





No other company in the world bundles together aircraft leasing, airline solutions, engine power, maintenance and logistics solutions.

SOLUTIONS GROUP





Aircraft Leasing



Training Services

AIRLINE GROUP







FAR 121 Freight and Passenger Operators - B767200/300, B757, and B777-200

SERVICES GROUP





Aircraft Maintenance & Engineering Services





TO OUR SHAREHOLDERS

Entering its third decade as a public company, Air Transport Services Group is a formidable leader in the fastest growing segment of the logistics industry – supporting the expansion of e-commerce merchandising through cargo aircraft and services it provides for regional air express networks throughout the world.

2022 was a very good year for your Company. Revenues topped \$2 billion for the first time, and earnings from continuing operations were \$196 million, or \$2.26 per diluted share. In February 2022, we set annual goals for two non-GAAP measures, Adjusted EBITDA and Adjusted Earnings Per Share. Thanks to hard work by our dedicated employees, we exceeded both goals.

"Our 2022 earnings from continuing operations were more than triple what they were in 2019"

Our 2022 earnings from continuing operations were more than triple what they were in 2019, the last year before the pandemic. Neither of those years were impacted by any federal grant funds related to airline pandemic relief.

Our reporting segments, Cargo Aircraft Management ("CAM") and ACMI Services, both had good years. CAM's pretax earnings increased 35% to \$143 million. ACMI Services earned \$95 million, which was more than double its earnings in 2021 excluding contributions from those pandemic relief grants.

Our GAAP earnings also continued to be affected by non-cash gains and losses in our liabilities for stock warrants that we began issuing to Amazon in 2016 as lease incentives, and mark-to-market changes in certain other liabilities. The impact of those changes has diminished since Amazon exercised most of its vested warrants in 2021, becoming your Company's largest shareholder in the process

with about 19% of shares outstanding. Pretax earnings included \$9 million in such financial instrument gains in 2022, versus \$30 million in 2021.

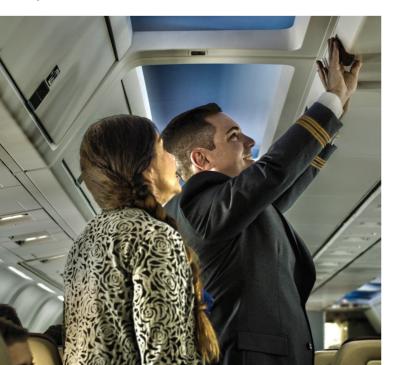
The foundation of our business remains dry-leasing midsize freighter aircraft that we purchase as mid-life passenger planes and convert to freighters. We remain the global market's largest source of that aircraft type, and customer demand for them remains greater than we can supply.

We added 13 Boeing 767 freighters to our fleet in 2022. Six were owned by CAM, which leased them to external customers. Our airlines operate two of them under crew, maintenance and insurance ("CMI") agreements with DHL. CAM also redeployed one Boeing 767-200 freighter under lease and extended the leases on four others.



Seven other Boeing 767-300s we don't own joined our fleet under asset-light CMI arrangements. Customers who obtained them elsewhere assigned them to our cargo airlines, ABX Air and Air Transport International ("ATI"), which began 2022 flying six freighters on the same basis. We expect our customers to assign us three more of their Boeing 767s in 2023. Those assignments are an important part of our business, as they demonstrate our customers' confidence in the quality and value of the airline services that we provide.

Our original 2022 business plan called for 11 new freighter leases, but vendor and regulatory issues prevented us from reaching that target. Throughput at our principal Boeing 767 conversion vendor remained well behind pre-pandemic levels in 2022. We are confident that pace will pick up sharply in 2023, as that vendor has expanded its Boeing 767 conversion capacity and improved its sourcing of conversion components. At the same time, we booked eight Boeing 767 conversion slots with Boeing for 2023 and 2024 that will yield four more converted 767 freighters in service each year. A combination of additional slots and faster throughput give us greater confidence that we can meet our fleet expansion goals this year and in 2024.



Leasing of our converted Airbus A321-200 freighters is expected to begin in mid-2023, when regulatory agencies abroad grant approval. CAM's first two A321-200 converted freighters are ready to fly, and four more are on schedule for delivery in the second half of this year.

CAM owns or has commitments to purchase all of the passenger aircraft it requires for our anticipated 20 freighter leases in 2023, including 14 Boeing 767s and six A321s, and nearly all of the more than 20 freighters that we will lease in 2024, including a projected 16 Boeing 767s. To prepare for two successive years of record leased freighter deployments, CAM purchased eight Boeing 767 and six Airbus A321 passenger aircraft for conversion last year, and will buy more used passenger aircraft for conversion to freighters in 2023, including the first three of four Airbus A330s that we plan to deliver to waiting customers next year. We had a record 22 aircraft in or awaiting freighter conversion at the end of last year.

Those purchases and conversion expenditures increased our capital spending to nearly \$600 million in 2022. Sustaining capital spending, mainly for airframe and engine maintenance, technology and other equipment, increased \$4 million to \$187 million for the year. Growth spending was \$412 million, up \$90 million.

Growth investments will increase again in 2023, to \$590 million, as the largest component of an \$850 million total capital budget. Most of that will fund the continued expansion of our leased 767 fleet. The rest will fund the purchase and conversion of Airbus A321s and A330s.

ATSG has been steadily de-levering its balance sheet since our acquisition of OAI in 2018. Through 2022, the leverage ratio our banks use as their principal yardstick was below two times, and well below our average over the last several years. In 2020 and 2021, we issued unsecured notes at a 4.75% coupon rate and

amended our senior credit facility to increase our borrowing capacity, free up some collateral, and accommodate the resumption of our stock repurchase program. Share re-purchasing during the fourth quarter of 2022 totaled \$54 million. Available credit under our revolver was \$365 million at the end of 2022. In March 2023, we established a \$100 million credit facility in Ireland to support our increased business with airlines in Europe and Asia.

We expect our capital spending to remain elevated through 2024. But even with higher capital expenditure levels, we do not expect our leverage ratio to exceed three times. We expect to return to de-levering in 2025, as we expect growth spending to begin to decline and cash flows from 2023 and 2024 aircraft leases to increase.

"Our business model and strategy are ideally suited for today's economic uncertainty because they bring us two key differentiators: resilience and growth."

Our business model and strategy are ideally suited for today's economic uncertainty because they bring us two key differentiators: resilience and growth. We are resilient because we lease to and operate aircraft for our customers on a dedicated basis and our customers are ordinarily responsible for the cost of jet fuel. We earn revenue every month for the freighters we lease to customers, no matter how often they operate, how far they travel, or the amount of cargo on board. For those aircraft we operate, maintain and insure for our customers, we earn at least a minimum monthly revenue contribution, but typically much more from customers that depend on them to move millions of packages each day. And instead of flying larger freighters over trans-Pacific express routes, and under arrangements

based on variable payload volumes, our cargo airlines operate customer-dedicated aircraft mostly within the United States, along spokes of express networks that are essential for keeping rapid fulfillment promises to e-commerce and other customers.

Our aircraft leasing business is not limited to one country or region. It will continue to grow because the decade-long acceleration in consumer preferences toward e-commerce versus brick and mortar shopping is continuing, and driving demand for aircraft to facilitate delivery of goods quickly to the consumer's doorstep. The surge in e-commerce spending in the U.S. and western Europe during the pandemic is now rippling out into other parts of the world, including Asia, India, Africa and Latin America

We anticipated that trend several years ago. Therefore, we shifted our sales and marketing emphasis abroad, and decided to augment our all-Boeing fleet with new aircraft types from Airbus. We chose a partner to help us develop an Airbus A321-200 converted freighter aircraft to address customer interest in a narrow-body freighter that could replace comparable Boeing 757 and older Boeing 737 types over shorter distances into smaller markets. We also decided to invest in the Airbus A330-300 as a longerrange, somewhat larger complement to our Boeing 767 fleet, noting an ample supply of Airbus A330 passenger aircraft reaching the prime age for conversion to freighters. We are buying and inducting for conversion our first Airbus A330s this year for lease in 2024.

The net result is that more than 80% of CAM's more than 40 projected leased freighter deployments over the next two years will be to airlines operating outside North America, many of which operate within air networks established by an existing customer and other global integrators. That includes all of the Airbus freighters we will lease over that period.



The majority of the six Airbus A321 freighters that we plan to lease this year will be going abroad.

ABX Air and ATI added nine Boeing 767 freighters to their combined fleets in 2022, including seven that we do not own but are operating on a CMI basis on behalf of customers. Block hours of flying for all three airlines increased 8% last year, with a 9% increase in cargo operations. On the passenger side, OAI completed a strong schedule of passenger airline missions for government customers last year, and the Department of Defense fully restored ATI's Boeing 757 "combi" aircraft schedule, including our longest route beginning in the fourth quarter. Together, our 2022 passenger and combi hours grew 4%.

In February 2022, we extended and expanded our long-standing commercial relationship with DHL, which dates to 2003 when ATSG became an independent public company. ABX Air will remain the backbone airline of the DHL Express network within the United States under a sixyear expansion of our commercial agreement. DHL agreed then to lease three more Boeing

CAM, more than doubling number of aircraft we fly for DHL since the beginning of 2021.

In March 2022, we issued

ATSG's first corporate sustainability report to provide greater transparency with respect to our environmental, social and governance ("ESG") efforts and initiatives, including our ongoing efforts in seeking to reduce the amount of fuel we use in our airline operations and thereby reduce our level of greenhouse gas emissions as well as numerous other efforts to mitigate our impact on the environment. The report led to 2022 actions that drove progress along several of our key ESG initiatives.

They included the implementation of lighting and technology improvements, including some that allowed us to route our cargo operations more efficiently, saving millions of gallons of jet fuel and reducing our carbon footprint, the approval of four weeks of paid leave for new parents, including families adding adopted and foster children, raising a record \$850,000 in charitable contributions for social services and other organizations that serve communities where our employees live and work, and a new Management Sustainability Committee composed of executives, senior management and subject matter experts from ATSG and each of its operating subsidiaries, to further integrate

ESG matters into the strategy and operations of the Company. Early this year, the Board also approved a Human Rights Statement that commits the company to join others in working to deter human trafficking and related abuses.

And finally, last October, we resumed share repurchases for the first time since early 2021. We acquired about two million shares during the fourth quarter, mainly under existing Board authority. In November, the Board approved a new \$150 million repurchase authorization. You can expect us to continue to enter the market and buy shares from time to time, but only when conditions make sense for us to do so.

When we issued our fourth-quarter 2022 earnings in February, we issued financial guidance for 2023, including our projection to generate more Adjusted EBITDA than in 2022, based on the non-GAAP measure that we track internally and share with investors each quarter.

Our 2023 objective assumes a record pace of newly converted freighter lease deployments in 2023 and 2024, but also some headwinds, principally affecting results for our ACMI Services segment.

Long-term, we expect more growth opportunities for our airlines. But schedules we have received to date from our customers indicate headwinds for our cargo and passenger airlines in 2023 compared to 2022 levels. The airlines will likewise continue to bear higher inflation-driven costs for non-reimbursable expenses that exceed the rate of revenue increases from escalators in our CMI agreements.

The 2023 outlook also includes the potential return to CAM of several leased Boeing 767-200 freighters, which will be redeployed to other CAM customers, sold, or retired, with engines reconditioned and added to a pool we service and maintain for other Boeing 767-200 lessees.

After a year of upscaled investments in 2023, we expect to resume double-digit growth in 2024 and 2025, as measured by our Adjusted EBITDA standard, a non-GAAP financial measure. Our value proposition includes increasing freighter leasing growth under multi-year agreements, a unique, differentiated business model with a range of aircraft support services for our lessees and other companies, global expansion, and a more diversified customer base. We have a strong balance sheet, a leadership position in the midsized freighter leasing market and the strong backing of investors in our credit facility and debt securities.

Throughout our history, ATSG has always proved itself to be very resilient, and our employees very dedicated performers, even during challenging times. I fully expect to merit that distinction as we drive our results and create more shareholder value in 2023 and beyond.

Richard F. Corrado President & CEO

Air Transport Services Group

Berkard & Concerts



UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

☒ ANNUAL REPORT PURSUANT T	TO SECTION 13 OR 15(d) OF THE SECUR	ITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31,	2022	
☐ TRANSITION REPORT PURSUA	NT TO SECTION 13 OR 15(d) OF THE SE	CURITIES EXCHANGE ACT OF 1934
For the transition period from	_ to	
	Commission file number 000-50368	
- A • 700	16 . 6	T
Air I	ransport Services Group (Exact name of registrant as specified in its charter)	, Inc.
Delaware (State of Incorporation)		26-1631624 (I.R.S. Employer Identification No.)
	145 Hunter Drive, Wilmington, OH 45177 (Address of principal executive offices) 937-382-5591	
Securities registered pursuant to Section 1:	(Registrant's telephone number, including area code) 2(b) of the Exchange Act:	
-		
Title of each class Common Stock, par value \$0.01 per shar	• •	ne of each exchange on which registered The Nasdaq Stock Market
Securities registered pursuant to Section 12		The Nasuay Stock Market
Indicate by check mark if the registrant is a Indicate by check mark whether the register Exchange Act of 1934 during the preceding 12 (2) has been subject to such filing requirement. Indicate by check mark whether the regular pursuant to Rule 405 of Regulations S-T (§2 registrant was required to submit such files). You Indicate by check mark whether the registre company, or an emerging growth company.	gistrant has submitted electronically every Into 32.405 of this chapter) during the preceding 12 Yes I No I ant is a large accelerated filer, an accelerated file. See the definitions of "large accelerated f	3 or Section 15(d) of the Act. Yes □ No ☑ led by Section 13 or 15(d) of the Securities gistrant was required to file such reports), and eractive Data File required to be submitted 2 months (or for such shorter period that the er, a non-accelerated filer, a smaller reporting iler," "accelerated filer," "smaller reporting
company" and "emerging growth company" in	Rule 12b-2 of the Exchange Act. (Check one):	
Large accelerated filer Non-accelerated filer □	Accelerated filer \square Smaller Emerging growth company \square	reporting company \Box
If an emerging growth company, indicate complying with any new or revised financial a Indicate by check mark whether the regist	e by check mark if the registrant has elected accounting standards provided pursuant to Section rant has filed a report on and attestation to its number Section 404(b) of the Sarbanes-Oxley Ac	on 13(a) of the Exchange Act. □ nanagement's assessment of the effectiveness
	ection 12(b) of the Act, indicate by check mection of an error to previously issued financial	
Indicate by check mark whether any of the	hose error corrections are restatements that rec t's executive officers during the relevant recove	uired a recovery analysis of incentive-based
•	rant is a shell company (as defined in Rule 12b-	*
The aggregate market value of the voting	and non-voting common equity held by non-af	filiates computed by reference to the price at

which the common equity was last sold, as of the last business day of the registrant's most recently completed second fiscal quarter:

\$1,458,744,346.

As of March 1, 2023, there were 71,982,273 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the Annual Meeting of Stockholders scheduled to be held May 24, 2023 are incorporated by reference into Part III of this Annual Report on Form 10-K to the extent provided herein.

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 ("Act") provides a safe harbor for forward-looking statements to encourage companies to provide prospective information, so long as those statements are identified as forward-looking and are accompanied by meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those discussed in the statements. The Company wishes to take advantage of the safe harbor provisions of the Act.

This Annual Report on Form 10-K (the "Form 10-K"), including "Management's Discussion and Analysis of Financial Condition and Results of Operations," in Item 7, contains forward-looking statements, within the meaning of the Act, that involve risks and uncertainties. Forward-looking statements provide current expectations of future events based on certain assumptions and includes any statement that does not directly relate to any historical or current fact. Forward-looking statements can also be identified by words such as "future," "anticipates," "believes," "estimates," "expects," "intends," "plans," "predicts," "will," "would," "could," "can," "may," and similar terms. Forward-looking statements are not guarantees of future performance and the Company's actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed in "Risk Factors" in Item 1A. The Company assumes no obligation to revise or update any forward-looking statements for any reason, except as required by law.

Except for historical information contained in this Form 10-K, the matters discussed herein contain forward-looking statements that involve risks and uncertainties. Such statements are provided under the "safe harbor" protection of the Act. Forward-looking statements include, but are not limited to, statements regarding anticipated operating results, prospects and levels of assets under management, technological developments, economic trends, expected transactions and similar matters. The words "may," "believe," "expect," "anticipate," "forecast," "outlook," "will," "continue," "likely," "should," "hope," "seek," "plan," "intend" and variations of such words and similar expressions identify forward-looking statements. Similarly, descriptions of the Company's objectives, strategies, plans, goals or targets are also forward-looking statements. Forward-looking statements are susceptible to a number of risks, uncertainties and other factors. While the Company believes that the assumptions underlying its forward-looking statements are reasonable, investors are cautioned that any of the assumptions could prove to be inaccurate and, accordingly, the Company's actual results and experiences could differ materially from the anticipated results or other expectations expressed in its forward-looking statements.

A number of important factors could cause the Company's actual results to differ materially from those indicated by such forwardlooking statements. These factors include, but are not limited to: (i) unplanned changes in the market demand for its assets and services, including the loss of customers or a reduction in the level of services it performs for customers; (ii) its operating airlines' ability to maintain on-time service and control costs; (iii) the cost and timing with respect to which it is able to purchase and modify aircraft to a cargo configuration: (iv) fluctuations in the Company's traded share price and in interest rates, which may result in mark-to-market charges on certain financial instruments; (v) the number, timing, and scheduled routes of its aircraft deployments to customers; (vi) its ability to remain in compliance with key agreements with customers, lenders and government agencies; (vii) the impact of current supply chain constraints both within and outside the Unites States, which may be more severe or persist longer than it currently expects; (viii) the impact of a competitive labor market, which could restrict its ability to fill key positions; (ix) changes in general economic and/or industry-specific conditions; and (x) factors relating to the COVID-19 pandemic, including that the pandemic may (a) continue for a longer period, or its effect on commercial and military passenger flying may be more substantial than the Company currently expects; (b) cause disruptions to its workforce and staffing capability, including through its compliance with federally mandated COVID-19 vaccination and testing requirements; (c) cause disruptions in its ability to access airports and maintenance facilities; and (d) adversely impact its customers' creditworthiness or the ability of its vendors and third-party service providers to maintain customary service levels. Other factors that could cause the Company's actual results to differ materially from those indicated by such forward-looking statements are discussed in "Risk Factors" in Item 1A to this Form 10-K and are contained from time to time in the Company's other filings with the U.S. Securities and Exchange Commission, including its annual reports on Form 10-K and quarterly reports on Form 10-Q.

Readers should carefully review this Form 10-K and should not place undue reliance on the Company's forward-looking statements. The forward-looking statements were based on information, plans and estimates as of the date of this Form 10-K. New risks and uncertainties arise from time to time, and factors that the Company currently deems immaterial may become material, and it is impossible for the Company to predict these events or how they may affect it. Except as may be required by applicable law, the Company undertakes no obligation to update any forward-looking statements to reflect changes in underlying assumptions or factors, new information, future events or other changes.

AIR TRANSPORT SERVICES GROUP, INC. AND SUBSIDIARIES 2022 FORM 10-K ANNUAL REPORT

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PART I

ITEM 1. BUSINESS

Company Overview

We are a leading provider of aircraft leasing and air cargo transportation and related services. We lease converted freighter aircraft to customers throughout North America, Europe, Asia and Africa. Our total in service fleet is comprised of 128 freighter and passenger aircraft as of December 31, 2022. To support the needs of our leasing customers, and the aviation and logistics industries at large, we offer a broad array of complementary solutions ranging from flight and ground operations to aircraft maintenance and overhaul services. When the context requires, we may use the terms "Company," "we," "our" and "us" in this Form 10-K to refer to the business of Air Transport Services Group, Inc. and its subsidiaries on a consolidated basis. References in this Form 10-K to "ATSG" are solely to Air Transport Services Group, Inc.

For over 40 years, our subsidiaries have been providing airlift, ground operations and maintenance services to the air transportation industry. Air Transport Services Group, Inc. is incorporated in Delaware and headquartered at the Wilmington Air Park in Wilmington, Ohio.

Strategy

Our primary business segment is aircraft leasing. We acquire used medium wide-body and narrow-body passenger aircraft, manage their conversion into a freighter configuration leveraging our experience as an airline then lease the converted freighters to customers under long-term contracts. The aircraft we target for conversion are ideal for express and e-commerce driven regional air networks. As a result, our aircraft can be deployed into regional markets more economically than larger capacity aircraft, newly built aircraft or other competing alternatives.

We distinguish ourselves from, and gain an advantage over, our competitors by offering a breadth of integrated, complementary aviation- and logistics-related services. Our broad range of ancillary services include aircraft maintenance and modifications, engine leases and sort and gateway operations.

Our business development and marketing efforts leverage the entire portfolio of our capabilities to create a customized bundled solution to meet our customers' needs. Our ability to offer our customers differentiated services, including aircraft leasing, airline express operations, line and heavy maintenance, and ground handling services makes us unique from other providers in our industry.

Services

We have two reportable segments: Cargo Aircraft Management Inc. ("CAM"), which includes the leasing of aircraft and aircraft engines, and ACMI Services, which includes the cargo and passenger aircraft flight operations of our three airlines. Our other business operations, which primarily provide support services to the transportation industry, do not constitute reportable segments.

CAM

We own and lease aircraft through our subsidiary, CAM. We acquire used passenger aircraft, typically 15-20 years old, and cause them to be converted to a freighter aircraft configuration. Following conversion, we lease those aircraft externally under long-term contracts to a customer base that includes Amazon.com Services, LLC ("ASI"), DHL Network Operations (USA), Inc. and its affiliates ("DHL"), and other airlines as well as internally to our own airline subsidiaries.

At December 31, 2022, we owned 111 Boeing aircraft that were in revenue service. We also owned 15 Boeing 767-300 aircraft and seven Airbus 321-200 aircraft either undergoing or awaiting induction into the freighter conversion process. A complete list of our aircraft is included in Item 2, Properties. In response to market demand, we have agreements to expand the fleet through the modification of additional Boeing 767-300 and Airbus A321 and A330 aircraft over the next few years.

We are the world's largest owner of converted Boeing 767 freighter aircraft. Our freighter fleet is comprised primarily of Boeing 767 aircraft, which are desirable in regional air networks because of their reliability, cubic cargo capacity and durable performance. Each of the Boeing 767 aircraft we acquire and convert to freighter configuration

is expected to have an economic life of at least 20 years. The demand for this aircraft type remains strong and it is expected to remain our primary mid-sized freighter aircraft for the foreseeable future. We have agreements with two aircraft conversion providers, Israel Aerospace Industries ("IAI") and The Boeing Company ("Boeing"), to convert additional Boeing aircraft over the next three years.

Through a joint venture with Precision Aircraft Solutions, LLC, we have developed a design for the conversion of Airbus A321 passenger aircraft into a freighter configuration and in 2021 were granted a Supplemental Type Certificate ("STC") for such design (An STC is granted by the Federal Aviation Administration ("FAA") and represents an ownership right, similar to an intellectual property right, which authorizes the alteration of an airframe, engine or component.). The converted Airbus A321 freighter is well suited for air-express service and e-commerce fulfillment over shorter routes with smaller payloads than the Boeing 767. The Airbus A321 can operate with more fuel efficiency than the comparable freighter aircraft variants of the Boeing 737 and Boeing 757. We have begun acquiring Airbus A321 aircraft for conversion to grow our fleet and further support our ability to meet the growing demand worldwide for narrow-body freighter aircraft.

We have also entered into an agreement with Elbe Flugzeugwerke ("EFW") to secure the right to convert 29 Airbus A330 passenger aircraft to a freighter configuration with EFW. The first aircraft induction is expected to occur in 2023. The Airbus A330 aircraft can provide capabilities similar to the Boeing 767 for medium wide-body airlift. The pending addition of this aircraft type to our fleet has already began to open new streams of customer interest and demand internationally.

Under a typical lease arrangement, the customer maintains the aircraft in serviceable condition at its own cost. At the end of the lease term, the customer is typically required to return the aircraft in approximately the same maintenance condition that existed at the inception of the lease, as measured by airframe and engine time and cycles since the last scheduled maintenance event. CAM examines the credit worthiness of potential customers, their short and long-term growth prospects, their financial condition and backing, the experience of their management, and the impact of governmental regulations when determining the lease rate that is offered to the customer. In addition, CAM monitors the customer's business and financial status throughout the term of the lease.

