringent government regulations are enacted or if industry oversight is increased.

The aerospace industry is highly regulated in the United States and in other countries. In order to sell our components, we and the components we manufacture must be certified by the FAA, the DOD and similar agencies in foreign countries and by individual manufacturers. If new and more stringent government regulations are adopted or if industry oversight increases, we might incur significant expenses to comply with any new regulations or heightened industry oversight. In addition, if material authorizations or approvals were revoked or suspended, our business would be adversely affected.

In addition to the aviation approvals, we are at times required to obtain approval from U.S. Government agencies to export our products. Failure to obtain approval to export or determination by the U.S. Government that we failed to receive required approvals or licenses could eliminate or restrict our ability to sell our products outside the United States, and the penalties that could be imposed by the U.S. Government for failure to comply with these laws could be significant.

Our indebtedness could adversely affect our financial health and could harm our ability to react to changes to our business and prevent us from fulfilling our obligations under our indebtedness.

We have a significant amount of indebtedness. As of September 30, 2016, our total indebtedness, excluding approximately \$17 million of outstanding letters of credit, was approximately \$10.2 billion, which was 106.8% of our total book capitalization as a result of our prior year dividends being funded with indebtedness and the addition of approximately \$1.8 billion in net new debt during fiscal 2016. We also incurred additional indebtedness subsequent to September 30, 2016 more fully described in Note 23, “Subsequent Events” in the notes to consolidated financial statements included herein.

In addition, we may be able to incur substantial additional indebtedness in the future. For example, as of September 30, 2016, we had approximately \$583 million of unused commitments under our revolving loan facility and \$50 million of unused capacity under our trade receivable securitization facility (the “Securitization Facility”) (with the availability of the capacity under the Securitization Facility being dependent on the amount of our trade receivables). Although our senior secured credit facility and the indentures governing the various senior subordinated notes outstanding (the “Indentures”) contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of significant qualifications and exceptions, and the indebtedness incurred in compliance with these qualifications and exceptions could be substantial. For example, if the usage of the revolving loan facility exceeds 25% of the total revolving commitments, the Company will be

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required to maintain a maximum consolidated net leverage ratio of net debt, as defined, to trailing four-quarter EBITDA As Defined. A breach of any of the covenants or an inability to comply with the required leverage ratio could result in a default under the senior secured credit facility or the Indentures.

Our substantial debt could also have other important consequences to investors. For example, it could:

• increase our vulnerability to general economic downturns and adverse competitive and industry conditions;

• increase the risk we are subjected to downgrade or put on a negative watch by the ratings agencies;

• require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital requirements, capital expenditures, acquisitions, research and development efforts and other general corporate requirements;

• limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;

• place us at a competitive disadvantage compared to competitors that have less debt; and

• limit, along with the financial and other restrictive covenants contained in the documents governing our indebtedness, among other things, our ability to borrow additional funds, make investments and incur liens.

In addition, all of our debt under the senior secured credit facility, which includes \$5.3 billion in term loans and a revolving loan facility of \$600 million, bears interest at floating rates. Accordingly, if interest rates increase, our debt service expense will also increase. Interest rate swap and cap agreements are used to manage interest rate risk associated with floating-rate borrowings under our credit facilities. For information about our interest rate swap and cap agreements, see Note 20, “Derivatives and Hedging Instruments” in the notes to the consolidated financial statements included herein.

Our substantial level of indebtedness increases the possibility that we may be unable to generate cash sufficient to pay, when due, the principal of, interest on or other amounts due in respect of our indebtedness, including the Indentures.

We cannot assure that our business will generate sufficient cash flow from operations or that future borrowings will be available to us under the senior secured credit facility or otherwise in amounts sufficient to enable us to service our indebtedness. If we cannot service our debt, we will have to take actions such as reducing or delaying capital investments, selling assets, restructuring or refinancing our debt or seeking additional equity capital.

To service our indebtedness, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control and any failure to meet our debt service obligations could harm our business, financial condition and results of operations.

Our ability to make payments on and to refinance our indebtedness, including the Indentures, amounts borrowed under the senior secured credit facility, amounts due under our Securitization Facility, and to fund our operations, will depend on our ability to generate cash in the future, which, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

We cannot assure that our business will generate sufficient cash flow from operations, that currently anticipated cost savings and operating improvements will be realized on schedule, or at all, or that future borrowings will be available to us under the senior secured credit facility or otherwise in amounts sufficient to enable us to service our indebtedness, including the amounts borrowed under the senior secured credit facility, amounts borrowed under our Securitization Facility and the Indentures, or to fund our other liquidity needs. If we cannot service our debt, we will have to take actions such as reducing or delaying capital investments, selling assets, restructuring or refinancing our debt or seeking additional equity capital. We cannot assure that any of these remedies could, if necessary, be effected on commercially reasonable terms, or at all. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. The terms of existing or future debt instruments, the Securitization Facility, the Indentures and the senior secured credit facility may restrict us from adopting any of these alternatives. In addition, any failure to make payments of interest and principal on our outstanding indebtedness on a timely basis would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness on acceptable terms and would otherwise adversely affect the Indentures.

The terms of the senior secured credit facility and Indentures may restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.

Our senior secured credit facility and the Indentures contain a number of restrictive covenants that impose significant operating and financial restrictions on TD Group, TransDigm Inc. and its subsidiaries (in the case of the senior secured credit facility) and TransDigm Inc. and its subsidiaries (in the case of the Indentures) and may limit their ability to engage in acts that may be in our long-term best interests. The senior secured credit facility and Indentures include covenants restricting, among

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other things, the ability of TD Group, TransDigm Inc. and its subsidiaries (in the case of the senior secured credit facility) and TransDigm Inc. and its subsidiaries (in the case of the Indentures) to:

- incur or guarantee additional indebtedness or issue preferred stock;
- pay distributions on, redeem or repurchase our capital stock or redeem or repurchase our subordinated debt;
- make investments;
- sell assets;
- enter into agreements that restrict distributions or other payments from our restricted subsidiaries to us;
- incur or allow to exist liens;
- consolidate, merge or transfer all or substantially all of our assets;
- engage in transactions with affiliates;
- create unrestricted subsidiaries; and
- engage in certain business activities.

A breach of any of these covenants could r