ACMI Services

ACMI Services consists of the operations of our three airline subsidiaries: ABX Air, Inc. ("ABX"), Air Transport International, Inc. ("ATI"), and Omni Air International, LLC ("OAI"). Each of these airlines is independently certificated by the United States Department of Transportation ("DOT") and the FAA.

A typical operating agreement for airline services requires us to supply a combination of aircraft, crew, maintenance and/or insurance for specified transportation operations. These services are commonly referred to as ACMI, CMI or charter services depending on the selection of services contracted by the customer. The customer bears the responsibility for capacity utilization and unit pricing in all cases.

ACMI - The airline provides the aircraft, flight crews, aircraft maintenance and aircraft hull and liability insurance while the customer is typically responsible for substantially all other aircraft operating expenses, including fuel, landing fees, parking fees and ground and cargo handling expenses.

CMI - The customer is responsible for providing the aircraft, in addition to the fuel and other operating expenses. The airline provides the flight crews, aircraft hull and liability insurance and typically aircraft line maintenance as needed between network flights.

Charter - The airline is responsible for providing full service, including fuel, aircraft, flight crews, maintenance, aircraft hull and liability insurance, landing fees, parking fees, catering, passenger handling fees, ground and cargo handling expenses and other operating expenses for an all-inclusive price.

The majority of the aircraft operated by our airlines are owned by CAM. Those aircraft are either leased directly to CAM's customer or leased to one of our airlines. A summary of our airlines is below:

ARX

ABX operates Boeing 767 aircraft exclusively in freighter configuration. ABX specializes in providing aircraft operations to customers in the e-commerce and express delivery markets, with DHL as its largest customer.

ATI

ATI operates Boeing 767 freighter aircraft and Boeing 757 "combi" aircraft, which are capable of simultaneously carrying passengers and cargo containers on the main flight deck. ATI operates its fleet of Boeing 767 primarily for the express package industry and freight forwarders, with ASI as its largest customer. It operates its fleet of Boeing 757 "combi" aircraft primarily for the United States Department of Defense ("DoD").

OAI

In November 2018, we acquired OAI, a passenger airline, along with its related entities. OAI operates Boeing 767 and Boeing 777 passenger aircraft. OAI carries passengers worldwide for a variety of private sector customers and government services agencies. It provides tailored passenger and government charter services, airline startup and route development services.

ABX, ATI and OAI are each participants in the Civil Reserve Air Fleet ("CRAF"), a National Emergency Preparedness Program designed to augment the airlift capability of the DoD and meet the national security interests and contingency requirements of the U.S. Transportation Command ("USTC"). The combined efforts of our airlines make us the nation's largest provider of passenger charter service to DoD and other governmental agencies.

Support Services

We provide a wide range of air transportation related services to our customers including aircraft maintenance and modification, ground support and crew training.

Aircraft Maintenance and Modification

Our aircraft maintenance and modification services, which are provided primarily by our subsidiaries Airborne Maintenance and Engineering Services, Inc. ("AMES") and Pemco World Air Services, Inc. ("Pemco"), provide airframe modification and heavy maintenance, component repairs, engineering services and aircraft line maintenance. Another subsidiary, AMES Material Services, Inc., resells and brokers aircraft parts. AMES and Pemco are certified by the FAA under Part 145 of the Federal Aviation Regulations ("FARs"). Pemco performs passenger-to-freighter and passenger-to-combi conversions for certain Boeing series aircraft and has begun performing passenger-to-freighter conversions for Airbus A321 aircraft. Both AMES and Pemco own many STCs and similar approvals issued by the FAA which are marketed to its customers.

Ground Support

Through our subsidiary, LGSTX Services Inc. ("LGSTX"), we provide labor and management for cargo load transfer and sorting; the design, installation and maintenance of material handling equipment; the leasing and maintenance of ground support equipment; and general facilities maintenance. LGSTX also resells aviation fuel at the airpark in Wilmington, Ohio.

Crew Training

Our support services also involve the training of flight crews, which we offer through our subsidiary, Airborne Training Services, Inc. ("ATS"). ATS is certificated under Part 142 of the FARs to offer flight crew training to customers. ATS also offers Boeing 757 and Boeing 767 flight simulators which can be rented by customers for use in conjunction with their flight training programs.

Major Customers

We have long-standing, strategic customer relationships with ASI, the DoD, and DHL, described below.

Amazon

We have been providing aircraft, flight operations, cargo handling and logistics support services to ASI, a subsidiary of Amazon.com, Inc. ("Amazon"), since September 2015. On March 8, 2016, we entered into an Air Transportation Services Agreement (as amended, the "ATSA") with ASI pursuant to which we lease Boeing 767 freighter aircraft to ASI through our subsidiary, CAM, operate the aircraft via our airline subsidiaries and are responsible for complying with FAA airworthiness directives, the cost of Boeing 767 airframe maintenance and certain engine maintenance events for the aircraft leased to ASI that we operate. We also provide ground handling services through our subsidiaries. Under the ATSA, we operate aircraft based on pre-defined fees scaled for the number of aircraft hours flown, aircraft scheduled and flight crews provided to ASI for its network. The operating term of the ATSA runs through March 2026 and is thereafter subject to renewal by ASI for an additional three years. Revenues from our commercial arrangements with ASI comprised approximately 34% of our consolidated revenues for 2022. As of December 31, 2022, we were leasing 42 of CAM's Boeing 767 aircraft to ASI under multi-year contracts. We operate all of these aircraft and seven more ASI-provided aircraft under the CMI provisions of the ATSA.

In conjunction with the execution of the ATSA and its amendments, the Company and ASI entered into an Investment Agreement (the "2016 Investment Agreement") and a Stockholders' Agreement on March 8, 2016 and a second Investment Agreement on December 20, 2018 (the "2018 Investment Agreement"). Pursuant to the 2016 and 2018 Investment Agreements, we issued warrants to Amazon in conjunction with aircraft leases. For additional information about the warrants issued under the 2016 and 2018 Investment Agreements, see Note C to the Consolidated Financial Statements.

U.S. Department of Defense

We have been providing services to the DoD since the 1990's. The DoD comprised 30% of our consolidated revenues for 2022. Our business with the DoD and other government agencies expanded significantly as a result of our November 2018 acquisition of OAI.

Our participation in CRAF allows our airlines to bid for military charter operations for passenger and cargo transportation. Our airlines provide charter operations to the Air Mobility Command ("AMC") through contracts awarded by the U.S. Transportation Command, both of which are organized under the DoD.

The USTC secures airlift capacity through fixed awards, which are awarded annually, and through bids for "expansion routes" which are awarded on a quarterly, monthly and as-needed basis. Under the contracts, we are responsible for all operating expenses including fuel, landing and ground handling expenses. We receive reimbursements from the USTC each month if the price of fuel paid by us for the flights exceeds a previously set peg price. If the price of fuel paid by us is less than the peg price, then we pay the difference to the USTC. Airlines may participate in CRAF either independently, or through teaming arrangements with other airlines. Our airlines are members of the Patriot Team of CRAF airlines. We pay a commission to the Patriot Team, based on certain revenues we receive under USTC contracts.

ATI contracts with the USTC to operate its unique fleet of four Boeing 757 "combi" aircraft, which are capable of simultaneously carrying passengers and cargo containers on the main flight deck. ATI has been operating combi aircraft for the DoD since 1993. The USTC contracted with ATI to provide combi aircraft operations through September of 2023. OAI has been operating aircraft for the DoD since 1995. Contracts with the USTC are typically for a one-year period; however, the current passenger international charter contract has a two-year term with option periods, at the election of the USTC, through September 2024.

DHL

We have provided aircraft services to DHL under multi-year contracts since August 2003. DHL accounted for 12% of our consolidated revenues for 2022. As of December 31, 2022, we were leasing 14 of our Boeing 767 aircraft to DHL under multi-year contracts. We operate 10 of these aircraft for DHL under a separate CMI agreement with DHL, along with six DHL-supplied aircraft. We operate and maintain the aircraft based on predefined fees scaled for the number of aircraft hours flown, aircraft scheduled and flight crews provided to DHL for its network. Under the pricing structure of the DHL CMI agreement, we are responsible for complying with FAA airworthiness directives, the cost of Boeing 767 airframe maintenance and certain engine maintenance events for the aircraft leased to DHL that we operate. We also provide ground equipment and maintenance services to DHL in the U.S. In February 2022, DHL agreed to a six-year extension of the DHL CMI agreement through April 2028.

Further, in the second half of 2022, we began to operate four Boeing 767 aircraft provided by DHL under an additional CMI agreement which currently runs through August of 2027.

Competitive Conditions

Competition for aircraft lease placements is generally affected by aircraft type, aircraft availability and lease rates. The aircraft in our fleet provide cost-effective air transportation for medium range requirements. We target our leases to cargo airlines and delivery companies seeking medium widebody aircraft. Competitors in the aircraft leasing industry include AerCap Holdings N.V. and Altavair Aviation Leasing, among others.

The primary competitive factors in the air transportation industry are operating costs, fuel efficiency, geographic coverage, aircraft range, aircraft reliability and capacity. The cost of airline operations is significantly impacted by the cost of flight crewmembers, which can vary among airlines depending on their collective bargaining agreements. Competitors in the air transportation industry include Amerijet International, Inc., Atlas Air, Inc., Kalitta Air LLC, Northern Air Cargo, LLC, National Air Cargo Group, Inc., and Western Global Airlines, LLC. Of these, Atlas Air, Inc. and National Air Cargo Group, Inc. (operating as National Airlines) also operate passenger aircraft as does Eastern Airlines, LLC. Cargo airlines also compete for cargo volumes with passenger airlines that have substantial belly cargo capacity.

The aircraft maintenance industry is labor intensive and typically competes based on cost, capabilities and reputation for quality. U.S. airlines may contract for aircraft maintenance with maintenance and repair organizations ("MROs") in other countries or geographies with a lower labor wage base, making the industry highly cost competitive. Other aircraft MROs include AAR Corp and Hong Kong Aircraft Engineering Co.

Demand for air cargo transportation services correlates closely with general economic conditions and the level of commercial activity in a geographic area. Stronger general economic conditions and growth in a region typically increases the need for air transportation. E-commerce growth is a strong indicator of growth in the express and network flying businesses which we enable with our assets and services. Historically, the cargo industry has experienced higher volumes during the fourth calendar quarter of each year due to increased shipments during the holiday season. Generally, time-critical delivery needs, such as just-in-time inventory management, increase the demand for air cargo delivery, while higher costs of aviation fuel generally reduces the demand for air delivery services. When aviation fuel prices increase, shippers will consider using ground transportation if the delivery time allows.

Sustainability

We are committed to integrating sustainability practices into our operations. We have formalized governance and oversight of our sustainability initiatives through a Management Sustainability Committee. The Committee, which is comprised of (i) the respective presidents of each of ATSG's operating subsidiaries; (ii) the Vice President, Human Capital, the Vice President, Controller, the Vice President, Corporate Development, and the Manager, Internal Audit of ATSG; (iii) a representative from the ATSG Information Technology Department, the OAI Information Technology Department, the ATSG Communications Department, and the ATSG Legal Department; and (iv) other officers and employees as determined by from to time by the President and Chief Executive Officer of ATSG, focuses on creating long-term shareholder value through strategic goals and initiatives for environmental, social and governance ("ESG") management. The Committee seeks opportunities to improve employee health and safety, corporate social responsibility, diversity and inclusion and activities related to stakeholder engagement and philanthropy. The Committee reports to the ATSG Leadership Council, which is comprised of the President and Chief Executive Officer, Chief Operating Officer, Chief Financial Officer, Chief Legal Officer and Chief Commercial Officer of ATSG, and provides updates to the Nominating and Governance Committee of the ATSG Board of Directors (the "Board").

As part of our commitment to corporate sustainability, we published a Sustainability Report in 2022 describing our environmental sustainability actions and initiatives as well as our efforts to create a more diverse and inclusive workplace and the contributions made to our surrounding communities. The disclosures contained in the Sustainability Report and other voluntary disclosures regarding environmental, social, and governance matters are responsive to various areas of stakeholder interests.

Human Capital Resources

Description

As of December 31, 2022, our workforce was composed of 5,320 full-time and part-time employees. We employed approximately 1,210 flight crewmembers, 420 flight attendants, 250 flight support personnel, 1,910 aircraft maintenance managers and technicians, 985 employees for ground equipment and logistics services, 45 employees for sales and marketing and 500 employees for administrative functions. In addition to full-time and part-time employees, we often engage contractors and temporary employees to assist in aircraft line maintenance and package sortation during peak operational times. On December 31, 2021, we had approximately 5,280 full-time and part-time employees. Over 99% of our workforce is based in the United States.

Our flight crewmembers and flight attendants are unionized employees. The table below summarizes the representation of our flight crewmembers at December 31, 2022.

<u>Airline</u>	Labor Agreement Unit	Contract Amendable Date	Percentage of the Company's Employees
ABX	International Brotherhood of Teamsters	1/1/2027	6.1%
ATI	Air Line Pilots Association	3/21/2021	10.2%
OAI	International Brotherhood of Teamsters	4/1/2021	6.4%
OAI	Association of Flight Attendants	11/14/2023	0.8%
OAI	Association of Flight Attendants	12/1/2021	7.1%

Under the Railway Labor Act, as amended ("RLA"), crewmember labor agreements do not expire, so the existing contract remains in effect throughout any negotiation process. If required, mediation under the RLA is conducted by the National Mediation Board ("NMB"), which has the sole discretion as to how long mediation can last and when it will end. In addition to direct negotiations and mediation, the RLA includes a provision for potential arbitration of unresolved issues and a 30-day "cooling-off" period before either party can resort to self-help, including, but not limited to, a work stoppage.

Objectives

Our employees are critical to our on-going success. Our approach to managing human capital includes the following: maintaining the health and safety of our employees; attracting and retaining skilled individuals; continuously improving the skills of our workforce; promoting inclusive and engaging work environments; and compensating and treating all employees fairly. We believe that every person deserves an equally respectful work environment regardless of race, ethnicity, capability, age, gender, or sexual orientation. We work to maintain a culture of inclusion for all employees.

To attract and retain skilled employees, we offer competitive compensation and benefits, including medical care, paid time off, retirement savings, mental health counseling and other employee benefits. Further, we are committed to training and supporting our employees' continuous development of professional, technical and management skills. We develop technical training programs which facilitate the licensure and certification of flight crews, aviation mechanics and other skilled jobs. We partner with third parties to assist employees in developing leadership skills and valuing diversity in our workforce.

The health and safety of our employees is paramount. Our airline operations rely on flight crews, aircraft maintenance technicians, flight support personnel and aircraft loading personnel. We rely on a skilled workforce to perform aircraft maintenance. Similarly, we staff personnel near airports to sort customer packages, load aircraft and maintain related equipment. We have taken precautions to prevent, detect and limit the spread of corona viruses in the workplace. We have added extra precautions and redundancies related to crew reserves, employee travel protocols, sanitation and other measures. We have encouraged our employees to take precautions and have given our employees the opportunity to get vaccinated.

We received funds to protect employees' jobs by offsetting payroll expenses under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), the Consolidated Appropriations Act, 2021 (the "PSP Extension Law"), and the American Rescue Plan Act of 2021 (the "American Rescue Plan"). Under the CARES Act, OAI and ATI agreed on behalf of themselves and ABX, to refrain from conducting involuntary furloughs or reducing employee rates of pay or benefits through September 30, 2020, and OAI subsequently agreed, as a condition of receiving funds under the PSP Extension Law and thereafter under the American Rescue Plan, to refrain from conducting involuntary furloughs or reducing employee rates of pay or benefits through March 31, 2021 and September 31, 2021, respectively.

Flight crewmembers are required to be licensed in accordance with FARs, with specific ratings for the aircraft type to be flown, and to be medically certified as physically fit to operate aircraft. Licenses and medical certifications are subject to recurrent requirements as set forth in the FARs, to include recurrent training and minimum amounts of recent flying experience.

The FAA requires initial and recurrent training for most flight and maintenance personnel. Quality control inspectors must also be licensed and qualified to perform maintenance inspections on Company-operated and maintained aircraft. The majority of our aircraft mechanics have one or more FAA licenses. Our subsidiaries pay for all of the required recurrent training and provide training for their ground service personnel as well. Their training programs have received all required FAA approvals. Similarly, our flight dispatchers and flight followers receive FAA approved training on the airlines' requirements and specific aircraft.

Information Systems

We are dependent on technology to conduct our daily operations including data processing, communications and regulatory compliance. We rely on critical computerized systems for aircraft maintenance records, flight planning, crew scheduling, employee training, financial records, cyber-security and other processes. We utilize information systems to maintain records about the maintenance status and history of each major aircraft component, as required by FAA regulations. Using our information systems, we track aircraft maintenance schedules and also control inventories and maintenance tasks, including the work directives of personnel performing those tasks. We rely on information systems to track crewmember flight and duty times, and crewmember training status. The Company's flight operations systems coordinate flight schedules and crew schedules.

We invest significant time and financial resources to acquire, develop and maintain information systems to facilitate our operations. Our information technology infrastructure includes security measures, backup procedures and redundancy capabilities. We rely increasingly on software applications, hosted technologies, data transmissions and cybersecurity safe-guards provided by or in conjunction with third parties. To remain competitive, we must continue to deploy new technologies while controlling costs and maintaining regulatory compliance and security safeguards.

Executive Officers

The following table sets forth information about the Company's executive officers, including each officer's age as of March 1, 2023.

Name	Age	Information
Richard F. Corrado	63	President and Chief Executive Officer, Air Transport Services Group, Inc., since May 2020 and President of Air Transport Services Group, Inc. since September 2019.
		Chief Operating Officer, Air Transport Services Group, Inc., from September 2017 to September 2019. Chief Executive Officer of Cargo Aircraft Management, Inc. since March 2020. President of Cargo Aircraft Management Inc., from April 2010 to January 2020. Chief Executive Officer of Airborne Global Solutions, Inc. since May 2020. President of Airborne Global Solutions, Inc. from July 2010 to January 2020. Mr. Corrado was Chief Commercial Officer, Air Transport Services Group, Inc., from April 2010 to September 2017.
		Before joining Air Transport Services Group, Inc., Mr. Corrado was President of Transform Consulting Group from July 2006 through March 2010 and Chief Operating Officer of AFMS Logistics Management from February 2008 through March 2010. He was Executive Vice President of Air Services and Business Development for DHL Express from September 2003 through June of 2006; and Senior Vice President of Marketing for Airborne Express from August 2000 through August 2003.
Quint O. Turner	60	Chief Financial Officer, Air Transport Services Group, Inc., since February 2008 and Chief Financial Officer, ABX Air, Inc. since December 2004.
		Mr. Turner was Vice President of Administration of ABX Air, Inc. from February 2002 to December 2004. Mr. Turner was Corporate Director of Financial Planning and Accounting of ABX Air, Inc. from 1997 to 2002. Prior to 1997, Mr. Turner held positions of Manager of Planning and Director of Financial Planning of ABX Air, Inc. Mr. Turner joined ABX Air, Inc. in 1988.
Edward J. Koharik	52	Chief Operating Officer, Air Transport Services Group, Inc., since September 2019. Before joining ATSG, Mr. Koharik served as Vice President of FlightSafety International, a global provider of flight training for commercial, business and military aviation professionals and flight simulation equipment, from January 2019 to September 2019. He was the General Manager and Executive Director of FlightSafety International Visual Systems from 2015 to 2018. He served as the Enterprise Readiness Center Chief for the U.S. Transportation Command from 2011 to 2015.
W. Joseph Payne	59	Chief Legal Officer & Secretary, Air Transport Services Group, Inc., since May 2016; Senior Vice President, Corporate General Counsel and Secretary, Air Transport Services Group, Inc., since February 2008; and Vice President, General Counsel and Secretary, ABX Air, Inc. since January 2004.
		Mr. Payne was Corporate Secretary/Counsel of ABX Air, Inc. from January 1999 to January 2004, and Assistant Corporate Secretary from July 1996 to January 1999. Mr. Payne joined ABX Air, Inc. in April 1995.

Paul E. Chase 41

Chief Commercial Officer, Air Transport Services Group, Inc., since December 2022; President of Airborne Global Solutions since December 2022.

Before joining ATSG, Mr. Chase served as CEO for Ameriflight, LLC from 2018 until November 2022. Prior to that he was with Amazon.com in key leadership functions within Amazon Air from 2016 to 2018. From 2007 to 2016, Mr. Chase served in a variety of operational, sales and executive roles, including Chief Operating Officer, for Southern Air Inc.

Michael L. Berger

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Chief Strategy Officer, Air Transport Services Group, Inc., since December 2022. Mr. Berger was the Chief Commercial Officer from March 2018 to December 2022 and President of Airborne Global Solutions, Inc. May 2018 to December 2022. Before joining ATSG, Mr. Berger was Chief Commercial Officer for Dicom Transportation Group of Canada from March 2017 through February 2018. Mr. Berger was Global Head of Sales for TNT Express based in Amsterdam from September 2014 through February 2017.

Mr. Berger joined Airborne Express in 1986 and worked 28 years for Airborne Express and its successor, DHL Express, where he held many roles including Head of Sales for the United States.

The executive officers of the Company are appointed annually, usually in May, and serve at the pleasure of the Board of Directors. There are no family relationships between any directors or executive officers of the Company.

Regulation

Our subsidiaries' airline operations are primarily regulated by the DOT, the FAA, and the U.S. Transportation Security Administration ("TSA"). Those operations must comply with numerous economic, safety, security and environmental laws, ordinances and regulations. In addition, they must comply with various other federal, state, local and foreign laws and regulations.

Environment

The U.S. Environmental Protection Agency ("EPA") is authorized to regulate aircraft emissions and has historically implemented emissions control standards adopted by the International Civil Aviation Organization ("ICAO"). In 2016, the EPA issued a finding on greenhouse gas ("GHG") emissions from aircraft and its relationship to air pollution. This finding is a regulatory prerequisite to the EPA's adoption of a new certification standard for aircraft emissions. In January 2021, the EPA issued a final rule regarding GHG emissions standards for new aircraft engines consistent with ICAO standards that were adopted in 2017. The EPA final rule does not apply to engines on aircraft that are already in service, as is also the case with the ICAO standards. However, President Biden's Administration has stated that it plans to review the EPA emissions standards issued by the prior Administration and, further, the EPA standards have been challenged by several states and environmental organizations. We cannot predict the results of the Biden Administration's review or the outcome of legal challenges to the EPA's final rules. Our subsidiaries' aircraft meet all currently applicable requirements for engine emission levels.

Related to the EPA GHG finding, in June 2022 the FAA issued proposed fuel efficiency standards in a notice of proposed rule-making ("NPRM") which, as drafted, would apply, inter alia, to in-service aircraft modified after the aircraft have been issued an airworthiness certificate, such as the Boeing 767 aircraft type. Industry trade groups believe this is a mistaken interpretation of the EPA rule and have sought modification in the final rule yet to be issued by FAA. Even if the rule is unchanged and applicable to a number of our subsidiaries' aircraft, the impact is expected to be minimal.

Under the Clean Air Act, individual states or the EPA may also adopt regulations requiring reductions in emissions for one or more localities based on the measured air quality at such localities. These regulations may seek to limit or restrict emissions by restricting the use of emission-producing ground service equipment or aircraft

auxiliary power units. Further, the U.S. Congress has, in the past, considered legislation that would regulate GHG emissions, and some form of federal climate change legislation is possible in the future.

In addition, the European Commission has approved the extension of the European Union Emissions Trading Scheme ("ETS") for GHG emissions to the airline industry. Currently, under the European Union's ETS, all ABX, ATI and OAI flights that are wholly within the European Union are covered by the ETS requirements, and each year our airlines are required to submit emission allowances in an amount equal to the carbon dioxide emissions from such flights. If the airline's flight activity during the year produces carbon emissions exceeding the number of carbon emissions allowances that it had been awarded, the airline must acquire allowances from other airlines in the open market. Our airlines operate intra-EU flights from time to time and management believes that such flights are operated in compliance with ETS requirements.

Similarly, in 2016, the ICAO passed a resolution adopting the Carbon Offsetting and Reduction Scheme for International Aviation ("CORSIA"), which is a global, market-based emissions offset program to encourage carbon-neutral growth beyond 2020. A pilot phase began in 2021 in which countries may voluntarily participate, followed by a first phase of the program beginning in 2024 that is also voluntary, and full mandatory participation is scheduled to begin in 2027. The United States has agreed to participate in the two voluntary phases. ICAO continues to develop details regarding implementation, but compliance with CORSIA will increase our operating costs.

The U.S. has also re-entered the Paris climate accord, an agreement among 196 countries to reduce GHG emissions, and the effect of the re-entry by the U.S. on future U.S. policy regarding GHG emissions, on CORSIA and on other GHG regulation is uncertain.

The U.S. government generally regulates aircraft engine noise at its source. However, local airport operators may, under certain circumstances, regulate airport operations based on aircraft noise considerations. The Airport Noise and Capacity Act of 1990 provides that, in the case of Stage 3 aircraft (all of our operating aircraft satisfy Stage 3 noise compliance requirements), an airport operator must obtain the carriers' consent to, or the government's approval of, the rule prior to its adoption. We believe the operation of our airline subsidiaries' aircraft either complies with or is exempt from compliance with currently applicable local airport rules. However, some airport authorities have adopted local noise regulations, and, to the extent more stringent aircraft operating regulations are adopted on a widespread basis, our airline subsidiaries may be required to spend substantial funds, make schedule changes or take other actions to comply with such local rules.

Department of Transportation

The DOT maintains authority over certain aspects of domestic and international air transportation serving the United States, such as consumer protection, accommodation of passengers with disabilities, requiring a minimum level of insurance and the requirement that a company be "fit" to hold a certificate to engage in air transportation. In addition, the DOT continues to regulate many aspects of international aviation, including the award of certain international routes. The DOT has issued to ABX a Domestic All-Cargo Air Service Certificate for air cargo transportation between all points within the U.S., the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. The DOT has issued to ATI certificate authority to engage in scheduled interstate air transportation, which is currently limited to all-cargo operations. ATI's DOT certificate authority also authorizes it to engage in interstate and foreign charter air transportation of persons, property and mail. Additionally, the DOT has issued to ABX and ATI Certificates of Public Convenience and Necessity authorizing each of them to engage in scheduled foreign air transportation of cargo and mail between the U.S. and all current and future U.S. open-skies partner countries, which currently consists of approximately 130 foreign countries. ABX and ATI also hold exemption authorities issued by the DOT to conduct scheduled all-cargo operations between the U.S. and certain foreign countries with which the U.S. does not have a liberal ("open-skies") air transportation agreement. The DOT has issued to OAI a Certificate of Public Convenience and Necessity for Interstate Charter Air Transportation and a Certificate of Public Convenience and Necessity for Foreign Charter Air Transportation that authorizes it to engage in interstate and foreign charter air transportation of persons, property and mail. In 2019, the DOT also issued OAI exemption authority to engage in scheduled foreign air transportation of property and mail between the U.S. and all existing and future countries with an open-skies air service agreement with the U.S.

By maintaining these certificates, the Company, through ABX and ATI, can and currently does conduct allcargo charter operations worldwide subject to the receipt of any necessary foreign government approvals. Further, the certificates issued to ATI and OAI authorize the air carriers to conduct passenger charter operations worldwide subject to the receipt of any necessary foreign government approvals. Periodically, the DOT re-examines a company's managerial competence, financial resources and plans, compliance disposition and citizenship in order to determine whether the carrier remains fit, willing and able to engage in the transportation services it is authorized to provide.

The DOT has the authority to impose civil penalties, or to modify, suspend or revoke our certificates and exemption authorities for cause, including failure to comply with federal laws or DOT regulations. A corporation or a limited liability company structured like a corporation holding the above-referenced certificates and exemption authorities must continuously qualify as a citizen of the United States, which, pursuant to federal law, requires that (1) it be organized under the laws of the U.S. or a state, territory or possession thereof, (2) that its president and at least two-thirds of its board of directors and other managing officers be U.S. citizens, (3) that no more than 25% of its voting interest be owned or controlled by non-U.S. citizens, and (4) that it not otherwise be subject to foreign control. We believe our airline subsidiaries possess all necessary DOT-issued certificates and authorities to conduct their current operations and that each continues to qualify as a citizen of the United States.

Federal Aviation Administration

The FAA regulates aircraft safety and flight operations generally, including equipment, ground facilities, maintenance, flight dispatch, training, communications, the carriage of hazardous materials and other matters affecting air safety. The FAA issues operating certificates and detailed "operations specifications" to carriers that possess the technical competence to safely conduct air carrier operations. In addition, the FAA issues certificates of airworthiness to each aircraft that meets the requirements for aircraft design and maintenance. ABX, ATI and OAI believe they hold all airworthiness and other FAA certificates and authorities required for the conduct of their business and the operation of their aircraft. The FAA has the power to suspend, modify or revoke such certificates for cause and to impose civil penalties for any failure to comply with federal laws or FAA regulations.

The FAA has the authority to issue regulations, airworthiness directives and other mandatory orders relating to, among other things, the inspection, maintenance and modification of aircraft and the replacement of aircraft structures, components and parts, based on industry safety findings, the age of the aircraft and other factors. If the FAA were to determine that the aircraft structures or components are not adequate, it could order our airline subsidiaries and other operators to take certain actions, including but not limited to, grounding aircraft, reducing cargo loads, strengthening any structure or component found to be inadequate, or making other modifications to the aircraft. New mandatory directives could also be issued requiring the Company's airline subsidiaries to inspect and replace aircraft components based on their age or condition. As a routine matter, the FAA issues airworthiness directives applicable to the aircraft operated by our airline subsidiaries, and our airlines comply, sometimes at considerable cost, as part of their aircraft maintenance program.

In addition to the FAA practice of issuing regulations and airworthiness directives as conditions warrant, the FAA has adopted new regulations to address issues involving aging, but still economically viable, aircraft on a more systematic basis. FAA regulations mandate that aircraft manufacturers establish aircraft limits of validity and service action requirements based on the number of aircraft flight cycles (a cycle being one takeoff and one landing) and flight hours before widespread fatigue damage might occur. Service action requirements include inspections and modifications to preclude development of significant fatigue damage in specific aircraft structural areas. The Boeing Company has provided its recommendations of the limits of validity to the FAA, and the FAA has now approved the limits for the Boeing 757, 767 and 777 model aircraft. Consequently, after the limit of validity is reached for a particular model aircraft, air carriers will be unable to continue to operate the aircraft without the FAA first granting an extension of time to the operator. There can be no assurance that the FAA would extend the deadline, if an extension were to be requested. At this point, we do not foresee a situation in which we would seek an extension from the FAA for an aircraft.

The FAA issued an airworthiness directive ("AD") in December 2021 to address potential 5G C-Band interference with certain aircraft radio altimeters as U.S. wireless providers upgraded to 5G technology in various U.S. wireless markets. The AD requires that those U.S. aircraft types that do not meet "tolerance requirements" either need a filter or upgraded radio altimeter, or they risk operational restrictions at affected airports. Agreements with wireless providers that provided for mitigation measures delayed until June 30, 2023, the need for aircraft

modifications. Our airline subsidiaries are modifying and upgrading their aircraft fleets as necessary in order to timely comply with the AD requirements.

The FAA requires each of our airline subsidiaries to implement a drug and alcohol testing program with respect to all employees performing safety sensitive functions and, unless already subject to testing, contractor employees that engage in safety sensitive functions. We believe that each of the Company's airlines complies with these regulations.

Transportation Security Administration

The TSA, an administration within the Department of Homeland Security, is responsible for the screening of passengers and their baggage. TSA rules also require airlines to adopt and comply with standard aircraft operator security programs, including the manner in which cargo must be screened prior to being loaded on aircraft. We believe that our airline subsidiaries comply with all applicable aircraft, passenger and cargo security requirements. The TSA has adopted cargo security-related rules that have imposed additional burdens on our airlines and our customers. The TSA also requires each airline to perform criminal history background checks on all employees. In addition, we may be required to reimburse the TSA for the cost of security services it may provide to the Company's airline subsidiaries in the future. The TSA holds (and has exercised) authority to issue regulations, including in cases of emergency the authority to do so without advance notice, including issuance of a grounding order as occurred on September 11, 2001. TSA's enforcement powers are similar to the DOT's and FAA's described above.

International Regulations

When operating in other countries, our airlines are subject to aviation agreements between the U.S. and the respective countries or, in the absence of such an agreement, the airlines' operating rights are governed by principles of reciprocity. International aviation agreements are periodically subject to renegotiation, and changes in U.S. or foreign governments could result in the alteration or termination of the agreements affecting our international operations. Commercial arrangements such as ACMI agreements between our airlines and our customers in other countries, may require the approval of foreign governmental authorities. Foreign authorities may limit or restrict the use of our aircraft in certain countries. Also, foreign government authorities often require licensing and business registration before beginning operations. Foreign laws, rules, regulations and licensing requirements governing air transportation are generally similar, in principle, to the regulatory scheme of the United States as described above, although in some cases foreign requirements are comparatively less onerous and in others, more onerous. Such authorities have enforcement powers generally similar to those of the U.S. agencies described above.

When we lease aircraft to customers operating in other countries, the aircraft must comply with the aviation authority designated by that country. The European Aviation Safety Agency ("EASA") is a regulatory agency of the European Union.

Data Protection

There has recently been increased regulatory and enforcement focus on data protection in the U.S. (at both the state and federal level) and in other countries. For example, the European Union ("E.U.") General Data Protection Regulation ("GDPR"), which became effective in May 2018, greatly increases the jurisdictional reach of E.U. law and increases the requirements related to the protection of personal data, including individual notice and opt-out preferences and public disclosure of significant data breaches. Additionally, violations of the GDPR can result in significant fines. Other governments have enacted or are enacting similar data protection laws, and are considering data localization laws that would govern the use of data outside of their respective jurisdictions.

Other Regulations

Various regulatory authorities have jurisdiction over significant aspects of our business, and it is possible that new laws or regulations or changes in existing laws or regulations or the interpretations thereof could have a material adverse effect on our operations. In addition to the above, other laws and regulations to which we are subject, and the agencies responsible for compliance with such laws and regulations, include the following:

 The labor relations of our airline subsidiaries are generally regulated under the Railway Labor Act, which vests in the NMB certain regulatory powers with respect to disputes between airlines and labor unions arising under collective bargaining agreements;

- The Federal Communications Commission regulates our airline subsidiaries' use of radio facilities pursuant to the Federal Communications Act of 1934, as amended;
- U.S. Customs and Border Protection issues landing rights, inspects passengers entering the United States, and inspects cargo imported to the U.S. from our subsidiaries' international operations, and those operations are subject to similar regulatory requirements in foreign jurisdictions;
- The U.S. Centers for Disease Control and Prevention has authority to impose requirements related to the mitigation of communicable diseases such as requiring masking on aircraft, negative test results, collection of passenger data for contact tracing, quarantine requirements;
- The Company and its subsidiaries must comply with U.S. Citizenship and Immigration Services regulations regarding the eligibility of our employees to work in the U.S., and the entry of passengers to the U.S.;
- The Company and its subsidiaries must comply with wage, work conditions and other regulations of the Department of Labor regarding our employees; and
- The Office of Foreign Assets Control ("OFAC") of the U.S. Department of the Treasury, the Bureau of Industry & Security ("BIS") of the U.S. Commerce Department, and other government agencies administer and enforce economic and trade sanctions based on U.S. foreign policy concerns, which may limit our aircraft sale and leasing business activities in and for certain countries.

Available Information

For more information concerning our sustainability initiatives, please refer to the "Responsibility - Sustainability" section of our website, www.atsginc.com.

Our filings with the Securities and Exchange Commission ("SEC"), including annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports, as well as our definitive proxy materials, are available free of charge from the "Investors - Reports & Filings - SEC Filings" section of our website at www.atsginc.com as soon as reasonably practicable after filing with the SEC.

The information contained on our website is not a part of this Annual Report on Form 10-K.

The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding Air Transport Services Group, Inc. at www.sec.gov.

ITEM 1A. RISK FACTORS

The risks described in this Item 1A could adversely affect our financial condition, results of operations, liquidity and capital resources as well as the market price of ATSG's common stock. Investors should carefully consider these risks before making an investment decision regarding ATSG's common stock. The risks below are not the only risks that we face. Additional risks that are currently unknown to us or that we currently consider immaterial or unlikely could also adversely affect us. Please also see the "Cautionary Note Regarding Forward-Looking Statements" preceding Part I of this Form 10-K.

Regulatory and Compliance Risk

Failure to maintain the operating certificates and authorities of our airlines would adversely affect our business.

Our airline subsidiaries have the necessary authority to conduct flight operations pursuant to the economic authority issued by the DOT and the safety based authority issued by the FAA. The continued effectiveness of such authority is subject to their compliance with applicable statutes and DOT, FAA and TSA rules and regulations, including any new rules and regulations that may be adopted in the future. The loss of such authority by an airline subsidiary could cause a default of covenants in our \$1 billion syndicated credit agreement that includes the ability to execute term loans and a revolving credit facility and is scheduled to mature on October 19, 2027 (the "Senior Credit Agreement") (see Note F to the consolidated financial statements included in this Form 10-K for more information regarding the Senior Credit Agreement) and would materially and adversely affect its airline operations, effectively eliminating the airline's ability to continue to provide air transportation services.

Failure to comply with the provisions of payroll support programs could result in the Company being required to repay government funds and also being subject to other remedies.

Two of the Company's airline subsidiaries, OAI and ATI, were granted government funds totaling \$75.8 million pursuant to separate payroll support program agreements under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and OAI was thereafter granted additional government funds totaling \$37.4 million (this grant was subsequently increased by \$5.6 million) and \$40.0 million pursuant to payroll support program agreements under each of the Consolidated Appropriations Act, 2021 (the "PSP Extension Law") and the American Rescue Plan Act of 2021 (the "American Rescue Plan"), respectively. The grant of government funds to OAI and ATI under the CARES Act, PSP Extension Law and the American Rescue Plan totaled \$158.8 million.

Under the CARES Act, the airlines agreed to limit, on behalf of themselves and certain of their affiliates, executive compensation through March 24, 2022; maintain certain air transportation service through March 1, 2022 as may be required by the U.S. Department of Transportation pursuant to its authority under the CARES Act; and maintain certain internal controls and records relating to the funds and comply with certain reporting requirements. OAI agreed as a condition of receiving grants under the PSP Extension Law and thereafter the American Rescue Plan Act, to limit executive compensation through October 1, 2022, and April 1, 2023, respectively.

If we were found to be noncompliant with the payroll support program agreements under the CARES Act, the PSP Extension Law or the American Rescue Plan, the Company may be required to repay the government funds and may also be subject to other penalties.

Our business could be negatively impacted by adverse audit findings by the U.S. Government.

Our DoD contracts are subject to audit by government agencies, including with respect to performance, costs, internal controls and compliance with applicable laws and regulations. If an audit uncovers improprieties, we may be subject to civil or criminal penalties, including termination of such contracts, forfeiture of profits, fines and suspension from doing business with the DoD. In addition, the DOT, FAA, TSA and other government agencies can initiate announced or unannounced investigations of our subsidiary air carriers, repair stations and other entities to determine if they are continuously conducting their operations in accordance with all applicable laws, rules and regulations. If an investigation uncovered a failure to comply, we could be subject to civil or criminal penalties.

Our participation in the CRAF Program could adversely restrict our commercial business in times of national emergency.

All three of our airlines participate in the CRAF Program, which permits the DoD to utilize the airlines' aircraft pledged to the Program during national emergencies when the need for military airlift exceeds the capability of military aircraft. In the event of such an emergency, our airline subsidiaries could incur the loss of use of such aircraft under commercial arrangements, which could have an adverse impact on our operating results.

Proposed rules from the DOT, FAA and TSA could increase our operating costs and reduce customer utilization of airfreight.

FAA rules for Flightcrew Member Duty and Rest Requirements (FMDRR) for passenger airline operations apply to our operation of passenger and combi aircraft for the DoD and other customers and impact the required amount and timing of rest periods for pilots between work assignments and modified duty and rest requirements based on the time of day, number of scheduled segments, flight types, time zones and other factors. Failure to remain in compliance with these rules may subject us to fines or other enforcement action.

There are separate crew rest requirements applicable to all-cargo aircraft of the type operated by the Company. The FAA has rejected, as have the courts, an attempt to apply the passenger airline crew rest rules to all-cargo operations. If such rest requirements and restrictions were imposed on our cargo operations, these rules could have a significant impact on the costs incurred by our airlines. The airlines would attempt to pass such additional costs through to their customers in the form of price increases. Customers, as a result, may seek to reduce their utilization of aircraft in favor of less expensive transportation alternatives.

The NMB could determine that two or more of our airline subsidiaries constitute a single transportation system.

During 2017, the NMB ruled that ABX and ATI do not constitute a single transportation system for the purposes of collective bargaining. The NMB could reconsider whether the airlines constitute a single transportation system and require that the ABX and ATI crewmembers, or that the ABX, ATI and OAI crewmembers, be represented by the same union. A single transportation system determination by the NMB could give rise to complex contractual

issues, including integrating the airlines' seniority lists, and materially impact the dynamics with respect to future collective bargaining agreement ("CBA") negotiations. While it is unlikely that the NMB would reconsider or find that ABX and ATI, or that ABX, ATI and OAI, constitute a single transportation system, the case-by-case analysis used by the NMB makes such predictions uncertain. Such a finding could have material adverse consequences to the Company.

We may be impacted by government requirements associated with transacting business in foreign jurisdictions and trade policies.

The U.S. and other governments have imposed trade and economic sanctions in certain geopolitical areas and on certain organizations and individuals. The U.S. Departments of Justice, Commerce and Treasury, as well as other government agencies have a broad range of civil and criminal penalties they may seek to impose for violations of the Foreign Corrupt Practices Act ("FCPA") or other regulations, including sanctions administered by the OFAC. In addition, the DOT, FAA and TSA may at times limit the ability of our airline subsidiaries to conduct flight operations in certain areas of the world. Under such laws and regulations, we may be obliged to limit our business activities, incur additional costs for compliance programs and may be subject to enforcement actions or penalties for noncompliance. In recent years, the U.S. government has increased its oversight and enforcement activities with respect to these laws and the relevant agencies may continue to increase these activities.

Any trade agreements that may be entered into are subject to a number of uncertainties, including the imposition of new tariffs or adjustments and changes to the products covered by existing tariffs. The impact of new laws, regulations and policies that affect global trade cannot be predicted.

Penalties, fines and sanctions levied by governmental agencies or the costs of complying with government regulations could negatively affect our results of operations.

The operations of the our subsidiaries are subject to complex aviation, transportation, security, environmental, labor, employment and other laws and regulations. These laws and regulations generally require our subsidiaries to maintain and comply with terms of a wide variety of certificates, permits, licenses and other approvals. Their inability to maintain required certificates, permits or licenses, or to comply with applicable laws, ordinances or regulations could result in substantial fines or, in the case of DOT and FAA requirements, possible suspension or revocation of their authority to conduct operations.

The costs of maintaining our aircraft in compliance with government regulations could negatively affect our results of operations and require further investment in our aircraft fleet.

Manufacturer Service Bulletins, FAA regulations and FAA Airworthiness Directives issued under its "Aging Aircraft" program cause our airlines, as operators of older aircraft, to be subject to additional inspections and modifications to address problems of corrosion and structural fatigue at specified times. The FAA may issue airworthiness directives that could require significant costly inspections and major modifications to such aircraft. The FAA may issue airworthiness directives that could limit the usability of certain aircraft types.

In addition, FAA regulations require that aircraft manufacturers establish limits on aircraft flight cycles to address issues involving aging, but still economically viable, aircraft, as described in Item 1 of this Form 10-K, under "Federal Aviation Administration." These regulations may increase our maintenance costs and eventually limit the use of our aircraft. See Item 2 of this Form 10-K, "Properties," for a description of the company's aircraft, including year of manufacture.

The FAA and ICAO are in the process of developing programs to modernize air traffic control and management systems. The FAA's program, Next Generation Air Transportation Systems, is an integrated system that requires updating aircraft navigation and communication equipment. The FAA has mandated the replacement of current ground based radar systems with more accurate satellite based systems on our aircraft. The ICAO began phasing in similar requirements for aircraft operating in Europe during 2015. These programs may increase our costs and limit the use of our aircraft. Aircraft not equipped with advanced communication systems may be restricted to certain airspace.

We may be negatively affected by global climate change or by legal, regulatory or market responses to such climate change.

We are subject to the regulations of the EPA and state and local governments regarding air quality and other matters. In part, because of the highly industrialized nature of many of the locations where we operate, there can be

no assurance that we have discovered all environmental contamination or other matters for which we may have or share responsibility.

Concern over climate change, including the impact of global warming, has led to significant federal, state and international legislative and regulatory efforts to limit GHG emissions. The European Commission has mandated the extension of the ETS for GHG emissions to the airline industry. Under the European Union ETS, all ABX, ATI and OAI flights that are wholly within the European Union are now covered by the ETS requirements, and each year we are required to submit emission allowances in an amount equal to the carbon dioxide emissions from such flights. If we exceed the airlines' emission allowances, we will be required to purchase additional emission allowances on the open market.

Similarly, in 2016, the ICAO passed a resolution adopting the CORSIA, which is a global, market-based emissions offset program to encourage carbon-neutral growth beyond 2020. A pilot phase began in 2021, in which countries may voluntarily participate, followed by a first phase of the program beginning in 2024 that is also voluntary, and full mandatory participation is scheduled to begin in 2027. The United States has agreed to participate in the two voluntary phases. ICAO continues to develop details regarding implementation, but compliance with CORSIA will increase our operating costs.

All three of our airlines, ABX, ATI and OAI, are certified to use sustainable aviation fuel ("SAF"), which has similar properties to conventional jet fuel but with a smaller carbon footprint. Depending on the type and production technique used, SAF can reduce GHG emissions up to 99% compared to conventional jet fuel. We support efforts to improve SAF production nationally and seek to use SAF at locations where it is available, but the production and supply of SAF is currently quite limited and significantly more expensive than traditional fuel. The Inflation Reduction Act passed by the U.S. Congress in 2022 would provide SAF tax credits of up to \$1.75 per gallon for SAF producers which is expected to boost production of SAF and reduce its cost for the airlines. Without the tax credits and other SAF production incentives planned by the Biden Administration, the cost to our airlines and their customers of using SAF would be prohibitive.

The U.S. Congress and certain states have also considered legislation regulating GHG emissions. In addition, even in the absence of such legislation, the EPA has sought to regulate GHG emissions, especially aircraft engine emissions. In July 2016, the EPA issued a finding that aircraft engine emissions cause or contribute to air pollution that may reasonably be anticipated to endanger public health. This finding is a regulatory prerequisite to the EPA's adoption of a new certificate standard for aircraft emissions. In January 2021, the EPA issued a final rule regarding GHG emissions standards for new aircraft engines consistent with ICAO standards that were adopted in 2017. The EPA final rule does not apply to engines on aircraft that are already in service, as is also the case with the ICAO standards. However, President Biden's Administration has stated that it plans to review the EPA emissions standards issued by the prior Administration and, further, the EPA standards have been challenged by several states and environmental organizations. We cannot predict the results of the Biden Administration's review or the outcome of legal challenges to the EPA's final rules. In June 2022, the FAA issued proposed fuel efficiency standards in a NPRM which, as drafted, would apply, inter alia, to in-service aircraft modified after the aircraft have been issued an airworthiness certificate, such as the Boeing 767 aircraft type. Industry trade groups believe this is a mistaken interpretation of the EPA rule and have sought modification in the final rule yet to be issued by FAA. Even if the rule is unchanged and applicable to a number of our subsidiaries' aircraft, the impact is expected to be minimal. The U.S. also recently re-entered the Paris climate accord, an agreement among 196 countries to reduce GHG emissions, and the effect of the U.S. re-entering the Paris climate accord on future U.S. policy regarding GHG emissions, on CORSIA and on other GHG regulations is uncertain. The extent to which the U.S. and other countries implement the agreement could have an adverse impact on us.

The cost to comply with new and potential environmental laws and regulations could be substantial for us. These costs could include an increase in the cost of fuel and capital costs associated with updating aircraft, among other things. We cannot predict the effect on our cost structure or operating results of complying with future environmental laws and regulations in the U.S. and in foreign jurisdictions until the timing, scope and extent of such laws and regulations becomes better known. Further, even without such legislation or regulation, increased awareness and adverse publicity in the global marketplace about greenhouse gas emitted by companies in the airline and transportation industries could harm our reputation and reduce demand for our services.

We are required to safeguard proprietary information and sensitive or confidential data, including personal information of customers, employees and others.

To conduct our operations, we regularly move data across national borders, and consequently we are subject to a variety of continuously evolving and developing laws and regulations in the United States and abroad regarding privacy, data protection and security. The scope of the laws that may be applicable to us is often uncertain and may be conflicting, particularly with respect to foreign laws. GDPR, which greatly increases the jurisdictional reach of European Union law and adds a broad array of requirements for handling personal data, including the public disclosure of significant data breaches, became effective in May 2018. Other countries and states have enacted or are enacting privacy and data localization laws that require data to stay within their borders. All of these evolving compliance and operational requirements impose significant costs that are likely to increase over time.

Operational Risk

Our operating results may be impacted by a coronavirus or other severe virus outbreaks.

The COVID-19 pandemic has had an adverse impact on our availability of labor resources resulting in increased labor cost to maintain sufficient staffing for operations. We rely on a skilled workforce to perform scheduled aircraft maintenance. We staff personnel near airports to sort customer packages, load aircraft and maintain related equipment. A coronavirus or another severe virus outbreak at one of our maintenance facilities, or at customer sorting centers could result in workforce shortages and facility closures. We have experienced delays in receiving parts from our global supply chains partners for aircraft conversions which could delay aircraft deployments to our customers.

Our costs incurred in providing airline services could be more than the contractual revenues generated.

Each airline develops business proposals for the performance of ACMI, CMI, charter and other services for its customers, crew productivity and maintenance expenses. Projections contain key assumptions, including maintenance costs, flight hours, aircraft reliability, crewmember productivity and crewmember compensation and benefits. We may overestimate revenues, the level of crewmember productivity, and/or underestimate the actual costs of providing services when preparing business proposals. If actual costs are higher than projected or aircraft reliability is less than expected, future operating results may be negatively impacted.

The supply of licensed pilots and qualified mechanics could negatively impact our operations and financial results.

Our industry has experienced a shortage of crewmembers and mechanics. While we have taken steps to attract, recruit, train and incentivize employees, situations may occur in which we cannot operate scheduled flights or commitment to charters opportunities because we lack the appropriate personnel. Our revenues from flight operations as well as our aircraft maintenance businesses could be constrained due to the lack of personnel. We may raise compensation and incentive levels to maintain or improve revenues levels. As a result, our profitability levels could be less than expected.

The concentration of aircraft types and engines in our airlines could adversely affect our operating and financial results.

Our combined aircraft fleet is currently concentrated in three aircraft types. If any of these aircraft types encounter technical difficulties that result in significant FAA airworthiness directives or grounding, our ability to lease the aircraft would be adversely impacted, as would our airlines' operations.

The cost of aircraft repairs and unexpected delays in the time required to complete aircraft maintenance could negatively affect our operating results.

Our airlines provide flight services throughout the world, sometimes operating in remote regions. Our aircraft may experience maintenance events in locations that do not have the necessary repair capabilities or are difficult to reach. As a result, we may incur additional expenses and lose billable revenues that we would have otherwise earned. Under certain customer agreements, we are required to provide a spare aircraft while scheduled maintenance is completed. If delays occur in the completion of aircraft maintenance, we may incur additional expense to provide airlift capacity and forgo revenues.

Our operating results could be adversely impacted by negotiations regarding collective bargaining agreements ("CBAs") with flight crewmember representatives.

The flight crewmembers for each of the Company's airlines are unionized. ABX and OAI's crewmembers are represented by the International Brotherhood of Teamsters ("IBT") while ATI's crewmembers are represented by the

Air Line Pilots Association ("ALPA"). During the negotiation of CBA amendments, the airline and the union are each required to maintain the status quo of the CBA; neither the airline nor the union may engage in a lock-out, strike or other self-help until such time as they are released from further negotiations by the mediator for the NMB, and after the conclusion of a mandatory 30-day "cooling off" period. It is rare for mediators to declare an impasse and release the parties. Instead, the NMB prefers to require the parties to remain in negotiations until such time as they come to an agreement. Despite this process, it's possible for disruptions in customer service to occur from time to time, resulting in increased costs for the airline and monetary penalties under certain customer agreements if monthly reliability thresholds are not achieved. Further, if we do not maintain minimum reliability thresholds over an extended period of time, we could be found in default of one or more customer agreements.

Contract negotiations with a union could result in reduced flexibility for scheduling crewmembers and higher operating costs for the airlines, making our airlines less competitive. If amendments to a CBA increase our costs and we cannot recover such increases, our operating results would be negatively impacted. In such event, it may be necessary for us to terminate customer contracts or curtail planned growth.

The rate of aircraft deployments may impact our operating results and financial condition.

Our future operating results and financial condition will depend in part on our subsidiaries' ability to successfully deploy aircraft in support of customers' operations while generating a positive return on investment. Our success will depend, in part, on our customers' ability to secure additional cargo volumes, in both U.S. and international markets. Deploying aircraft in international markets can pose additional risks, costs and regulatory requirements which could result in periods of delayed deployments. Deploying an aircraft into service typically requires various approvals from the FAA or EASA. Aircraft deployments could be delayed if such FAA or EASA approvals are delayed.

We may fail to meet the scheduled delivery date for aircraft required by customer agreements.

If CAM cannot meet the agreed delivery schedule for an aircraft lease, the customer may have the right to cancel the aircraft lease, thus delaying revenues until the aircraft can be completed and re-marketed successfully and exposing CAM to potential liability to the original customer.

Our airline operating agreements include on-time reliability requirements which can impact our operating results and financial condition.

Certain of our airline operating agreements contain monthly incentive payments for reaching specific on-time reliability thresholds. Additionally, such airline operating agreements contain monetary penalties for aircraft reliability below certain thresholds. As a result, our operating revenues may vary from period to period depending on the achievement of monthly incentives or the imposition of penalties. Further, an airline could be found in default of an agreement if it does not maintain minimum thresholds over an extended period of time. If our airlines are placed in default due to the failure to maintain reliability thresholds, the customer may elect to terminate all or part of the services we provide under certain customer agreements after a cure period.

If ABX fails to maintain aircraft reliability above a minimum threshold under the restated CMI agreement with DHL for two consecutive calendar months or three months in a rolling twelve-month period, we would be in default of the restated CMI agreement with DHL. In that event, DHL may elect to terminate the restated CMI agreement, unless we maintain the minimum reliability threshold during a 60-day cure period. If DHL terminates the CMI agreement due to an ABX event of default, we would be subject to a monetary penalty payable to DHL.

If our airlines fail to maintain aircraft reliability above a minimum threshold under the ATSA with ASI for either a specified number of consecutive calendar months or a specified number of calendar months (whether or not consecutive) in a specified trailing period, we could be held in default. In that event, ASI may elect to terminate the ATSA and pursue those rights and remedies available to it at law or in equity.

If OAI fails to maintain reliability above a minimum threshold under its contract with the DoD with respect to the flight segments flown during a given month, we could be held in default. In that event, the DoD may elect to terminate the contract. In addition, missions that experience carrier controllable delays are subject to monetary penalties. Depending on the delay interval, the compensation paid to OAI for the performance of the services can be reduced by a specified percentage amount.

Customers and Market Risk

Inflation and expenses may outpace customer rate increases.

General inflation in the United States continued to climb during 2022 before tapering at the end of the year and inflation is still elevated compared to previous years and may continue to increase in 2023 and beyond. Although a large portion of our operating costs are contractual with escalation clauses, a portion of our costs are subject to inflationary pressures. Salaries, wages and contract labor rates of individuals may continue to come under inflationary pressures to keep up with market demands. We have, and may continue to experience increased costs to retain and attract employees. Additionally our parts, materials and shipping costs may increase. While our customer contracts may have price escalation clauses, continued inflationary pressure on our cost may be more than the price increases we can charge to our customers. Elevated inflation rates for a prolonged period of time, without the ability to increase our prices at a similar rate, may negatively impact our financial results.

A limited number of key customers are critical to our business and the loss of one or more of such customers could materially adversely affect our business, results of operations and financial condition.

Our business is dependent on a limited number of key customers. There is a risk that any one of our key customers may not renew their contracts with us on favorable terms or at all, perhaps due to reasons beyond our control. As discussed in the risk factor below, certain key customers have the ability to terminate their agreements in advance of the expiration date.

The actual demand for Boeing 777, 767, 757 and Airbus A321 and A330 aircraft may be less than we anticipate. Customers may develop preferences for other aircraft types, instead of the aircraft that make up our fleet. The actual lease rates for aircraft available for lease may be less than we projected, or new leases may start later than we expect. Further, other airlines and lessors may be willing to offer aircraft to the market under terms more favorable to lessees.

Under the terms of our airline operating and aircraft lease agreements, customers may be able to terminate the agreements prior to their expiration date.

Customers can typically terminate for convenience one or more of the aircraft we operate for them under an airline operating agreement at any time during the term, subject to a 60-day notice period and paying the Company a fee. Additionally, the lease agreements may contain provisions for terminating an aircraft lease for convenience, including a notice period and paying a lump sum amount to the Company.

ASI may terminate the ATSA in its entirety after providing 180 days of advance notice and paying to the Company a termination fee which reduces over the term of the agreement.

DHL may terminate the CMI agreement in its entirety after providing 180 days of advance notice and paying a termination fee which amortizes down during the term of the agreement.

We may have disputes with our customers.

From time to time, we may have disputes with customers over contractual terms such as performance levels, service obligations, billing rates, cost responsibilities, return conditions and other matters. Our customer contracts often stipulate procedures for dispute resolution. The resolution of such disputes, if they arise, may result in unexpected financial costs and or outcomes that would not be favorable to our future operating results

The DoD may not renew our contracts or may reduce the number of routes that we expect to operate.

Our contracts with the DoD are typically for one year and are not required to be renewed. The DoD may terminate the contracts for convenience or in the event we were to fail to satisfy reliability requirements or for other reasons. The number and frequency of routes is sensitive to changes in military priorities and U.S. defense budgets.

The majority of OAI's business currently consists of flights chartered by the DoD for the transportation of DoD personnel and a significant amount of ATI's revenue is derived from flights for the DoD. Increased competition from other airlines to bid the same routes or downturn in the DoD's need for such services could adversely affect our operating results.

Lessees of our aircraft may fail to make contractual payments or fail to maintain the aircraft as required.

Our financial results depend in part on our lease customers' ability to make lease payments and maintain the related aircraft. Our customers' ability to make payments could be adversely impacted by changes to their financial liquidity, competitiveness, economic conditions and other factors. A default of an aircraft lease by a customer could negatively impact our operating results and cash flows and result in the repossession of the aircraft.

While we often require leasing customers to pay monthly maintenance deposits, customers are normally responsible for maintaining our aircraft during the lease term. Failure of a customer to perform required maintenance and maintain the appropriate records during the lease term could result in higher maintenance costs, a decrease in the value of the aircraft, a lengthy delay in or even our inability to redeploy the aircraft in a subsequent lease, any of which could have an adverse effect on our results of operations and financial condition.

The economic conditions in the U.S. and in other markets may negatively impact the demand for the Company's aircraft and services.

Air transportation volumes are strongly correlated to general economic conditions, including the price of aviation fuel. An economic downturn could reduce the demand for delivery services offered by DHL, ASI and other delivery businesses, in particular expedited shipping services utilizing aircraft, as well as the demand for the chartered passenger flights OAI operates. Further, during an economic slowdown, cargo customers generally prefer to use ground-based or marine transportation services instead of more expensive air transportation services. Accordingly, an economic downturn could reduce the demand for airlift and aircraft leases.

Additionally, if the price of aviation fuel rises significantly, the demand for aircraft and air transportation services may decline. During periods of downward economic trends and rising fuel costs, freight forwarders and integrated delivery businesses are more likely to defer market expansion plans. When the cost of air transportation increases, the demand for passenger transportation may decline.

On occasion, declines in demand may stem from other uncontrollable factors such as geopolitical tensions or conflicts, trade embargoes or tariffs, and human health crises. We may experience delays in the deployment of available aircraft with customers under lease, ACMI or charter arrangements and our revenues may be adversely affected.

A reduction in customer demand for aircraft maintenance facilities could negatively impact our financial results.

We lease and operate a 310,000 square foot, three-hangar aircraft maintenance facility and a 100,000 square foot component repair shop in Wilmington, Ohio. Additionally, we lease and operate a 311,500 square foot, two-hangar aircraft maintenance complex in Tampa, Florida. Accordingly, a large portion of the operating costs for our aircraft maintenance and conversion business are fixed. As a result, we need to retain existing aircraft maintenance business levels to maintain a profitable operation. The actual level of revenues may not be sufficient to cover our operating costs. Additionally, revenues from aircraft maintenance can vary among periods due to the timing of scheduled maintenance events and the completion level of work during a period.

Strategic investments in other businesses may not result in the desired benefits.

We enter into joint venture and other business acquisition and investment agreements from time to time with the expectation that such investments will result in various benefits including revenue growth through geographic diversification and product diversification, improved cash flows and better operating efficiencies. Achieving the anticipated benefits from such agreements is subject to a number of challenges and uncertainties. The expected benefits may be only partially realized or not at all, or may take longer to realize than expected, which could adversely impact our financial condition and results of operations. We may make additional capital contributions to these businesses.

Geopolitical uncertainties could impact our financial results

The war in Ukraine or the development of instabilities in other regions of the globe may result in further supply chain disruptions. The aircraft conversion operations that we contract to third parties rely on part manufacturers and labor from several global sources. Prolonged disruptions to the supply chain would impact the completion of aircraft and our corresponding leases to customers. Additionally, when coupled with inflationary pressures, such delays could have a significant impact on overall economic conditions as well as our operations and financial results. Further, the emergence of geopolitical instabilities could impact our customers operations, their ability to meet their commitments and pay for our services.

Risk Related to Business Interruptions and Cybersecurity Incidents

Our operating results may be impacted by outbreaks of COVID-19 variants or other highly contagious diseases

Our operations could be negatively affected if our own personnel or those of our suppliers and customers are quarantined or sickened as a result of exposure to COVID-19, or if they are subject to governmental curfews or "shelter in place" health orders. A COVID-19 outbreak at certain maintenance facilities, customer sorting centers or airports could result in workforce shortages or closures causing reduced revenues and higher expenses.

In addition to workforce shortages, a COVID-19 outbreak may result in parts shortages, maintenance delays, shortages of transportation and hotel accommodations for flight crews, any of which could result in reduced revenues and additional expenses. Similarly, the effects of the COVID-19 could result in the slower completion of aircraft freighter conversions which in turn would disrupt our aircraft leasing operations. Our customer base for aircraft maintenance revenues includes passenger airlines. Our operating results could be adversely impacted by a COVID-19 outbreak if passenger airlines reduce their needs for scheduled heavy airframe maintenance.

Our operating results could be negatively impacted by disruptions of our information technology and communication systems and data breaches.

Our businesses depend heavily on information technology, computerized systems and data transmissions to operate effectively. We continue to expand our reliance on third party providers for technical support, management, and hosting of systems. Our systems and technologies, or those of third parties on which we rely, could fail or become unreliable due to equipment failures, software viruses, ransomware attacks, malware attacks, cyberattacks, natural disasters, power failures, telecommunication outages, or other causes. Hackers, foreign governments, cyberterrorists and cyber-criminals, acting individually or in coordinated groups, may launch distributed denial of service attacks or other coordinated attacks that may cause service outages, gain inappropriate or block legitimate access to systems or information, or result in other interruptions to our business. In addition, the foregoing breaches in security could expose us and our customers, or the individuals affected, to a risk of loss, disclosure or misuse of proprietary information and sensitive or confidential data, including personal information of customers, employees and others. Certain disruptions could prevent our airlines from flying as scheduled, possibly for an extended period of time, which could have a negative impact on our financial results and operating reliability. A cybersecurity attack or system outage could limit our ability to conduct some operations or result in the complete shutdown of all of our operations. A cybersecurity attack impacting onboard or other flight systems could result in an accident or operational disruptions, which could adversely affect our reputation, regulatory oversight and financial position.

We continually monitor the risks of disruption, take preventative measures, develop backup plans and maintain redundancy capabilities. The measures we use may not prevent the causes of disruptions we could experience or help us recover failed systems quickly.

We depend on and interact with the information technology networks and systems of third parties for some aspects of our business operations, including our customers and service providers, such as cloud service providers. These third parties may have access to information we maintain about our company, operations, customers, employees and vendors, or operating systems that are critical to or can significantly impact our business operations. Like us, these third parties are subject to risks imposed by data breaches and information technology systems disruptions like those described above, and other events or actions that could damage, disrupt or close down their networks or systems. Security processes, protocols and standards that we have implemented and contractual provisions requiring security measures that we may have sought to impose on such third parties may not be sufficient or effective at preventing such events. These events could result in unauthorized access to, or disruptions or denials of access to, misuse or disclosure of, information or systems that are important to our business, including proprietary information, sensitive or confidential data, and other information about our operations, customers, employees and suppliers, including personal information. Any of these events that impact our information technology networks or systems, or those of customers, service providers or other third parties, could result in disruptions in our operations, the loss of existing or potential customers, damage to our brand and reputation, regulatory scrutiny, and litigation and potential liability for us.

Our systems are subject to evolving cyber security threats. Our exposure to cyber risk also increases as we expand the number of airports and locations within our operations, as well as the number of employees working from remote locations. The costs of maintaining safeguards, recovery capabilities and preventive measures may continue to rise. Further, the costs of recovering or replacing a failed system could be very expensive.

Among other consequences, our customers' confidence in our ability to protect data and systems and to provide services consistent with their expectations could be negatively impacted, further disrupting our operations. Similarly, an actual or alleged failure to comply with applicable U.S. or foreign data protection regulations or other data protection standards may expose us to litigation, fines, sanctions or other penalties. As regulations and expectations evolve, we may incur significant costs to upgrade and bring our systems and processes into compliance.

Severe weather or other natural or man-made disasters and epidemics could adversely affect our business.

Severe weather conditions and other natural or man-made disasters, including storms, floods, fires or earthquakes, epidemics or pandemics, conflicts or unrest, or terrorist attacks, may result in decreased revenues, as our customers reduce their transportation needs, or increased costs to operate our business, which could have a material adverse effect on our results of operations for a quarter or year. Any such event affecting one of our major facilities could result in a significant interruption in or disruption of our business.

Third-Party Reliance Risk

We rely on third parties to modify aircraft and provide aircraft and engine maintenance.

We rely on third party aircraft modification service providers and aircraft and engine maintenance service providers that have expertise or resources that we do not have. Third party service providers may seek to impose price increases that could negatively affect our competitiveness in the airline markets. An unexpected termination or delay involving service providers could have a material adverse effect on our operations and financial results. A delay in an aircraft modification could adversely impact our revenues and our ability to place the aircraft in the market. We must manage third party service providers to meet schedules and turn-times and to control costs in order to remain competitive to our customers.

We rely on a limited number of engine maintenance providers for our engines that power our fleet of aircraft. If our providers do not complete the refurbishment of our engines within the contractual turn-times or if an unplanned replacement of a maintenance provider is required due to the deterioration of their performance or some other reason, our operations and financial results may be adversely impacted. Further, if replacement engines cannot be sourced or if the cost of replacement engines increases, our operations and financial results may be adversely impacted.

Financial Risk

Our Senior Credit Agreement and our Senior Notes include covenants that could limit our operating and financial flexibility.

The Senior Credit Agreement contains covenants including, among other requirements, limitations on certain additional indebtedness and guarantees of indebtedness. The Senior Credit Agreement is collateralized by certain of our Boeing 777, 767 and 757 aircraft. Under the terms of the Senior Credit Agreement, we are required to maintain aircraft collateral coverage equal to 125% of the outstanding balance of the revolving credit facility. On January 28, 2020, we completed a debt offering of \$500.0 million in senior unsecured notes (the "Senior Notes"). On April 13, 2021, we completed an offering of \$200.0 million of additional notes (the "Additional Notes") under the existing Senior Notes. Our Senior Notes and related Indenture also include a number of restrictions and covenants including limitations on our ability to incur additional indebtedness, grant liens, make investments, repurchase or redeem capital stock, pay dividends, enter into transactions with affiliates, merge with other entities or transfer or sell assets. The covenants under the Senior Notes, which are generally no more restrictive than those set forth in the Senior Credit Agreement, are subject to exceptions and qualifications as described in the Indenture. Complying with these covenants in the Senior Credit Agreement and the Senior Notes may impair our ability to finance our operations or capital needs or to take advantage of other business opportunities. Our ability to comply with these covenants will depend on our future performance, which may be affected by events beyond our control. Our failure to comply with these covenants would represent an event of default. An event of default under the Senior Credit Agreement or the Senior Notes could result in all indebtedness thereunder being declared due and payable immediately.

Operating results may be affected by fluctuations in interest rates.

We enter into interest rate derivative instruments from time to time in conjunction with our debt levels. We typically do not designate the derivative instruments as hedges for accounting purposes. Future fluctuations in SOFR will result in the recording of gains and losses on interest rate derivatives that we hold.

Under the Senior Credit Agreement, interest rates are adjusted monthly based on the prevailing SOFR rates and may be adjusted at any time for prime rates and a ratio of our outstanding debt level to earnings before interest, taxes, depreciation and amortization expenses ("EBITDA"). At our current debt-to-EBITDA ratio, the revolving credit facility bears variable interest rates of 5.22% per annum. In addition to the impact of higher SOFR rates, additional debt or lower EBITDA may also result in higher interest rates on the variable rate portion of our debt. Higher interest rates may adversely impact our operating results.

We sponsor defined benefit pension plans and post-retirement healthcare plans for certain eligible employees. Our related pension expense, the plans' funded status and funding requirements are sensitive to changes in interest rates. The plans' funded status and annual pension expense are recalculated at the beginning of each calendar year using the fair value of plan assets and market-based interest rates at that point in time, as well as assumptions for asset returns and other actuarial assumptions. Future fluctuations in interest rates, including the impact on asset returns, could result in the recording of additional expense and require additional contributions for pension and other post-retirement healthcare plans.

The costs of insurance coverage or changes to our reserves for self-insured claims could affect our operating results and cash flows.

We are self-insured for certain claims related to workers' compensation, aircraft, automobile, general liability and employee healthcare. We record a liability for reported claims and an estimate for incurred claims that have not yet been reported. Accruals for these claims are estimated utilizing historical paid claims data and recent claims trends. Changes in claim severity and frequency could negatively impact our results of operations and cash flows.

Our future earnings and earnings per share, as reported under generally accepted accounting principles, will be impacted by the Amazon stock warrants.

The Amazon warrants are subject to fair value measurements during periods that they are outstanding. Accordingly, future fluctuations in the fair value of the warrants are expected to adversely impact the Company's reported earnings measures from time to time. See Note C in the accompanying consolidated financial statements of this Form 10-K for further information about warrants.

If Amazon exercises its right to acquire shares of ATSG's common stock pursuant to the outstanding warrants it holds, such exercise will dilute the ownership interests of ATSG's then-existing stockholders and could adversely affect the market price of ATSG's common stock.

If Amazon exercises its right to acquire shares of ATSG's common stock pursuant to the warrants, it will dilute the ownership interests of our then-existing stockholders and reduce our earnings per share. In addition, any sales in the public market of ATSG's common stock issuable upon the exercise of the warrants by Amazon could adversely affect prevailing market prices of ATSG's common stock.

Changes in the fair value of certain financial instruments could impact our financial results.

Certain financial instruments are subject to fair value measurements at the end of each reporting period. Accordingly, future fluctuations in their fair value may adversely impact our reported earnings.

The convertible note hedge transactions and the warrant transactions that we entered into in September 2017 may affect the value of ATSG's common stock.

In connection with the pricing of our 1.125% senior convertible notes due 2024 (the "Convertible Notes") and the exercise by the initial purchasers of their option to purchase additional Convertible Notes, we entered into privately-negotiated convertible note hedge transactions with the hedge counterparties. The convertible note hedge transactions cover, subject to customary anti-dilution adjustments, the number of shares of common stock that initially underlie the Convertible Notes. We also entered into separate, privately-negotiated warrant transactions with the hedge counterparties relating to the same number of shares of ATSG's common stock that initially underlie the Convertible Notes, subject to customary anti-dilution adjustments.

The hedge counterparties and/or their affiliates may modify their hedge positions with respect to the Convertible Note hedge transactions and the warrant transactions from time to time. They may do so by purchasing and/or selling shares of ATSG's common stock and/or other securities of ours, including the Convertible Notes in privately-negotiated transactions and/or open-market transactions or by entering into and/or unwinding various over-the-counter derivative transactions with respect to ATSG's common stock. The hedge counterparties are likely to modify their hedge positions during any observation period for the Convertible Notes.

The effect, if any, of these activities on the market price of ATSG's common stock will depend on a variety of factors, including market conditions, and cannot be determined at this time. Any of these activities could, however, adversely affect the market price of ATSG's common stock. In addition, the hedge counterparties and/or their affiliates may choose to engage in, or to discontinue engaging in, any of these transactions with or without notice at any time, and their decisions will be at their sole discretion and not within our control.

We are subject to counterparty risk with respect to the Convertible Note hedge transactions. The hedge counterparties are financial institutions, and we will be subject to the risk that they might default under the Convertible Note hedge transactions. Our exposure to the credit risk of the hedge counterparties is unsecured by any collateral. Global economic conditions have from time to time resulted in failure or financial difficulties for many financial institutions. If a hedge counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at that time under our transactions with that hedge counterparty. Our exposure will depend on many factors but, generally, the increase in our exposure will be correlated to the increase in the market price and volatility of ATSG's common stock. In addition, upon a default by a hedge counterparty, we may suffer adverse tax consequences and more dilution than we currently anticipate with respect to ATSG's common stock. We can provide no assurances as to the financial stability or viability of any hedge counterparty.

Conversion of the Convertible Notes or exercise of the warrants may dilute the ownership interest of stockholders. Any sales in the public market of the common stock issuable upon such conversion of the Convertible Notes or such exercise of the warrants could adversely affect prevailing market prices of ATSG's common stock. In addition, the existence of the Convertible Notes may encourage short selling by market participants because the conversion of the Convertible Notes could depress the price of ATSG's common stock.

We may need to reduce the carrying value of our assets.

The Company owns a significant amount of aircraft, aircraft parts and related equipment. Additionally, the balance sheet reflects assets for income tax carryforwards and other deferred tax assets. The removal of aircraft from service or continual losses from aircraft operations could require us to evaluate the recoverability of the carrying value of those aircraft, related parts and equipment and record an impairment charge through earnings to reduce the carrying value.

We have recorded goodwill and other intangible assets related to acquisitions and equity investments. If we are unable to achieve the projected levels of operating results, it may be necessary to record an impairment charge to reduce the carrying value of goodwill, equity investments and related intangible assets. Similarly, if we were to lose a key customer or one of our airlines were to lose its authority to operate, it could be necessary to record an impairment charge.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease portions of an air park in Wilmington, Ohio, under lease agreements with a regional port authority, the terms of which expire in June 2026 and June 2036 with options for us to extend the terms. The leases include corporate offices, 310,000 square feet of maintenance hangars and a 100,000 square foot component repair shop at the air park. We also have the non-exclusive right to use the Wilmington airport, which includes one active runway, taxiways and ramp space. We also lease and operate a 311,500 square foot, two hangar aircraft maintenance complex at the Tampa International Airport in Florida. We lease approximately 82,500 square feet of office and warehouse space at the Tulsa International Airport in Oklahoma. We lease a facility having approximately 335,000 square feet in Chicago, Illinois and another facility having approximately 100,000 square feet in Orlando, Florida for our USPS mailing handling contracts. In addition, we lease smaller maintenance stations, offices and ramp space at certain airport and regional locations, typically on a short-term basis. Further, we lease warehousing space inside or near certain U.S. airports to support our customers' parcel handling requirements.

As of December 31, 2022, our in-service aircraft fleet consisted of 111 owned Boeing aircraft and 17 Boeing aircraft leased from external companies. The majority of these aircraft were formerly passenger aircraft that have been modified for cargo operations. These cargo aircraft are generally described as being mid-size or having medium wide-body cargo capabilities. The cargo aircraft carry gross payloads ranging from approximately 47,900 to 129,000 pounds. These cargo aircraft are well suited for intra-continental flights and medium range intercontinental flights. The table below shows the combined fleet of aircraft in service condition.

In-service Aircraft as of December 31, 2022

Aircraft Type	Total	Owned	Operating Lease	Year of Manufacture	Gross Payload (Lbs.)	Still Air Range (Nautical Miles)
767-200 SF (1)	32	30	2	1982 - 1987	85,000 - 100,000	1,700 - 5,300
767-200 Passenger	3	2	1	2001	63,000 - 73,000	6,500 - 7,600
767-300 SF (1)	78	67	11	1988 - 2002	121,000 - 129,000	3,200 - 7,100
767-300 Passenger	8	5	3	1993 - 2002	85,000 - 99,700	6,300 - 7,200
777-200 Passenger	3	3	_	2004 - 2007	119,500 - 123,900	8,700 - 9,500
757-200 Combi (2)	4	4		1989 - 1992	58,000	2,600 - 4,300
Total in-service	128	111	17			

- (1) These aircraft are configured for standard cargo containers loaded through large standard main deck cargo doors.
- (2) These aircraft are configured as "combi" aircraft capable of simultaneously carrying passengers and cargo containers on the main deck.

CAM also owns 15 Boeing 767-300 aircraft and seven Airbus A321-200 aircraft which were undergoing or preparing to undergo modification to a standard freighter configuration and are expected to be completed in 2023 or 2024.

We believe that our existing facilities and aircraft fleet are appropriate for our current operations. As described in Note H to the accompanying financial statements of this Form 10-K, we plan to invest in additional aircraft to meet our growth plans. We may make additional investments in aircraft and facilities if we identify favorable opportunities in the markets that we serve.

ITEM 3. LEGAL PROCEEDINGS

We are currently a party to legal proceedings in various federal and state jurisdictions arising out of the operation of our business. The amount of alleged liability, if any, from these proceedings cannot be determined with certainty; however, we believe that the Company's ultimate liability, if any, arising from the pending legal proceedings, as well as from asserted legal claims and known potential legal claims which are probable of assertion, taking into account established accruals for estimated liabilities, should not be material to our financial condition 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

Market Information

ATSG's common stock is publicly traded on The Nasdaq Stock Market on The Nasdaq Global Select Market under the symbol "ATSG." The closing price of ATSG's common stock was \$20.93 on February 28, 2023.

Holders

On February 28, 2023, there were approximately 1,242 stockholders of record of ATSG's common stock.

Dividends

We currently do not pay a dividend. Future dividends, if any, and the timing of declaration of any such dividends, will be at the discretion of the Board and will depend upon many factors including, but not limited to, certain restrictions that we have on our ability to pay dividends. We are restricted from paying dividends on our common stock in excess of \$100.0 million during any calendar year under the provisions of the Senior Credit Agreement. Additionally, the Senior Notes and related Indenture generally restrict our ability to pay dividends on or make distributions in respect of capital stock or make certain other restricted payments or investments, subject to certain exceptions therein including, upon the satisfaction of certain conditions, the making of permitted dividends up to \$100.0 million during any calendar year and other additional permitted dividends, investments and other restricted payments not to exceed the amounts set forth therein.

Purchases of equity securities by the issuer and affiliated purchasers

The Senior Credit Agreement limits the amount of ATSG common stock we can repurchase to \$100.0 million during any calendar year, provided our total debt to EBITDA ratio is under 3.50 times on a trailing 12-month basis, after giving effect to the repurchase.

On August 5, 2014, the Board authorized the repurchase of up to \$50.0 million of outstanding ATSG common stock (the "2014 Repurchase Program"). In May 2016, the Board amended the 2014 Repurchase Program to increase the authorized amount from \$50.0 million to \$100.0 million. In February 2018, the Board increased the authorization under the 2014 Repurchase Program from \$100.0 million to \$150.0 million (less amounts previously repurchased). The 2014 Repurchase Program did not have a specific termination date, and was subject to termination by the Board at any time. On November 29, 2022, the Board terminated the 2014 Repurchase Program. A total of 8.2 million shares of ATSG's outstanding common stock were acquired under the 2014 Repurchase Program for \$132.9 million.

The following table summarizes our repurchases of ATSG common stock under the 2014 Repurchase Program during the fourth quarter ended December 31, 2022.

Period	Total Number of Shares Purchased	erage Price d Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	T	Maximum Dollar Value of Shares That May Yet Be Purchased Under the Program		
October 1, 2022 through October 31, 2022	1,557,224	\$ 26.92	1,557,224	\$	19,400,584		
November 1, 2022 through November 30, 2022	80,115	\$ 29.06	80,115	\$	17,072,206		
December 1, 2022 through December 31, 2022	_	\$ _	_	\$	_		
Total for the quarter	1,637,339	\$ 27.03	1,637,339	\$	_		

Also on November 29, 2022, the Board authorized the repurchase of up to \$150.0 million of ATSG's outstanding common stock (the "2022 Repurchase Program"). The 2022 Repurchase Program does not require the repurchase of a specific number of shares or establish a time frame for any repurchase and the Board may terminate

the 2022 Repurchase Program at any time. Repurchases may be made under the 2022 Repurchase Program from time to time in the open market or in privately negotiated transactions. There is no expiration date for the 2022 Repurchase Program. We repurchased \$9.6 million in ATSG common stock under the 2022 Repurchase Program during the fourth quarter of 2022 (all of which was in December 2022). As of December 31, 2022, the remaining available authorization under the 2022 Repurchase Program was \$140.4 million.

The following table summarizes our repurchases of ATSG common stock under the 2022 Repurchase Program during the fourth quarter ended December 31, 2022:

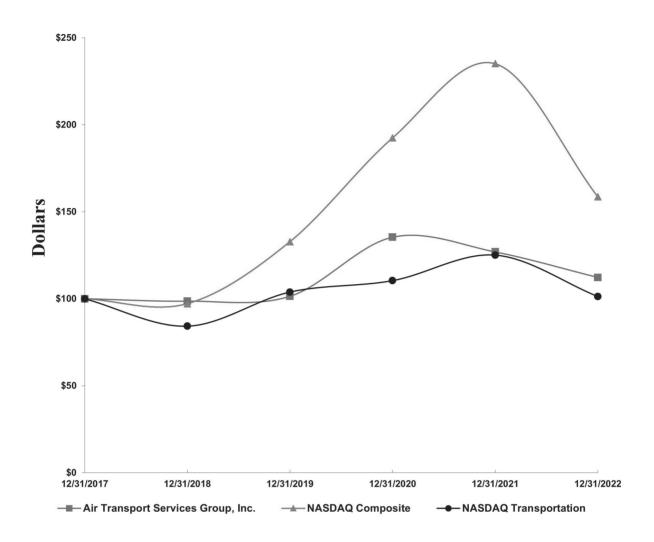
Period	Total Number of Shares Purchased	Average Price paid Per Share Total Number of Shares Purchased as Part of Publicly Announced Program		T	Maximum Dollar Value of Shares That May Yet Be Purchased Under the Program		
October 1, 2022 through October 31, 2022	_	\$ _	_	\$	_		
November 1, 2022 through November 30, 2022	_	\$ _	_	\$	150,000,000		
December 1, 2022 through December 31, 2022	355,959	\$ 27.02	355,959	\$	140,381,669		
Total for the quarter	355,959	\$ 27.02	355,959	\$	140,381,669		

During the fourth quarter of 2022, we repurchased an aggregate of 2.0 million shares of ATSG common stock for \$53.9 million under the 2014 Repurchase Program and the 2022 Repurchase Program.

On March 5, 2021, Amazon exercised warrants for 865,548 shares of ATSG's common stock through a cashless exercise by forfeiting 480,047 warrants from the 2016 Investment Agreement as payment. For the cashless exchange, ATSG shares were valued at \$27.27 per share, its volume-weighted average price for the previous 30 trading days immediately preceding March 5, 2021. Also on March 5, 2021, Amazon notified the Company of its intent to exercise warrants from the 2016 Investment agreement for 13,562,897 shares of ATSG's common stock by paying \$132.0 million of cash to the Company. This exercise was contingent upon the approval of the United States Department of Transportation, and the expiration or termination of any applicable waiting period pursuant to the Hart-Scott-Rodino Antitrust Improvements Act of 1976. After receiving all required regulatory approvals and clearances, Amazon remitted the funds to the Company on May 7, 2021 and the Company issued the corresponding shares of ATSG common stock, completing the warrant exercise. These funds were used to pay down the balance of the Company's revolving credit facility. The shares were issued to Amazon without registration under the Securities Act of 1933, as amended (the "1933 Act"), pursuant to exemptions from registration under Section 4(2) of the 1933 Act and Regulation D promulgated by the Securities and Exchange Commission under the 1933 Act.

Performance Graph

The graph below compares the cumulative total stockholder return on a \$100 investment in ATSG's common stock with the cumulative total return of a \$100 investment in the Nasdaq Composite Index and the cumulative total return of a \$100 investment in the Nasdaq Transportation Index for the period beginning on December 31, 2017 and ending on December 31, 2022.



	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
Air Transport Services Group, Inc.	100.00	98.57	101.38	135.44	126.97	112.27
Nasdaq Composite Index	100.00	97.16	132.81	192.47	235.15	158.65
Nasdaq Transportation Index	100.00	84.30	103.87	110.40	125.06	101.32

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

The following Management's Discussion and Analysis has been prepared with reference to our historical financial condition and results of operations. It should be read in conjunction with the accompanying consolidated financial statements and related notes included in Item 8 of this Form 10-K as well as Business Development described in Item 1 of this Form 10-K. Certain statements we make in this Item 7 constitute forward-looking statements under the Act. You should consider our forward-looking statements in light of the "Cautionary Note Regarding Forward-Looking Statements" preceding Part I of this Form 10-K and the risks discussed under the heading "Risk Factors" in Item 1A of this Form 10-K.

OVERVIEW

We lease aircraft and provide airline operations, aircraft modification and maintenance services, ground services, and other support services to the air transportation and logistics industries. We offer a range of complementary services to delivery companies, freight forwarders, e-commerce operators, airlines and government customers. Our principal subsidiaries include our aircraft leasing company (CAM) and three independently certificated airlines, (ABX, ATI and OAI).

We have two reportable segments:

CAM offers aircraft leasing and related services to external customers and also leases aircraft internally to our airlines. CAM acquires passenger aircraft and manages the modification of the aircraft into freighters by third parties. The follow-on aircraft leases normally cover a term of five to 10 years. CAM currently leases Boeing 767, 757 and 777 aircraft and aircraft engines. CAM is in the process of adding Airbus A321 and A330 freighter aircraft to its fleet.

ACMI Services includes the cargo and passenger transportation operations of our three airlines. Our airlines operate under contracts to provide a combination of aircraft, crews, maintenance, insurance and aviation fuel. Our customers are typically responsible for supplying the necessary aviation fuel and cargo handling services and reimbursing our airline for other operating expenses such as landing fees, ramp expenses, certain aircraft maintenance expenses and fuel procured directly by the airline. Aircraft charter agreements, including passenger services for the DoD, usually require the airline to provide full service, including fuel and other operating expenses for a fixed, all-inclusive price.

Our other business operations, which primarily provide support services to the transportation industry, include providing aircraft maintenance and modification services to customers, cargo load transfer and sorting services as well as related equipment maintenance services. These operations do not constitute reportable segments.

Demand for medium widebody and narrow-body freighters, driven primarily by express networks has been strong and we expect it remain strong at least during the next few years in regions across the globe. As part of our growth strategy to expand and diversify our freighter fleet, we hold aircraft conversion slots through 2027. We partner with IAI, Boeing and EFW for passenger aircraft conversions and perform our own conversions of the Airbus A321 aircraft through our joint venture arrangement. During 2022 we took steps to diversify and improve our supply chain for modified freighters.

During 2022, we took redelivery of six additional newly converted, CAM-owned Boeing 767-300 freighter aircraft and began leasing all of them to external customers under long-term leases. We also added seven more customer-provided aircraft to the fleet that our airlines operate for our customers under CMI agreements, and we purchased 14 more passenger aircraft for conversion.

At December 31, 2022, we owned 111 Boeing aircraft that were in revenue service. We also owned 15 Boeing 767-300 aircraft and seven Airbus 321-200 aircraft either already undergoing or awaiting induction into the freighter conversion process at December 31, 2022. In addition to these aircraft, we leased four passenger aircraft from third parties and operated 13 freighter aircraft provided by customers.

COVID-19

Our passenger flight operations have been impacted by the COVID-19 pandemic primarily as a result of certain international airport closures, flight cancellations and increased expenses. Our airlines have received federal government funding pursuant to payroll support programs as described in Note H of the accompanying consolidated financial statements. Vendors that convert our aircraft into freighters have experienced supply chain disruptions resulting in the delay of aircraft conversions. While the pandemic has made network operations more difficult to maintain, it has not had a significant adverse financial impact on our airline operations for customers' freight networks. We have not experienced a wide-spread outbreak at any of our employee locations.

Customers

Our largest customers are ASI, which is a subsidiary of Amazon, the DoD and DHL.

Revenues from our commercial arrangements with ASI comprised approximately 34%, 35% and 30% of our consolidated revenues during the years ended December 31, 2022, 2021 and 2020, respectively. As of December 31, 2022, we leased 42 Boeing 767 freighter aircraft to ASI with lease expirations between 2023 and 2031 and we operate those aircraft for ASI. The aircraft lease terms typically range from 5 to 10 years. We operate seven other Boeing 767 aircraft provided by ASI. We also provide ground services and aircraft maintenance services to ASI.

The DoD comprised 30%, 26% and 31% of our consolidated revenues during the years ended December 31, 2022, 2021 and 2020, respectively, derived from operating passenger and combi charter flights.

DHL comprised 12%, 12% and 12% of our consolidated revenues during the years ended December 31, 2022, 2021 and 2020, respectively. In February 2022, ATSG and DHL agreed to a six-year extension of its dry leases for five Boeing 767 freighters as well as an extension of the CMI agreement for ABX to operate aircraft through April 2028. The CMI agreement was expanded to include two additional 767 freighters. As of December 31, 2022, we leased 14 Boeing 767 freighter aircraft to DHL comprised of three Boeing 767-200 aircraft and 11 Boeing 767-300 aircraft. Ten of the 14 Boeing 767 aircraft were being operated by our airlines for DHL. Additionally, we operated six Boeing 767 aircraft that were provided by DHL as of December 31, 2022.

RESULTS OF OPERATIONS

Revenue and Earnings Summary

External customer revenues from continuing operations increased by \$311.2 million, or 18%, to \$2,045.5 million during 2022 compared to 2021. Customer revenues increased in 2022 for contracted airline services, charter flights, aircraft leasing and aviation fuel sales, compared to the previous year periods. Revenues for 2021 and 2020 were \$1,734.3 million and \$1,570.6 million respectively. Our revenues were disrupted in 2021 and 2020 due to the COVID-19 pandemic. The DoD and other customers cancelled scheduled passenger flights as a result of the pandemic. Our passenger flight operations were impacted by the COVID-19 pandemic primarily as a result of certain international airport closures, flight cancellations and increased expenses. Our airlines received federal government funding pursuant to payroll support programs as described in Note H of the accompanying financial statements. Lower revenues from cancellations in 2021 and 2020 were offset by an increase in flying for our customers' package delivery networks and charter flight operations.

The consolidated earnings from continuing operations were \$196.4 million for 2022 compared to \$229.0 million for 2021 and \$25.1 million for 2020. The pre-tax earnings from continuing operations were \$260.5 million for 2022 compared to \$301.2 million for 2021 and \$41.4 million for 2020. Earnings were affected by the following specific events and certain adjustments that do not directly reflect our underlying operations among the years presented.

- On a pre-tax basis, earnings included net gains of \$9.0 million and \$30.0 million and net losses of \$100.8 million for the years ended December 31, 2022, 2021 and 2020, respectively, for the gains or losses related to the repurchase of debt as well as financial instrument valuations, including warrant obligations granted to Amazon.
- Pre-tax earnings were also reduced by \$23.3 million, \$23.1 million and \$20.7 million for the years ended December 31, 2022, 2021 and 2020, respectively, for the amortization of customer incentives given to Amazon in the form of warrants.
- Pre-tax earnings from continuing operations included gains of \$20.0 million, \$17.8 million and \$12.0 million for the years ended December 31, 2022, 2021 and 2020, respectively, for settlement charges, curtailments and other non-service components of retiree benefit plans.
- Pre-tax earnings included losses of \$7.6 million, \$2.6 million and \$13.6 million for the years ended December 31, 2022, 2021 and 2020, respectively, our share of joint venture results, including engineering costs for the development of an aircraft modification for the Airbus A321.
- Pre-tax earnings for the year ended December 31, 2021, included a one-time charge of \$6.5 million to write off debt issuance costs in conjunction with the repayment of term loans.
- Pre-tax earnings for the year ended December 31, 2020, were decreased by an impairment charge of \$39.1 million for our four Boeing 757 freighter aircraft and related assets.
- During the years ended December 31, 2021 and 2020, we recognized \$111.7 million and \$47.2 million of government grants from the CARES Act, PSP Extension Law and the American Rescue Plan.
- Pre-tax earnings for the year ending December 31, 2022 included losses of \$1.0 million, net of related insurance recoveries for the costs of employee coverage, property damage, clean-up and repairs which occurred as a direct result of a foam release after a hangar's fire suppression system malfunctioned.

After removing the effects of these items, adjusted pre-tax earnings from continuing operations, a non-GAAP financial measure (a definition and reconciliation of adjusted pre-tax earnings from continuing operations follows), were \$263.3 million for 2022 compared to \$173.9 million for 2021 and \$156.2 million for 2020.

Adjusted pre-tax earnings from continuing operations improved by 51.4% and 11.3% for 2022 and 2021, respectively, driven by increased revenues primarily from CAM and the ACMI Services segments.

A summary of our revenues and pre-tax earnings from continuing operations and adjusted pre-tax earnings from continuing operations is shown below (in thousands):

	Year	s En	ding Decemb	er 3	131		
	2022		2021		2020		
Revenues from Continuing Operations:							
CAM							
Aircraft leasing and related services	\$ 454,804	\$	390,327	\$	327,170		
Lease incentive amortization	(20,118)		(20,040)		(18,509)		
Total CAM	434,686		370,287		308,661		
ACMI Services	1,404,348		1,185,128		1,147,279		
Other Activities	430,326		375,571		334,300		
Total Revenues	2,269,360		1,930,986		1,790,240		
Eliminate internal revenues	(223,891)		(196,704)		(219,665)		
Customer Revenues	\$ 2,045,469	\$	1,734,282	\$	1,570,575		
Pre-Tax Earnings from Continuing Operations:							
CAM, inclusive of interest expense	\$ 143,008	\$	106,161	\$	77,424		
ACMI Services, inclusive of government grants and interest expense	95,198		158,733		114,128		
Other Activities	2,579		112		(5,933)		
Net unallocated interest expense	(1,748)		(2,525)		(2,825)		
Impairment of aircraft and related assets	_		_		(39,075)		
Net financial instrument re-measurement (loss) gain	9,022		29,979		(100,771)		
Other non-service components of retiree benefits costs, net	20,046		17,827		12,032		
Loss from non-consolidated affiliate	(7,607)		(2,577)		(13,587)		
Debt issuance costs	_		(6,505)		_		
Pre-Tax Earnings from Continuing Operations	260,498		301,205		41,393		
Add other non-service components of retiree benefit costs, net	(20,046)		(17,827)		(12,032)		
Less government grants	_		(111,673)		(47,231)		
Add impairment of aircraft and related assets	_		_		39,075		
Add charges for non-consolidated affiliates	7,607		2,577		13,587		
Add lease incentive amortization	23,263		23,094		20,671		
Add net loss (gain) on financial instruments	(9,022)		(29,979)		100,771		
Add net charges for hangar foam incident	978		_		_		
Add debt issuance costs	_		6,505		_		
Adjusted Pre-Tax Earnings from Continuing Operations	\$ 263,278	\$	173,902	\$	156,234		

We define adjusted pre-tax earnings from continuing operations, a non-GAAP measure, as pre-tax earnings from continuing operations excluding the following: (i) settlement charges and other non-service components of retiree benefit costs; (ii) gains and losses for the fair value re-measurement of financial instruments including warrants issued to Amazon and, during 2022, gains from the repurchase of unsecured notes; (iii) customer incentive amortization; (iv) the charge-off of debt issuance costs associated with the repurchase of debt: (v) the start-up costs of a non-consolidated joint venture; (vi) charges related to the discharge of a fire suppression system in the Company's aircraft hangar, net of related insurance recoveries; and (vii) impairment charges for aircraft and related assets. We exclude these items from adjusted pre-tax earnings because they are distinctly different in their predictability or not closely related to our on-going operating activities. We also excluded the recognition of government grants from adjusted pre-tax earnings to improve comparability between periods. Management uses adjusted pre-tax earnings to compare the performance of core operating results between periods. Presenting this measure provides investors with a comparative metric of fundamental operations while highlighting changes to

certain items among periods. Adjusted results should not be considered in isolation or as a substitute for analysis of the Company's results as reported under GAAP.

Our earnings for the reported periods were impacted by the fair value re-measurement of the Amazon warrants classified in liabilities at the end of each reporting period, customer incentive amortization and the related income tax effects. The fair value of the warrants issued or issuable to Amazon was recorded as a customer incentive asset and are amortized against revenues over the duration of the aircraft leases. Our accounting for the warrants issued to Amazon has been determined in accordance with the financial reporting guidance for financial instruments. For additional information about the warrants issued to Amazon, see the accompanying notes to the financial statements included in this Form 10-K

Aircraft Fleet Summary

Our fleet of cargo and passenger aircraft is summarized in the following table as of December 31, 2022, 2021 and 2020. Our CAM-owned operating aircraft fleet has increased by 11 aircraft since the end of 2020, driven by customer demand for the Boeing 767-300 converted freighter. Our freighters, converted from passenger aircraft, utilize standard shipping containers and can be deployed into regional cargo markets more economically than larger capacity aircraft, newly built freighters or other competing alternatives. At December 31, 2022, we owned 15 Boeing 767-300 aircraft and seven Airbus A321-200 aircraft that were either already undergoing or awaiting induction into the freighter conversion process.

Aircraft fleet activity during 2022 is listed below:

- CAM completed the modification of six Boeing 767-300 freighter aircraft purchased in the previous year. The aircraft are leased to external customers under multi-year leases. Two of the aircraft are being operated by ABX for the customer.
- CAM purchased eight Boeing 767-300 passenger aircraft for the purpose of converting the passenger aircraft into a standard freighter configuration. These aircraft are expected to be leased to external customers during 2023 and 2024.
- OAI returned one Boeing 767-300 passenger aircraft to CAM. CAM has begun converting this passenger aircraft into a standard freighter configuration. This aircraft is expected to be leased to an external customer during 2023.
- CAM purchased six Airbus A321-200 passenger aircraft for the purpose of converting the passenger aircraft into a standard freighter configuration. These aircraft are expected to be leased to an external customer during 2023.
- ATI and ABX began to operate three and four customer-provided Boeing 767-300 freighter aircraft, respectively.
- CAM leased one previously returned Boeing 767-200 freighter aircraft to an external customer under a multi-year lease.
- An external customer and ABX each returned one Boeing 767-200 freighter aircraft to CAM. These
 aircraft has been removed from service and their parts and engines will be used to support the fleet or
 leased to customers.

		2022			2021			2020	
	ACMI Services	CAM	Total	ACMI Services	CAM	Total	ACMI Services	CAM	Total
In-service aircraft									
Aircraft owned									
Boeing 767-200 Freighter	4	26	30	5	26	31	5	28	33
Boeing 767-200 Passenger	2	_	2	2	_	2	2	_	2
Boeing 767-300 Freighter	2	65	67	2	59	61	5	45	50
Boeing 767-300 Passenger	5	_	5	6	_	6	7	_	7
Boeing 777-200 Passenger	3	_	3	3		3	3	_	3
Boeing 757-200 Freighter	_	_	_	_	_	_	1	_	1
Boeing 757-200 Combi	4	_	4	4	_	4	4	_	4
Total	20	91	111	22	85	107	27	73	100
Operating lease									
Boeing 767-200 Passenger	1	_	1	1	_	1	1	_	1
Boeing 767-300 Passenger	3	_	3	3		3	3	_	3
Boeing 767-200 Freighter	2	_	2	2	_	2	_	_	
Boeing 767-300 Freighter	11	_	11	4		4	2		2
Total	17	_	17	10	_	10	6	_	6
Other aircraft									
Owned Boeing 767-300 under modification	_	15	15	_	12	12	_	8	8
Owned Airbus A321-200 under modification	_	7	7	_	1	1	_	_	
Owned Boeing 767 available or staging for lease	_	_	_	_	1	1	_	_	_

As of December 31, 2022, ABX, ATI and OAI were leasing 20 in-service aircraft internally from CAM for use in ACMI Services. Of CAM's 26 externally leased Boeing 767-200 freighter aircraft, 12 were leased to ASI and operated by ABX or ATI, one was leased to DHL and operated by ABX, two were leased to DHL and were being operated by a DHL-affiliated airline and 11 were leased to other external customers. Of the 65 externally leased Boeing 767-300 freighter aircraft, 30 were leased to ASI and operated by ABX or ATI, nine were leased to DHL and operated by ABX, two were leased to DHL and were being operated by a DHL-affiliated airline and 24 were leased to other external customers. The carrying values of the total in-service fleet as of December 31, 2022, 2021 and 2020 were \$1,741.7 million, \$1,693.0 million and \$1,535.3 million, respectively.

2022 Compared to 2021

CAM

As of December 31, 2022 and 2021, CAM had 91 and 85 aircraft under lease to external customers, respectively. CAM's revenues grew by \$64.4 million during 2022 compared to 2021, primarily as a result of additional aircraft leases. Revenues from external customers totaled \$317.2 million and \$273.3 million for 2022 and 2021, respectively. CAM's revenues from the Company's airlines totaled \$117.5 million during 2022, compared to \$97.0 million for 2021. CAM's aircraft leasing and related services revenues, which exclude customer lease incentive amortization, increased \$64.5 million in 2022 compared to 2021, as a result of new aircraft leases in 2022 and 2021 along with engine maintenance revenue. During 2022, CAM added six Boeing 767-300 freighter aircraft to its portfolio and placed these six aircraft with external customers under long-term leases.

In October of 2021, CAM began to offer engine power coverage to lessees of CAM's General Electric powered Boeing 767-200 aircraft. Under this service, CAM is responsible for providing and maintaining engines for its lease

customers as needed through a pool of engines. Revenues from external customers increased \$17.3 million during 2022 for this service. CAM's revenues and earnings from this service are dependent upon multiple factors including the cycles operated, the number of maintenance overhauls and the severity of unscheduled maintenance events.

CAM's pre-tax earnings, inclusive of internally allocated interest expense, were \$143.0 million and \$106.2 million during 2022 and 2021, respectively. Increased pre-tax earnings reflect the six aircraft placed into service in 2022 and a \$7.3 million decrease in internally allocated interest expense due to lower company-wide interest expense, offset by a \$28.0 million increase in depreciation expense due to the addition of 18 Boeing aircraft since the beginning of 2021.

In addition to the 15 Boeing 767-300 aircraft and seven Airbus A321-200 aircraft which were in the modification process at December 31, 2022, CAM has agreements to purchase 16 more Boeing 767-300 aircraft and two more Airbus A321-200 and six Airbus A330-300 aircraft during 2023 and 2024. CAM's operating results will depend on its continuing ability to convert passenger aircraft into freighters within planned costs and within the time frames required by customers. We expect to lease to external customers at least 14 newly modified Boeing 767-300 freighters in 2023 and 16 in 2024. We expect to complete the passenger-to-freighter conversion and deliver six Airbus A321-200 freighters during 2023. CAM will begin the passenger-to-freighter conversion of Airbus A330 aircraft in 2023 and expects to begin leasing the Airbus A330 freighter aircraft in 2024. CAM's future operating results will also depend on the timing and lease rates under which aircraft are redeployed as well as lease expirations. During 2023, 11 Boeing 767-200 aircraft leases are scheduled to expire if they are not extended.

ACMI Services

Total revenues from ACMI Services increased \$219.2 million during 2022 compared with 2021 to \$1,404.3 million. Improved revenues for 2022 were driven by seven more aircraft in operations and an 8% increase in customer block hours during 2022. Increased revenues for 2022 included additional aircraft operations for ASI and DHL as well as the DoD compared to 2021. As of December 31, 2022 and 2021, ACMI Services included 89 and 82 in-service aircraft, respectively. Uniform rates for the DOD were higher in 2022 compared to 2021. Revenues also increased due to fuel expenses that are billed through to the DoD and charter customers. The customer fuel portion of ACMI Services revenue increased approximately \$68.9 million during 2022 compared to 2021.

ACMI Services had pre-tax earnings of \$95.2 million during 2022, compared to \$158.7 million for 2021 inclusive of internally allocated interest expense and the recognition of pandemic-related government grants of \$111.7 million received during 2021. Without the government grants, pre-tax earnings from ACMI Services increased \$48.1 million due to additional aircraft and block hours during 2022 compared to 2021. Internally allocated interest expense decreased to \$13.8 million for 2022 compared to \$18.1 million for 2021 due to lower interest expense during 2022.

During the fourth quarter of 2022, we began to experience lower flying activity for customers than previously expected. We expect that our customers' adjustments to their networks will reduce our operating results for the first half of 2023 compared to 2022. Maintaining profitability in ACMI Services will depend on a number of factors, including the impact of the customer flight schedules, crewmember productivity and pay, employee attrition, employee benefits, aircraft maintenance schedules and the number of aircraft we operate. Recruiting, training and retaining employees and contractors is an important factor to our success. If we experience a shortage of qualified employees, ACMI Services' financial results could be detrimentally impacted.

Other Activities

We provide other support services to our ACMI Services customers and other airlines by leveraging our knowledge and capabilities developed for our own operations over the years. Through our FAA certificated maintenance and repair subsidiaries, we sell aircraft parts and provide aircraft maintenance and modification services. We also provide mail sorting, parcel handling and logistical support to USPS facilities and similar services to certain ASI hub and gateway locations in the U.S. We provide maintenance for ground equipment, facilities and material handling equipment and we resell aviation fuel in Wilmington, Ohio. Additionally, we provide flight training services.

External customer revenues from all other activities increased \$48.2 million in 2022 compared to 2021 due to sales of aviation fuel and increases across most maintenance and ground services offerings as well additional aircraft conversion projects. Low margin revenues from the sale of fuel comprised \$21.4 million of the increase, although gallons of fuel sold declined 13%. Pre-tax earnings from other activities increased by \$2.5 million to a pretax gain of \$2.6 million in 2022. The improved earnings for 2022 reflect increased revenues compared to 2021.

Expenses from Continuing Operations

Salaries, wages and benefits expense increased \$75.7 million or 13% during 2022 compared to 2021. While the number of total employees was relatively flat compared to the previous year, salaries and wages have been impacted by higher wage rates, including more pilots, benefit costs, and more overtime pay. Inflationary pressures may continue to impact wages in the future.

Depreciation and amortization expense increased \$22.6 million during 2022 compared to 2021. The increase reflects incremental depreciation for 18 aircraft added to its operating fleet over the last two years as well as additional depreciation expense for engines that are now being serviced and maintained by CAM under engine power coverage arrangements. We expect depreciation expense to continue to increase during future periods in conjunction with our fleet expansion, engine programs and capital spending plans.

Maintenance, materials and repairs expense decreased by \$11.2 million during 2022 compared to 2021. Maintenance expense in 2021 included \$27.8 million for an engine power-by-the-cycle ("PBC") agreement that expired in September 2021. We are now maintaining these engines through time and material agreements with engine maintenance providers to replace the expired PBC agreement. The decline in PBC expense was offset by increases in unscheduled engine removals and part repairs driven by increased flight operations. The aircraft maintenance and material expenses can vary among periods due to the number of maintenance events and the scope of airframe checks that are performed.

Fuel expense increased by \$101.9 million during 2022 compared to 2021. Fuel expense includes the cost of fuel to operate DoD charters, fuel used to position aircraft for service and for maintenance purposes, as well as the cost of fuel sales. Fuel expense increased due to the additional block hours for the DoD and due to an approximately 50% per gallon increase in the price per gallon of aviation fuel compared to 2021.

Contracted ground and aviation services expense includes navigational services, aircraft and cargo handling services, baggage handling services and other airport services. Contracted ground and aviation services increased \$1.3 million during 2022 compared to 2021. Contracted ground and aviation services vary with the level of passenger airline operations. The increases for the year correspond to increased flying volume.

Travel expense increased by \$25.4 million during 2022 compared to 2021. In addition to the increased number of crew member and flying volumes, travel expense increased in 2022 due to significantly higher airfares and hotel rates compared to 2021.

Landing and ramp expense, which includes the cost of deicing chemicals, increased by \$2.3 million during 2022 compared to 2021, driven by increased block hours and higher airport fees.

Rent expense increased by \$6.7 million during 2022 compared to 2021 due to additional aircraft engines and facility locations under lease.

Insurance expense decreased by \$2.9 million during 2022 compared to 2021 due to the management of deductible levels, excess coverage policies and self insurance initiatives.

Other operating expenses increased by \$13.5 million during 2022 compared to 2021. Other operating expenses for 2022 include increases for professional fees, employee training, utilities, commission expense to our CRAF team for DoD revenues and flight expenses due to additional airline activity compared to 2021.

Operating results included a pre-tax expense credit of \$111.7 million during 2021 to recognize grants received from the U.S. government under the CARES Act, PSP Extension Law and the American Rescue Plan. For additional information about these grants, see Note H of the consolidated financial statements included in this Form 10-K.

Non Operating Income, Adjustments and Expenses

Interest expense decreased by \$11.9 million during 2022 compared to 2021. While interest rates and debt balances increased over the course of 2022, interest expense declined due to the adoption of ASU No. 2020-06, "Accounting for Convertible Instruments and Contracts in an Entity's Own Equity," lower variable interest rates during the first few months of 2022 and the effects of interest rates swaps compared to 2021. ASU No.2020-06 resulted in the elimination of the discount on the convertible notes and accordingly the reduction of discount amortization to interest expense. See Note A to the consolidated financial statements included in this Form 10-K for additional information about ASU No. 2020-06. We expect interest expense to increase in future periods due to increases in our revolver balances as we expand CAM's fleet and increased interest rates from our Senior Credit Agreement. During the second quarter of 2021, we recorded a pre-tax charge of \$6.5 million to write-off the unamortized debt issuance costs of our term loans which were repaid in full during April 2021.

During the second quarter of 2022, we repurchased \$120.0 million of the Senior Notes par value in the open market resulting in a net pre-tax gain of \$4.5 million, net of fees, which was recorded under net gain on financial instruments on the income statement during the corresponding period. We recorded unrealized pre-tax gains on financial instrument re-measurements of \$9.0 million during the year ended December 31, 2022, compared to \$30.0 million for 2021. The gains are primarily the result of re-valuing, as of December 31, 2021, the stock warrants granted to Amazon and interest rate swaps we hold. Generally, the warrant values increase or decrease with corresponding increases or decreases in the ATSG common stock price during the measurement period. Additionally, the value of certain warrants depends partially on the probability that warrants will vest upon the execution of aircraft leases. Increases in the probability of a warrants vesting results in higher liabilities and losses, and increases in the ATSG common stock price during the measurement period results in lower liabilities and losses (and vice versa). In December 2021, most of the outstanding warrants were reclassified from liabilities to paid in capital and are no longer subject to periodic reevaluation. (See Note C to the consolidated financial statements included in this Form 10-K for additional information about the Amazon warrants.)

Non-service components of retiree benefits resulted in net gains of \$20.0 million for 2022 compared to \$17.8 million for 2021. The non service component gain and losses of retiree benefits are determined by actuaries and include the amortization of unrecognized gain and loss stemming from changes in assumptions regarding discount rates, expected investment returns and other retirement plan assumptions. Non service components of retiree benefits can vary significantly from one year to the next based on investment results and changes in discount rates used to account for defined benefit retirement plans.

Income tax expense from earnings from continuing operations increased \$8.2 million for 2022 compared to 2021. The effective tax rate before including the warrant revaluations, incentive amortization and the other adjustments for adjusted pre-tax earnings from continuing operations (see items in the table above) was 24.5% for 2022 compared to 24.7% for 2021.

As of December 31, 2022, we had operating loss carryforwards for U.S. federal income tax purposes of approximately \$278.0 million which do not expire but the use of which is limited to 80% of taxable income in any given year. We expect to utilize the loss carryforwards to offset most of our federal income tax liabilities through 2024. We are required to pay certain federal minimum taxes and certain state and local income taxes before then. Our taxable income earned from international flights is primarily sourced to the United States under international aviation agreements and treaties. When the Company operates in countries without such agreements, we could incur additional foreign income taxes. Aircraft leasing income earned by the Company's Ireland-based subsidiary will be taxed under Ireland's tax jurisdiction.

The effective rate can be impacted by a number of factors, including the continued impact of the apportionment of income among taxing jurisdictions, employee compensation limitations, the return of the meals and per diem

deductibility limitations and our leasing efforts in our Ireland-based subsidiary. We estimate that our effective tax rate for 2023, before applying the deductibility of employee stock compensation, will be approximately 23.5%.

Discontinued Operations

The financial results of discontinued operations primarily reflect workers' compensation cost adjustments and other benefits for former employees previously associated with ABX's former hub operations pursuant to which ABX performed package sorting services for DHL. Pre-tax earnings related to the former sorting operations were \$2.8 million for 2022 compared to \$3.2 million for 2021. Pre-tax earnings during 2022 and 2021 were a result of reductions in self-insurance reserves for former employee claims and pension credits.

2021 Compared to 2020

CAM

As of December 31, 2021 and 2020, CAM had 85 and 73 aircraft under lease to external customers, respectively. CAM's revenues grew by \$61.6 million during 2021 compared to 2020, primarily as a result of additional aircraft leases. Revenues from external customers totaled \$273.3 million and \$205.0 million for 2021 and 2020, respectively. CAM's revenues from our airlines totaled \$97.0 million during 2021, compared to \$103.6 million for 2020. CAM's aircraft leasing and related services revenues, which exclude customer lease incentive amortization, increased \$63.2 million in 2021 compared to 2020, as a result of new aircraft leases in 2021. During 2021, CAM added 12 Boeing 767-300 freighter aircraft to its portfolio and placed 15 Boeing 767-300 aircraft with external customers under long-term leases.

In October of 2021, CAM began to offer engine power coverage to lessees of CAM's General Electric powered Boeing 767-200 aircraft. Under this service, CAM is responsible for providing and maintaining engines for its lease customers as needed through a pool of engines. Revenues from external customers increased \$6.5 million during 2021 for this service.

CAM's pre-tax earnings, inclusive of internally allocated interest expense, were \$106.2 million and \$77.4 million during 2021 and 2020, respectively. Increased pre-tax earnings reflect the 15 aircraft placed into service in 2021 and a \$1.1 million decrease in internally allocated interest expense due to lower company-wide interest expense, offset by a \$31.7 million increase in depreciation expense driven by the addition of 12 Boeing aircraft in 2021 compared to 2020.

ACMI Services

Total revenues from ACMI Services increased \$37.8 million during 2021 compared with 2020 to \$1,185.1 million. Improved revenues for 2021 were driven by nine more freighter aircraft in operations and a 12% increase in customer block hours during 2021. Increased revenues for 2021 included additional aircraft operations for ASI and DHL, while block hours flown for the DoD declined compared to 2020. As of December 31, 2021 and 2020, ACMI Services included 82 and 73 in-service aircraft, respectively.

Revenues were negatively impacted by the COVID-19 pandemic. In late February 2020, the DoD began canceling combi aircraft flights and in March 2020, commercial customers began canceling scheduled passenger flights as a result of the pandemic. During 2020, the DoD and other governmental agencies contracted for flights to return people to the United States who were stranded abroad as a result of the pandemic, which partially mitigated the impact of the pandemic during 2020. As a result, combined block hours flown for the DoD, contracted commercial passenger and combi flights declined 10% for 2021, compared to 2020. The decline in revenues from passenger and combi aircraft operations were offset by increased flying for customer cargo operations, particularly e-commerce networks. Customer block hours for freighter aircraft increased 19% in 2021 compared to 2020, driven primarily by the growth of e-commerce in the U.S.

ACMI Services had pre-tax earnings of \$158.7 million during 2021, compared to \$114.1 million for 2020 inclusive of internally allocated interest expense and the recognition of pandemic-related government grants of \$111.7 million and \$47.2 million for 2021 and 2020, respectively. Earnings for 2021 were negatively impacted by less passenger flying and higher expenses for passenger operations during 2021 compared to 2020. Internally allocated interest expense decreased to \$18.1 million for 2021 compared to \$20.5 million for 2020.

Other Activities

External customer revenues from all other activities increased \$57.6 million in 2021 compared to 2020, due to broad increases across most maintenance and ground services offerings. Additionally, the sale of aviation fuel to customers at the Wilmington, Ohio air hub increased in 2021. Revenues from ground services increased due to the addition, since mid-2020, of a third operating contract for USPS mail sorting.

Pre-tax earnings from other activities increased by \$6.0 million to a pretax gain of \$0.1 million in 2021. The improved earnings comparison for 2021 reflects start-up costs for the USPS facilities which we started to operate in 2020, as well as the increased revenues.

Expenses from Continuing Operations

Salaries, wages and benefits expense increased \$72.3 million or 14% during 2021 compared to 2020. While the number of total employees is similar among the two years, headcount for flight crews and flight operations personnel increased while the number of sorters decreased. Additionally, labor rates for aircraft maintenance technicians and freight sorters increased over 2020.

Depreciation and amortization expense increased \$30.4 million during 2021 compared to 2020. The increase reflects incremental depreciation for 12 Boeing 767-300 aircraft and additional aircraft engines added to the operating fleet since the beginning of 2021, as well as capitalized heavy maintenance and navigation technology upgrades.

Maintenance, materials and repairs expense decreased by \$6.0 million during 2021 compared to 2020. Decreased maintenance expense for 2021 was driven by lower costs for engine repairs at our airlines offset by increased flight operations for our customers' express cargo networks and increased heavy maintenance. The aircraft maintenance and material expenses can vary among periods due to the number of maintenance events and the scope of airframe checks that are performed. Maintenance expense for 2021 included \$27.8 million for an engine PBC agreement that expired in September 2021.

Fuel expense increased by \$25.2 million during 2021 compared to 2020. Fuel expense includes the cost of fuel to operate DoD charters, fuel used to position aircraft for service and for maintenance purposes, as well as the cost of fuel sales. Fuel expense increased during 2021 compared to 2020 due primarily to increases in the price per gallon of aviation fuel compared to the previous year. Aviation fuel rates increased over 40% per gallon for the comparative periods.

Contracted ground and aviation services expense includes navigational services, aircraft and cargo handling services, baggage handling services and other airport services. Contracted ground and aviation services increased \$12.2 million during 2021 compared to 2020. The increases were driven by additional ground equipment installation projects for customers and higher fees for airport services compared to the previous year.

Travel expense increased by \$9.2 million during 2021 compared to 2020. The increase in travel expense reflects an increase in employee travel to support higher block hours flown for customers, which increased 12% compared to 2020.

Landing and ramp expense, which includes the cost of deicing chemicals, increased by \$1.8 million during 2021 compared to 2020, driven by increased block hours for our customers' express cargo networks.

Rent expense increased by \$4.4 million during 2021 compared to 2020 due to an additional passenger aircraft and facility rents for the two USPS facilities started in mid-2020.

Insurance expense increased by \$2.7 million during 2021 compared to 2020. Aircraft fleet insurance has increased due to additional aircraft operations and higher insurance rates during 2021.

Other operating expenses increased by \$0.2 million during 2021 compared to 2020. Other operating expenses include professional fees, employee training, utilities, commission expense to our CRAF team for DoD revenues and other expenses.

Operating results included a pre-tax expense credit of \$111.7 million and \$47.2 million during 2021 and 2020, respectively, to recognize grants received from the U.S. government under the CARES Act, PSP Extension Law and the American Rescue Plan.

Non-Operating Income, Adjustments and Expenses

Interest expense decreased by \$4.1 million during 2021 compared to 2020. Interest expense during 2021 decreased compared to the previous year due to lower interest rates on our borrowings under the Senior Credit Agreement and lower average debt balances outstanding during the year. During the second quarter of 2021, we recorded a pre-tax charge of \$6.5 million to write-off the unamortized debt issuance costs of our term loans which were repaid in full during April 2021.

We recorded unrealized pre-tax gains on financial instrument re-measurements of \$30.0 million during 2021, compared to pre-tax losses of \$100.8 million for 2020. The gains and losses include the results of re-valuing, as of December 31, 2021 and 2020, the fair value of the stock warrants granted to Amazon. Generally, the warrant values increase or decrease with corresponding increases or decreases in the ATSG common stock price during the measurement period. Additionally, the value of certain warrants depends partially on the probability that warrants will vest upon the execution of aircraft leases. Increases in the probability of a warrants vesting results in higher liabilities and losses, and increases in the ATSG common stock price during the measurement period results in lower liabilities and losses (and vice versa). Re-measurement gains for 2021 reflect a 6% decrease in the traded price of ATSG shares.

Income tax expense from earnings from continuing operations increased \$55.9 million for 2021 compared to 2020. Income taxes for 2020 included deferred income tax effects for the gains and losses from warrant remeasurements and the amortization of the customer incentive while 2021 did not. The income tax effects of the warrant re-measurements and the amortization of the customer incentive are different than the book tax expenses and benefits required by generally accepted accounting principles because for tax purposes, the warrants are valued at a different time and under a different valuation method. The recognition of discrete tax items, such as the conversion of employee stock awards, the issuance of stock warrants and other items also have an impact on the effective rate during a period. The effective tax rate, before including the warrant revaluations and incentive amortization, was 24% for 2021 compared to 22% for 2020. The higher effective income tax rate for 2021 reflects increases in the apportionment of taxable income in state jurisdictions with higher tax rates compared to 2020, and an increase in deferred tax valuation allowance for capital losses on a Company investment.

Discontinued Operations

Pre-tax earnings related to the former sorting operations were \$3.2 million for 2021 compared to \$9.1 million for 2020. Pre-tax earnings during 2021 and 2020 were a result of reductions in self-insurance reserves for former employee claims and pension credits.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flows

Net cash generated from operating activities totaled \$472.1 million, \$583.6 million and \$512.3 million in 2022, 2021 and 2020, respectively. Operating cash flows for 2021 and 2020 include the receipt of \$83.0 million and \$75.8 million of grant funds from the CARES Act, PSP Extension Law and the American Rescue Plan, respectively. The decline in operating cash flows for 2022 reflect lower grant funds and larger customer receivables balances. Cash outlays for pension contributions were \$1.3 million, \$1.7 million and \$10.8 million in 2022, 2021 and 2020, respectively.

Capital spending levels were primarily the result of aircraft modification costs and the acquisition of aircraft for freighter modification. Cash payments for capital expenditures were \$599.4 million, \$504.7 million and \$510.4 million in 2022, 2021 and 2020, respectively. Capital expenditures in 2022 included \$412.6 million for the acquisition of eight Boeing 767-300 aircraft, six Airbus A321-200 aircraft and freighter modification costs; \$173.8 million for required heavy maintenance; and \$13.0 million for other equipment. Capital expenditures in 2021 included \$321.6 million for the acquisition of 15 Boeing 767-300 aircraft, one Airbus A321-200 aircraft and freighter modification costs; \$171.6 million for required heavy maintenance; and \$11.5 million for other equipment. Capital expenditures in 2020 included \$353.4 million for the acquisition of 11 Boeing 767-300 aircraft and freighter modification costs; \$76.0 million for required heavy maintenance; and \$81.0 million for other equipment, including the purchases of aircraft engines and rotables.

Cash proceeds of \$15.9 million, \$19.4 million and \$24.6 million were received in 2022, 2021 and 2020, respectively, for the sale of aircraft engines and airframes.

During 2022, 2021 and 2020, we spent \$16.5 million, \$2.2 million and \$13.3 million, respectively to invest in joint ventures. Our joint-venture with Precision Aircraft Solutions, LLC, developed a passenger-to-freighter conversion program for Airbus A321-200 aircraft and our joint venture with GA Telesis Engine Services, LLC will provide engine tear-down services to harvest and sell engine parts.

Net cash provided by financing activities was \$85.6 million in 2022 and net cash used in financing activities was \$66.3 million and \$19.6 million in 2021 and 2020, respectively. During 2022, we made debt principal payments of \$365.6 million, we drew \$625.0 million from the revolving credit facility under the Senior Credit Agreement and we paid \$115.2 million to retire Senior Notes. Financing activities in 2021 included \$132 million remitted by Amazon on May 7, 2021, to exercise warrants for ATSG's common stock, as described in Note C of the accompanying consolidated financial statements. During 2021, we made debt principal payments of \$1,900.3 million which included payments of \$619.1 million to repay the entire balance of all term loans and payments of \$1,280.6 million to the revolving credit facility. Our financing activities during 2021 included the \$200 million add-on in Additional Notes under the existing Senior Notes. During 2021, we drew \$1,500.6 million from the revolving credit facility. The proceeds from the Additional Notes add-on of \$207.4 million, the funds received from Amazon and draws on the revolving credit facility under the Senior Credit Agreement resulted in the retirement of the term loans and a larger outstanding balance under the Senior Credit Agreement.

Commitments

The table below summarizes our contractual obligations and commercial commitments (in thousands) as of December 31, 2022.

	Payments Due By Year									
Contractual Obligations	Total		2023	2024 and 2026 an 2025 2027		2026 and 2027	2028 and after			
Debt obligations, including interest payments	\$ 1,770,475	\$	63,655	\$ 382,537	\$	734,734	\$ 589,549			
Facility leases	40,206		9,261	14,116		8,180	8,649			
Aircraft and modification obligations	715,903		350,889	347,224		17,790	_			
Aircraft and other leases	40,928		16,040	19,637		5,251				
Total contractual cash obligations	\$ 2,567,512	\$	439,845	\$ 763,514	\$	765,955	\$ 598,198			

Debt

We have obligations for interest and principal payments associated with our debt. As of December 31, 2022, at current interest rates, future interest payments associated with our debt were \$63.0 million in 2023, \$62.4 million in 2024, \$60.1 million in 2025, \$60.1 million in 2026, \$53.3 million in 2027, and \$2.9 million thereafter. Additional debt or lower EBITDA may result in higher interest rates. See Note F of the accompanying consolidated financial statements in this Form 10-K for additional information about the timing of expected and future principal debt payments.

Leases

We enter into leases for property, aircraft, engines and other types of equipment in the normal course of business. See Note H to the accompanying consolidated financial statements for further detail.

Aircraft purchase and modifications

We expect to increase the size of CAM's fleet in 2023 and beyond through the purchase and modification of additional aircraft. The modification primarily consists of the installation of a standard cargo door and loading system. The Company outsources a significant portion of the aircraft freighter modification process to non-affiliated third parties. In addition to the purchase commitments, we are required to make cash deposits for conversion slots.

Other Commitments

Since August 3, 2017, we have been part of a joint venture with Precision Aircraft Solutions, LLC, to develop a passenger-to-freighter conversion program for Airbus A321-200 aircraft. Approval of a supplemental type certificate from the FAA was granted in 2021 while European certificates are in process.

We provide defined benefit pension plans to certain employee groups. The table above does not include cash contributions for pension funding, due to the absence of scheduled maturities. The timing of pension and post-retirement healthcare payments cannot be reasonably determined, except for \$1.3 million expected to be funded in 2023. For additional information about our pension obligations, see Note I of the accompanying consolidated financial statements.

Liquidity

At December 31, 2022, we had \$27.1 million of cash balances and \$364.9 million available from the unused portion of the revolving credit facility under the Senior Credit Agreement as described in Note F of the accompanying consolidated financial statements. We expect our operations to continue to generate significant net cash in-flows after deducting required spending of approximately \$260 million for heavy maintenance and other sustaining capital expenditures. To expand our fleet we estimate that capital expenditures for aircraft purchases and freighter modifications will total \$590 million for 2023. We believe that our current cash balance, forecasted cash flows provided from customer leases and operating agreements, combined with the Senior Credit Agreement, will be sufficient to fund the expansion and maintenance of our fleet while meeting our contractual obligations, other commitments and working capital requirements for at least the next twelve months. In October 2022, we amended the Senior Credit Agreement. See Note F of the accompanying consolidated financial statements for additional information regarding our credit facilities and outstanding debt obligations.

Continued global disruptions in the supplies chains and labor shortages may delay aircraft modification projects, pushing contractual obligations into later periods and could decrease the projected amount of capital expenditures.

CRITICAL ACCOUNTING ESTIMATES

"Management's Discussion and Analysis of Financial Condition and Results of Operations," as well as certain disclosures included elsewhere in this Form 10-K, are based upon our consolidated financial statements included in this Form 10-K, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to select appropriate accounting policies and make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingencies. In certain cases, there are alternative policies or estimation techniques which could be selected. On an ongoing basis, we evaluate our selection of policies and the estimation techniques we use, including those related to revenue recognition, post-retirement liabilities, bad debts, selfinsurance reserves, valuation of spare parts inventory, useful lives, salvage values and impairment of property and equipment, income taxes, contingencies and litigation. We base our estimates on historical experience, current conditions and on various other assumptions that are believed to be reasonable under the circumstances. Those factors form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources, as well as for identifying and assessing our accounting treatment with respect to commitments and contingencies. Actual results may differ from these estimates under different assumptions or conditions. We believe the following significant and critical accounting policies involve the more significant judgments and estimates used in preparing the consolidated financial statements.

Goodwill and Intangible Assets

We assess in the fourth quarter of each year whether our goodwill acquired in acquisitions is impaired in accordance with the Financial Accounting Standards Board Accounting Standards Codification ("FASB ASC") Topic 350-20 *Intangibles—Goodwill and Other*. Additional assessments may be performed on an interim basis whenever events or changes in circumstances indicate an impairment may have occurred. Indefinite-lived intangible assets are not amortized but are assessed for impairment annually, or more frequently if impairment indicators occur. Finite-lived intangible assets are amortized over their estimated useful economic lives and are periodically reviewed for impairment.

The goodwill impairment test requires significant judgment, including the determination of the fair value of each reporting unit that has goodwill. We estimate the fair value using a market approach and an income approach utilizing discounted cash flows applied to a market-derived rate of return. The market approach utilizes market multiples from comparable publicly traded companies. The market multiples include revenues and EBITDA (earnings before interest, taxes, depreciation and amortization). We derive cash flow assumptions from many factors including recent market trends, expected revenues, cost structure, aircraft maintenance schedules and long-term strategic plans for the deployment of aircraft. Key assumptions under the discounted cash flow models include projections for the number of aircraft in service, capital expenditures, long term growth rates, operating cash flows and market-derived discount rates.

The performance of the goodwill impairment test is the comparison of the fair value of the reporting unit to its respective carrying value. If the carrying value of a reporting unit is less than its fair value no impairment exists. If the carrying value of a reporting unit is higher than its fair value an impairment loss is recorded for the difference and charged to operations. See additional information about the goodwill impairment tests in Note B of the accompanying consolidated financial statements.

Based on our analysis, the individual fair values of each reporting unit having goodwill exceeded their respective carrying values as of December 31, 2022. We have used the assistance of an independent business valuation firm in estimating an expected market rate of return, and in the development of a market approach for CAM and OAI separately, using multiples of EBITDA and revenues from comparable publicly traded companies. Our key assumptions used for CAM's goodwill testing include uncertainties, including the level of demand for cargo aircraft by shippers, the DoD and freight forwarders and CAM's ability to lease aircraft and the lease rates that will be realized. The demand for customer airlift is projected based on input from customers, management's interface with customer planning personnel and aircraft utilization trends. Our key assumptions used for OAI's goodwill testing include the number of aircraft that OAI will operate, the amount of revenues that the aircraft will generate, the number of flight crews and the cost of needed flight crews. Our key assumptions used for Pemco's and our subsidiary TriFactor Solutions, LLC's goodwill testing includes the level of revenues that customers will seek and the cost of labor, parts and contract resources expected to be utilized. Certain events or changes in circumstances could negatively impact our key assumptions. Customer preferences may be impacted by changes in aviation fuel prices. Key customers, including ASI, DHL and the DoD may decide that they do not need as many aircraft as projected or may find alternative providers.

Self-Insurance

We self-insure certain claims related to workers' compensation, aircraft, automobile, general liability and employee healthcare. We record a liability for reported claims and an estimate for incurred claims that have not yet been reported. Accruals for these claims are estimated utilizing historical paid claims data and recent claims trends. Changes in claim severity and frequency could result in actual claims being materially different than the costs provided for in our results of operations. We maintain excess claims coverage with common insurance carriers to mitigate our exposure to large claim losses.

Contingencies

We are involved in legal matters that have a degree of uncertainty associated with them. We continually assess the likely outcomes of these matters and the adequacy of amounts, if any, provided for these matters. There can be no assurance that the ultimate outcome of these matters will not differ materially from our assessment of them. There also can be no assurance that we know all matters that may be brought against us at any point in time.

Income Taxes

We account for income taxes under the provisions of FASB ASC Topic 740-10 *Income Taxes*. The objectives of accounting for income taxes are to recognize the amount of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in our financial statements or tax returns. Judgment is required in assessing the future tax consequences of events that have been recognized in our financial statements or tax returns. Fluctuations in the actual outcome of expected future tax consequences could materially impact our financial position or results of operations.

As of December 31, 2022, we had significant deferred tax assets including net operating loss carryforwards ("NOL CFs") for federal income tax purposes. Based upon projections of taxable income, we determined that it was more likely than not that the NOL CFs will be realized in 2023 and beyond.

We recognize the impact of a tax position if that position is more likely than not of being sustained on audit, based on the technical merits of the position.

Stock Warrants

Our accounting for warrants issued to Amazon is determined in accordance with the financial reporting guidance for equity-based payments to non-employees and for financial instruments. The warrants issued to Amazon are recorded as a lease incentive asset using their fair value at the time that ASI has met its lease performance obligation. The lease incentive is amortized against revenues over the duration of related aircraft leases. The unexercised warrants are classified in liabilities and re-measured to fair value at the end of each reporting period, resulting in a non-operating gain or loss.

Post-retirement Obligations

We sponsor qualified defined benefit pension plans for ABX's flight crewmembers and other eligible employees. We also sponsor non-qualified, unfunded excess plans that provide benefits to executive management and crewmembers that are in addition to amounts permitted to be paid through our qualified plans under provisions of the tax laws. Employees are no longer accruing benefits under any of the defined benefit pension plans. We also sponsor unfunded post-retirement healthcare plans for ABX's flight crewmembers.

The accounting and valuation for these post-retirement obligations are determined by prescribed accounting and actuarial methods that consider a number of assumptions and estimates. The selection of appropriate assumptions and estimates is significant due to the long time period over which benefits will be accrued and paid. The long term nature of these benefit payouts increases the sensitivity of certain estimates on our post-retirement costs. In actuarially valuing our pension obligations and determining related expense amounts, key assumptions include discount rates, expected long term investment returns, retirement ages and mortality. Actual results and future changes in these assumptions could result in future costs that are materially different than those recorded in our annual results of operations.

Our actuarial valuation includes an assumed long term rate of return on pension plan assets of 6.75% for crewmember plans and 6.65% for non-crewmember plans. Our assumed rate of return is based on a targeted long term investment allocation of 30% equity securities, 65% fixed income securities and 5% cash. The actual asset allocation at December 31, 2022, was 27% equities, 70% fixed income and 3% cash. The pension trust includes less than \$0.1 million of investments (less than 1% of the plans' assets) whose fair values have been estimated in the absence of readily determinable fair values. Such investments include private equity, hedge fund investments and real estate funds. Management's estimates are based on information provided by the fund managers or general partners of those funds.

In evaluating our assumptions regarding expected long term investment returns on plan assets, we consider a number of factors, including our historical plan returns in connection with our asset allocation policies, assistance from investment consultants hired to provide oversight over our actively managed investment portfolio, and long term inflation assumptions. The selection of the expected return rate materially affects our pension costs. Our expected long term rate of return was 6.65% to 6.75% after analyzing expected returns on investment vehicles and considering our long term asset allocation expectations. Fluctuations in long-term interest rates can have an impact on the actual rate of return. If we were to lower our long term rate of return assumption by a hypothetical 100 basis points, expense in 2022 would be increased by approximately \$6.1 million. We use a market value of assets as of the measurement date for determining pension expense.

In selecting the interest rate to discount estimated future benefit payments that have been earned to date to their net present value (defined as the projected benefit obligation), we match the plan's benefit payment streams to high-quality bonds of similar maturities. The selection of the discount rate not only affects the reported funded status information as of December 31 (as shown in Note I to the accompanying consolidated financial statements), but also affects the succeeding year's pension and post-retirement healthcare expense. The discount rates selected for December 31, 2022, based on the method described above, were 5.5% for crewmembers and 5.5% for non-crewmembers. If we were to lower our discount rates by a hypothetical 50 basis points, pension expense in 2022 would be increased by approximately \$6.0 million.

Our mortality assumptions at December 31, 2022, reflect the most recent projections released by the Actuaries Retirement Plans Experience Committee, a committee within the Society of Actuaries, a professional association in North America. The assumed future increase in salaries and wages is not a significant estimate in determining pension costs because each defined benefit pension plan was frozen during 2009 with respect to additional benefit accruals.

Our corridor approach amortizes into earnings variances in plan assets and benefit obligations that are a result of the previous measurement assumptions when the net deferred variances exceed 10% of the greater of the market value of plan assets or the benefit obligation at the beginning of the year. The amount in excess of the corridor is amortized over the average remaining service period to retirement date of active plan participants. The average remaining service period to retirement is an assumption that reflects the estimated retirement date based on recent retirement data and could be subject to changes as a result of increased delayed retirements or increased early retirements. This assumption is based on the study of demographic information and actual experience. The average remaining service years was estimated to be 3.65 years and 5.62 years for crew members and non-crewmembers respectively as of December 31, 2022.

The following table illustrates the sensitivity of the aforementioned assumptions on our pension expense, pension obligation and accumulated other comprehensive income (in thousands):

		Effect of change					
			December	r 31, 202	22		
Change in assumption	2022 Pension expense		Pension obligation	comp	imulated other rehensive e (pre-tax)		
100 basis point decrease in rate of return	\$ 6,075	\$	<u>—</u>	\$	_		
50 basis point decrease in discount rate	 5,982		(32,526)		32,526		
Aggregate effect of all the above changes	12,057		(32,526)		32,526		

New Accounting Pronouncements

For information regarding recently issued accounting pronouncements and the expected impact on our annual statements, see Note A "SUMMARY OF FINANCIAL STATEMENT PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES" to the consolidated financial statements included in this Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to market risk for increasing interest rates.

The Company has entered into interest rate swap instruments. As a result, fluctuations in interest rates will result in the recording of unrealized gains and losses on interest rate derivatives held by the Company. The combined notional values were \$125.6 million as of December 31, 2022. See Note G in the accompanying consolidated financial statements for a discussion of our accounting treatment for these hedging transactions.

As of December 31, 2022, the Company had \$835.0 million of fixed interest rate debt and \$620.0 million of variable interest rate debt outstanding. Variable interest rate debt exposes the Company to differences in future cash flows resulting from changes in market interest rates. Variable interest rate risk can be quantified by estimating the change in annual cash flows resulting from a hypothetical 50% increase in interest rates. A hypothetical 50% increase or decrease in interest rates would have resulted in a change in interest expense of approximately \$15.1 million for the year ended December 31, 2022.

The convertible debt and Senior Notes issued at fixed interest rates are exposed to fluctuations in fair value resulting from changes in market interest rates. Fixed interest rate risk can be quantified by estimating the change in fair value of our long term convertible debt and Senior Note. As of December 31, 2022, increases in market interest rates contributed to an approximately \$48.3 million decrease in fair value. A 50% increase in interest rates would have decreased the book value of the Company's fixed interest rate convertible debt and Senior Notes by approximately \$48.3 million.

The Company is exposed to concentration of credit risk primarily through cash deposits, cash equivalents, marketable securities and derivatives. As part of its risk management process, the Company monitors and evaluates the credit standing of the financial institutions with which it does business. The financial institutions with which it does business are generally highly rated. The Company is exposed to counterparty risk, which is the loss it could incur if a counterparty to a derivative contract defaulted.

As of December 31, 2022, the Company's liabilities reflected certain stock warrants issued to Amazon. The fair value of the stock warrants obligation is re-measured at the end of each reporting period and marked to market. The fair value of the stock warrants is dependent on a number of factors which change, including ATSG's common stock price, the volatility of ATSG's common stock and the risk-free interest rate. See Note D in the accompanying consolidated financial statements for further information about the fair value of the stock warrants.

The Company sponsors defined benefit pension plans and post-retirement healthcare plans for certain eligible employees. The Company's related pension expense, plans' funded status, and funding requirements are sensitive to changes in interest rates. The funded status of the plans and the annual pension expense is recalculated at the beginning of each calendar year using the fair value of plan assets, market-based interest rates at that point in time, as well as assumptions for asset returns and other actuarial assumptions. Higher interest rates could result in a lower fair value of plan assets and increased pension expense in the following years. At December 31, 2022, ABX's defined benefit pension plans had total investment assets of \$627.0 million under investment management. See Note I in the accompanying consolidated financial statements for further discussion of these assets.

The Company is exposed to market risk for changes in the price of jet fuel. The risk associated with jet fuel, however, is largely mitigated by reimbursement through the agreements with the Company's customers.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Air Transport Services Group, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Air Transport Services Group, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income, cash flows, and stockholders' equity, for each of the three years in the period ended December 31, 2022, and the related notes and the schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control* — *Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 1, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matter

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

Stock Warrant Obligations - Fair Value Measurements - Level 3 Liabilities - Refer to Note C to the Financial Statements

Critical Audit Matter Description

In conjunction with a lease incentive agreement entered into with a customer on December 20, 2018, the Company conditionally granted to the customer unvested warrants to purchase shares of the Company's common stock, which vest as additional aircraft leases are executed. The warrants are reported in the financial statements at fair value as a liability. These warrants do not have a readily determinable market value and were valued at \$0.7 million as of December 31, 2022, based on a pricing model using several inputs. Those inputs include significant observable and unobservable inputs.

We identified the valuation of these unvested warrants to purchase shares of the Company's common stock, conditionally granted to a customer, as a critical audit matter because of a significant unobservable input management uses to estimate fair value. Valuation of these warrants included the use of a warrant valuation model with adjustments for the probability of the future vesting events occurring. A high degree of auditor judgment and an increased extent of effort was involved to audit the probabilities of the future vesting events occurring.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to a significant unobservable input used in management's estimate of fair value of the conditionally granted unvested warrants included the following, among others:

- We tested the effectiveness of management's controls over the valuation of these warrants, which included a control over the significant unobservable input.
- We evaluated the reasonableness of management's estimate of the probability that future vesting events will occur by assessing the Company's forecast for aircraft leases and extensions, the Company's projected aircraft availability, and related internal and external communications.
- We performed a retrospective review of management's ability to accurately estimate the probability of future vesting events occurring by comparing (1) prior period estimates of probability to actual dates of vesting events, and (2) prior period estimates of aircraft availability and customer action to actual results.
- We assessed the consistency by which management has applied business assumptions to a significant unobservable input.

/s/ Deloitte & Touche LLP

Cincinnati, Ohio March 1, 2023

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

AIR TRANSPORT SERVICES GROUP, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(In thousands, except share data)

	D	ecember 31, 2022	D	ecember 31, 2021
ASSETS				
CURRENT ASSETS:				
Cash, cash equivalents and restricted cash	\$	27,134	\$	69,496
Accounts receivable, net of allowance of \$939 in 2022 and \$742 in 2021		301,622		205,399
Inventory		57,764		49,204
Prepaid supplies and other		31,956		28,742
TOTAL CURRENT ASSETS		418,476		352,841
Property and equipment, net		2,402,408		2,129,934
Customer incentive		79,650		102,913
Goodwill and acquired intangibles		492,642		505,125
Operating lease assets		74,070		62,644
Other assets		122,647		113,878
TOTAL ASSETS	\$	3,589,893	\$	3,267,335
LIABILITIES AND STOCKHOLDERS' EQUITY				
CURRENT LIABILITIES:				
Accounts payable	\$	192,992	\$	174,237
Accrued salaries, wages and benefits		56,498		56,652
Accrued expenses		12,466		14,950
Current portion of debt obligations		639		628
Current portion of lease obligations		23,316		18,783
Unearned revenue and grants		21,546		47,381
TOTAL CURRENT LIABILITIES		307,457		312,631
Long term debt		1,464,285		1,298,735
Stock warrant obligations		695		915
Post-retirement obligations		35,334		21,337
Long term lease obligations		51,575		44,387
Other liabilities		62,861		49,662
Deferred income taxes		255,180		217,291
TOTAL LIABILITIES		2,177,387		1,944,958
Commitments and contingencies (Note H)				
STOCKHOLDERS' EQUITY:				
Preferred stock, 20,000,000 shares authorized, including 75,000 Series A Junior Participating Preferred Stock		_		_
Common stock, par value \$0.01 per share; 150,000,000 shares authorized; 72,327,758 and 74,142,183 shares issued and outstanding in 2022 and 2021, respectively		723		741
Additional paid-in capital		986,303		1,074,286
Retained earnings		528,882		309,430
Accumulated other comprehensive loss		(103,402)		(62,080)
TOTAL STOCKHOLDERS' EQUITY		1,412,506		1,322,377
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$	3,589,893	\$	3,267,335
TOTAL BRIDGHTED IN DITOCHHOUDEND EQUIT	Ψ	5,567,675	Ψ	5,207,555

AIR TRANSPORT SERVICES GROUP, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	December 31,								
)22		2021		2020			
REVENUES	\$ 2,0	45,469	\$	1,734,282	\$	1,570,575			
OPERATING EXPENSES									
Salaries, wages and benefits		66,950		591,280		518,961			
Depreciation and amortization		31,064		308,448		278,067			
Maintenance, materials and repairs		62,122		173,364		179,315			
Fuel		75,512		173,600		148,383			
Contracted ground and aviation services		77,026		75,724		63,564			
Travel		11,989		86,601		77,382			
Landing and ramp		16,583		14,244		12,468			
Rent		30,437		23,695		19,299			
Insurance Other energing expenses		9,666		12,588 65,179		9,903 64,999			
Other operating expenses Government grants		78,637		(111,673)		(47,231)			
Impairment of aircraft and related assets		_		(111,073)		39,075			
impairment of aircraft and related assets	1.7	50.006	_	1 412 050					
OPERATING INCOME		59,986 85,483	_	1,413,050 321,232	_	1,364,185 206,390			
		03,403		321,232		200,390			
OTHER INCOME (EXPENSE)		415		20		222			
Interest income		415		39					
Non-service component of retiree benefit gains		20,046		17,827		12,032			
Debt issuance costs				(6,505)		(100 771)			
Net gain (loss) on financial instruments		9,022		29,979		(100,771)			
Loss from non-consolidated affiliate		(7,607)		(2,577)		(13,587)			
Interest expense		46,861)	_	(58,790)	_	(62,893)			
	(24,985)		(20,027)		(164,997)			
EARNINGS FROM CONTINUING OPERATIONS BEFORE INCOME TAXES	2	60,498		301,205		41,393			
INCOME TAX EXPENSE	(64,060)		(72,225)		(16,314)			
EARNINGS FROM CONTINUING OPERATIONS	1	96,438		228,980		25,079			
EARNINGS FROM DISCONTINUED OPERATIONS, NET OF TAXES		2,143		2,440		7,036			
NET EARNINGS	\$ 1	98,581	\$	231,420	\$	32,115			
			÷		Ė	- , -			
BASIC EARNINGS PER SHARE									
Continuing operations	\$	2.67	\$	3.33	\$	0.42			
Discontinued operations		0.03		0.03		0.12			
TOTAL BASIC EARNINGS PER SHARE	\$	2.70	\$	3.36	\$	0.54			
DILUTED EARNINGS PER SHARE					Ξ				
Continuing operations	\$	2.26		2.80	\$	0.42			
Discontinued operations	Ψ	0.02		0.03	Ψ	0.42			
TOTAL DILUTED EARNINGS PER SHARE	\$	2.28		2.83	\$	0.12			
	Ф	2.20	_	2.03	ψ	0.54			
WEIGHTED AVERAGE SHARES									
Basic		73,611	_	68,853		59,128			
Diluted		88,324		76,216		59,931			

AIR TRANSPORT SERVICES GROUP, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In thousands)

	December 31,						
	2022 2021			2020			
NET EARNINGS	\$	198,581	\$	231,420	\$	32,115	
OTHER COMPREHENSIVE INCOME (LOSS):							
Defined Benefit Pension		(41,587)		16,262		(16,941)	
Defined Benefit Post-Retirement		265		320		153	
Foreign Currency Translation		_		(6)		(2)	
TOTAL COMPREHENSIVE INCOME, net of tax	\$	157,259	\$	247,996	\$	15,325	

AIR TRANSPORT SERVICES GROUP, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

		Years Ended December 31				
		2022		2021		2020
OPERATING ACTIVITIES:						
Net earnings from continuing operations	\$	196,438	\$	228,980	\$	25,079
Net earnings from discontinued operations		2,143		2,440		7,036
Adjustments to reconcile net earnings to net cash provided by operating activities:						
Depreciation and amortization		355,848		341,849		310,317
Pension and post-retirement		2,675		7,244		3,888
Deferred income taxes		54,862		70,544		18,492
Amortization of stock-based compensation		8,342		7,386		7,477
Loss from non-consolidated affiliates		7,607		2,577		13,587
Net (gain) loss on financial instruments		(9,022)		(29,979)		100,771
Debt issuance costs		_		6,505		_
Impairment of aircraft and related assets						39,075
Changes in assets and liabilities:						
Accounts receivable		(96,223)		(51,888)		9,359
Inventory and prepaid supplies		(18,981)		(3,123)		(27,825)
Accounts payable		6,047		30,388		5,584
Unearned revenue		(26,430)		(7,011)		36,922
Accrued expenses, salaries, wages, benefits and other liabilities		14,755		10,059		(5,226)
Pension and post-retirement balances		(24,258)		(26,884)		(28,198)
Other		(1,683)		(5,530)		(4,036)
NET CASH PROVIDED BY OPERATING ACTIVITIES		472,120		583,557		512,302
INVESTING ACTIVITIES:						
Expenditures for property and equipment		(599,431)		(504,748)	((510,417)
Proceeds from property and equipment		15,913		19,427		24,583
Acquisitions and investments in businesses, net of cash acquired		(16,545)		(2,155)		(13,333)
NET CASH (USED IN) INVESTING ACTIVITIES		$\overline{(600,063)}$		$\overline{(487,476)}$	((499,167)
FINANCING ACTIVITIES:		<u> </u>		<u> </u>		
Principal payments on long term obligations		(365,628)	(1	,900,311)	((689,380)
Proceeds from revolving credit facilities		625,000	1	,500,600		180,000
Payments for financing costs		(1,803)		(3,099)		(7,507)
Proceeds from bond issuance				207,400		500,000
Repurchase of senior unsecured notes		(115,204)		_		_
Proceeds from issuance of warrants		_		131,967		_
Purchase of common stock		(53,868)		_		_
Withholding taxes paid for conversion of employee stock awards		(2,916)		(2,861)		(2,730)
NET CASH (USED IN) PROVIDED BY FINANCING ACTIVITIES		85,581		(66,304)		(19,617)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		(42,362)		29,777		(6,482)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR		69,496		39,719		46,201
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$	27,134	\$	69,496	\$	39,719
	_		÷		÷	
SUPPLEMENTAL CASH FLOW INFORMATION: Interest poid not of amount conitalized	¢	47,194	Φ	12 606	Φ	11 2 12
Interest paid, net of amount capitalized	\$	/	\$	43,696	\$	41,343
Federal and state income taxes paid	\$	6,205	\$	3,431	\$	1,139
SUPPLEMENTAL NON-CASH INFORMATION: Accrued expenditures for property and equipment	\$	56,433	\$	43,479	\$	37,880
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AIR TRANSPORT SERVICES GROUP, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands, except share data)

	Common	Stock	_ Additional Paid-in	Accumulated Earnings	Accumulated Other Comprehensive	
	Number	Amount	Capital	(Deficit)	Income (Loss)	Total
BALANCE AT DECEMBER 31, 2019	59,329,431	\$ 593	\$ 475,720	\$ 45,895	\$ (61,866)	\$ 460,342
Stock-based compensation plans						
Grant of restricted stock	201,400	2	(2)	_	_	_
Issuance of common shares, net of withholdings	31,005	1	(2,731)	_	_	(2,730)
Forfeited restricted stock	(1,800)	_	_	_	_	_
Reclassification of warrant liability	_	_	375,083	_	_	375,083
Amortization of stock awards and restricted stock	_	_	7,477	_	_	7,477
Total comprehensive income				32,115	(16,790)	15,325
BALANCE AT DECEMBER 31, 2020	59,560,036	\$ 596	\$ 855,547	\$ 78,010	\$ (78,656)	\$ 855,497
Stock-based compensation plans						
Grant of restricted stock	121,339	1	(1)	_	_	_
Issuance of common shares, net of withholdings	35,163	_	(2,861)	_	_	(2,861)
Forfeited restricted stock	(2,800)	_	_	_	_	_
Conversion of warrants	14,428,445.	144	131,823		_	131,967
Reclassification of warrant liability	_	_	82,392	_	_	82,392
Amortization of stock awards and restricted stock	_	_	7,386	_	_	7,386
Total comprehensive income (loss)	_	_	_	231,420	16,576	247,996
BALANCE AT DECEMBER 31, 2021	74,142,183	\$ 741	\$1,074,286	\$ 309,430	\$ (62,080)	\$1,322,377
Stock-based compensation plans						
Grant of restricted stock	118,310	1	(1)	_	_	_
Issuance of common shares, net of withholdings	66,263	1	(2,917)	_	_	(2,916)
Forfeited restricted stock	(5,700)	_	_	_	_	_
Purchase of common stock	(1,993,298)	(20)	(53,848)	_	_	(53,868)
Cumulative effect in change in accounting principle	_	_	(39,559)	20,871	_	(18,688)
Amortization of stock awards and restricted stock	_	_	8,342	_	_	8,342
Total comprehensive income				198,581	(41,322)	157,259
BALANCE AT DECEMBER 31, 2022	72,327,758	\$ 723	\$ 986,303	\$ 528,882	\$ (103,402)	\$1,412,506

AIR TRANSPORT SERVICES GROUP, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE A—SUMMARY OF FINANCIAL STATEMENT PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

Air Transport Services Group, Inc. is a holding company whose subsidiaries lease aircraft and provide contracted airline operations as well as other support services mainly to the air transportation, e-commerce and package delivery industries.

The Company's leasing subsidiary, Cargo Aircraft Management, Inc. ("CAM"), leases aircraft to each of the Company's airlines as well as to non-affiliated airlines and other lessees. The Company's airlines, ABX Air, Inc. ("ABX"), Air Transport International, Inc. ("ATI") and Omni Air International, LLC ("OAI") each have the authority, through their separate U.S. Department of Transportation ("DOT") and Federal Aviation Administration ("FAA") certificates, to transport cargo worldwide. The Company provides a combination of aircraft, crews, maintenance and insurance services for a customer's transportation network through customer "CMI" and "ACMI" agreements and through charter contracts in which aircraft fuel is also included.

In addition to its aircraft leasing and airline services, the Company offers a range of complementary services to delivery companies, freight forwarders, airlines and government customers. These include aircraft maintenance and modification services, aircraft parts, equipment maintenance services and load transfer and package sorting services for customers

Basis of Presentation

The accompanying consolidated financial statements include the accounts of Air Transport Services Group, Inc. and its wholly-owned subsidiaries. Inter-company balances and transactions are eliminated. The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

Investments in affiliates in which the Company has significant influence but does not exercise control are accounted for using the equity method of accounting. Under the equity method, the Company's share of the nonconsolidated affiliate's income or loss is recognized in the consolidated statement of earnings and cumulative post-acquisition changes in the investment are adjusted against the carrying amount of the investment. Investments in affiliates in which the Company does not exercise control or have significant influence are reflected at cost less impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect amounts reported in the consolidated financial statements. Estimates and assumptions are used to record allowances for uncollectible amounts, self-insurance reserves, spare parts inventory, depreciation and impairments of property, equipment, goodwill and intangibles, stock warrants and other financial instruments, post-retirement obligations, income taxes, contingencies and litigation. Changes in estimates and assumptions may have a material impact on the consolidated financial statements.

Uncertainties

The Company has experienced disruptions to its operations, such as shortages of personnel, parts shortages, maintenance delays, shortages of transportation and hotel accommodations for flight crews, facility closures and other supply chain related issues as a result of the continuing effects from the COVID-19 pandemic. The emergence of COVID-19 variants could result in reduced revenues, additional costs and supply chain delays for the Company. The extent of the impact that the coronavirus pandemic will have on our future operations and financial results will depend on future developments, including: the duration, spread, severity and recurrence of the COVID-19 variants as well as the extent of the impact of the pandemic on overall economic conditions.

In February 2022, war started in Ukraine, intensifying geopolitical pressures worldwide. While the Company's operations have not been detrimentally impacted directly, additional supply chain disruptions and inflationary pressures could have an impact on overall economic conditions, as well as the Company's operations and financial results. The outbreak of war or the development of instabilities in other regions of the globe may result in further supply chain disruptions. These matters, coupled with inflationary pressures, could have an impact on overall economic conditions as well as the Company's operations and financial results.

Cash and Cash Equivalents

The Company classifies short-term, highly liquid investments with maturities of three months or less at the time of purchase as cash and cash equivalents. These investments, consisting of money market funds, are recorded at cost, which approximates fair value. Substantially all deposits of the Company's cash are held in accounts that exceed federally insured limits. The Company deposits cash in common financial institutions which management believes are financially sound.

Cash includes restricted cash of \$1.9 million as of December 31, 2022 and \$5.9 million as of December 31, 2021. Restricted cash consists of customers' deposits held in an escrow account as required by DOT regulations. The cash is restricted to the extent of customers' deposits on flights not yet flown. Restricted cash is released from escrow upon completion of specific flights, which are scheduled to occur within the twelve months.

Accounts Receivable and Allowance for Uncollectible Accounts

The Company's accounts receivable is primarily due from its significant customers (see Note C), other airlines, delivery companies and freight forwarders. The Company estimates expected credit losses over the lifetime of the customer receivables that are not past due. The Company also performs a quarterly evaluation of the accounts receivable and the allowance for uncollectible accounts by reviewing specific customers' recent payment history, growth prospects, financial condition and other factors that may impact a customer's ability to pay. The Company establishes allowances for amounts that are not expected to be received. Account balances are written off against the allowances when the Company ceases collection efforts.

Inventory

The Company's inventory is comprised primarily of expendable aircraft parts and supplies used for aircraft maintenance. Inventory is generally charged to expense when issued for use on a Company aircraft. The Company values its inventory of aircraft parts and supplies at weighted-average cost and maintains a related obsolescence reserve. The Company records an obsolescence reserve on a base stock of inventory. The Company monitors the usage rates of inventory parts and segregates parts that are technologically outdated or no longer used in its fleet types. Slow moving and segregated items are actively marketed and written down to their estimated net realizable values based on market conditions.

Management analyzes the inventory reserve for reasonableness at the end of each quarter. That analysis includes consideration of the expected fleet life, amounts expected to be on hand at the end of a fleet life, and recent events and conditions that may impact the usability or value of inventory. Events or conditions that may impact the expected life, usability or net realizable value of inventory include additional aircraft maintenance directives from the FAA, changes in DOT regulations, new environmental laws and technological advances.

Goodwill and Intangible Assets

The Company assesses, during the fourth quarter of each year, the carrying value of goodwill. The assessment requires an estimation of fair value of each reporting unit that has goodwill. The goodwill impairment test requires a comparison of the fair value of the reporting unit to its respective carrying value. If the carrying value of a reporting unit is less than its fair value no impairment exists. If the carrying amount of a reporting unit is higher than its fair value an impairment loss is recorded for the difference and charged to operations.

The Company assesses, during the fourth quarter of each year, whether it is more likely than not that an indefinite-lived intangible asset is impaired by considering all relevant events and circumstances that could affect the significant inputs used to determine the fair value of the indefinite-lived intangible asset.

The Company also conducts impairment assessments of goodwill, indefinite-lived intangible assets and finite-lived intangible assets whenever events or changes in circumstance indicate an impairment may have occurred. Finite-lived intangible assets are amortized over their estimated useful economic lives.

Property and Equipment

Property and equipment held for use is stated at cost, net of any impairment recorded. The Company accounts for planned major airframe and engine maintenance costs using the built-in overhaul method for the aircraft it owns, except the costs of airframe maintenance for Boeing 767-200 aircraft operated by ABX which are expensed as they are incurred. Under the built-in overhaul method, costs of planned airframe maintenance and engine overhauls are capitalized and depreciated by the Company's airlines over the expected period until the next scheduled major maintenance event is required. Major, non-scheduled airframe and engine maintenance costs that extend the life of the asset are also capitalized. The capitalized costs of airframe maintenance and engine overhauls for aircraft leased to customers, are depreciated over the life of the lease with consideration for the customer's return obligations.

Scheduled maintenance for the aircraft engines, including Boeing 777 and Boeing 757 aircraft, are typically contracted to service providers on a time and material basis and the costs of those engine overhauls are capitalized and amortized over the life of the overhaul. Certain engines that power the Boeing 767 aircraft are maintained under "power by the cycle" agreements with engine maintenance providers. Under these agreements, the engines are maintained by the service provider for a fixed fee per cycle. As a result, the cost of maintenance for these engines is generally expensed as flights occur and the initial engine overhaul value is depreciated over the life of the engine. In September of 2021, a power by the cycle maintenance agreement for many of the Company's Boeing 767-200 engines expired. As a result, the Company began to depreciate the remaining carrying value of these engine overhauls over the time remaining until the next overhaul. This resulted in additional depreciation expense of \$2.1 million before the effects of income taxes during 2021.

Property and equipment is depreciated over an asset's estimated useful life, or if related to a lease, over the lesser of the asset's useful life or lease term. Assets are typically depreciated on a straight-line basis except for certain engines which are depreciated based on their usage levels during the period.

Depreciable lives are summarized as follows:

Boeing 777, 767 and 757 aircraft and flight equipment	7 to 18 years
Ground equipment	2 to 10 years
Leasehold improvements, facilities and office equipment	3 to 25 years

The Company periodically evaluates the useful lives, salvage values and fair values of property and equipment. Acceleration of depreciation expense or the recording of significant impairment losses could result from changes in the estimated useful lives of assets due to a number of reasons, such as excess aircraft capacity or changes in regulations governing the use of aircraft.

The cost and accumulated depreciation of disposed property and equipment and expired major maintenance are removed from the accounts with any related gain or loss reflected in earnings from operations.

For aircraft leased from external lessors, the Company may be required to make periodic payments to the lessor under certain aircraft leases for future maintenance events such as engine overhauls and major airframe maintenance. Such payments are recorded as deposits until drawn for qualifying maintenance costs. The maintenance costs are expensed or capitalized in accordance with the airline's accounting policy for major airframe

and engine maintenance. The Company evaluates at the balance sheet date, whether it is probable that an amount on deposit will be returned by the lessor to reimburse the costs of the maintenance activities. When it is less than probable that a deposit will be returned, it is recognized as additional maintenance expense.

Aircraft and other long-lived assets are tested for impairment when circumstances indicate the carrying value of the assets may not be recoverable. To conduct impairment testing, the Company groups assets and liabilities at the lowest level for which identifiable cash flows are largely independent of cash flows of other assets and liabilities. For assets that are to be held and used, impairment is recognized when the estimated undiscounted cash flows associated with the asset group are less than the carrying value. If impairment exists, an adjustment is recorded to write the assets down to fair value, and a loss is recorded as the difference between the carrying value and fair value. Fair values are determined considering quoted market values, discounted cash flows or internal and external appraisals, as applicable. For assets held for sale, impairment is recognized when the fair value less the cost to sell the asset is less than the carrying value.

Capitalized Interest

Interest costs incurred while aircraft are being modified are capitalized as an additional cost of the aircraft. Capitalized interest was \$3.2 million, \$3.5 million and \$2.8 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Discontinued Operations

A business component whose operations are discontinued is reported as discontinued operations if the cash flows of the component have been eliminated from the ongoing operations of the Company and represents a strategic shift that had a major impact on the Company. The results of discontinued operations are aggregated and presented separately in the consolidated statements of operations.

Self-Insurance

The Company is self-insured for certain workers' compensation, employee healthcare, automobile, aircraft, and general liability claims. The Company maintains excess claim coverage with common insurance carriers to mitigate its exposure to large claim losses. The Company records a liability for reported claims and an estimate for incurred claims that have not yet been reported. Accruals for these claims are estimated utilizing historical paid claims data and recent claims trends. Other liabilities included \$3.9 million and \$6.1 million at December 31, 2022 and December 31, 2021, respectively, for self-insured reserves. Changes in claim severity and frequency could result in actual claims being materially different than the costs accrued.

Pension and Post-Retirement Benefits

The funded status of any of the Company's defined benefit pension or post-retirement health care plans is the difference between the fair value of plan assets and the accumulated benefit obligations to plan participants. The over funded or underfunded status of a plan is reflected in the consolidated balance sheet as an asset for over funded plans, or as a liability for underfunded plans.

The funded status is ordinarily re-measured annually at year end using the fair value of plans assets, market based discount rates and actuarial assumptions. Changes in the funded status of the plans as a result of re-measuring plan assets and benefit obligations, are recorded to accumulated comprehensive loss and amortized into expense using a corridor approach. The Company's corridor approach amortizes into earnings variances in plan assets and benefit obligations that are a result of the previous measurement assumptions when the net deferred variances exceed 10% of the greater of the market value of plan assets or the benefit obligation at the beginning of the year. The amount in excess of the corridor is amortized over the average remaining service period to retirement date of active plan participants. Cost adjustments for plan amendments are also deferred and amortized over the expected working life or the life expectancy of plan participants. Irrevocable settlement transactions that relieve the Company from responsibilities of providing retiree benefits and significantly eliminate the Company's related risk may result in recognition of gains or losses from accumulated other comprehensive loss. The plan's investment returns, interest expense, settlements and other non-service cost components of retiree benefits are reported in other income and expense included in earnings before income taxes.

Customer Security and Maintenance Deposits

The Company's customer leases typically obligate the lessee to maintain the Company's aircraft in compliance with regulatory standards for flight and aircraft maintenance. The Company may require an aircraft lessee to pay a security deposit or provide a letter of credit until the expiration of the lease. Additionally, the Company's leases may require a lessee to make monthly payments toward future expenditures for scheduled heavy maintenance events. The Company records security and maintenance deposits in other liabilities. If a lease requires monthly maintenance payments, the Company is typically required to reimburse the lessee for costs they incur for scheduled heavy maintenance events after completion of the work and receipt of qualifying documentation. Reimbursements to the lessee are recorded against the previously paid maintenance deposits.

Income Taxes

Income taxes have been computed using the asset and liability method, under which deferred income taxes are provided for the temporary differences between the financial reporting basis and the tax basis of the Company's assets and liabilities. Deferred taxes are measured using provisions of currently enacted tax laws. A valuation allowance against net deferred tax assets is recorded when it is more likely than not that such assets will not be fully realized. Tax credits are accounted for as a reduction of income taxes in the year in which the credit originates. All deferred income taxes are classified as noncurrent in the statement of financial position.

The Company recognizes the benefit of a tax position taken on a tax return, if that position is more likely than not of being sustained on audit, based on the technical merits of the position. An uncertain income tax position is not recognized if it has less than a 50% likelihood of being sustained. The Company recognizes interest and penalties accrued related to uncertain tax positions in operating expense.

Purchase of Common Stock

The Company's Board of Directors has authorized management to repurchase outstanding common stock of the Company from time to time on the open market or in privately negotiated transactions. The authorization does not require the Company to repurchase a specific number of shares and the Company may terminate the repurchase program at any time. Upon the retirement of common stock repurchased, the excess purchase price over the par value for retired shares of common stock is recorded to additional paid-in-capital.

Stock Warrants

The Company's accounting for warrants issued to a lessee is determined in accordance with the financial reporting guidance for equity-based payments to non-employees and for financial instruments. The warrants issued to a lessee are recorded as a lease incentive asset using their fair value at the time of issuance. The lease incentive is amortized against revenues over the duration of related aircraft leases. The unexercised warrants that are classified in liabilities are re-measured to fair value at the end of each reporting period, resulting in a non-operating gain or loss.

Comprehensive Income

Comprehensive income includes net earnings and other comprehensive income or loss. Other comprehensive income or loss results from certain changes in the Company's liabilities for pension and other post-retirement benefits, gains and losses associated with interest rate hedging instruments and fluctuations in currency exchange rates related to the foreign affiliate.

Fair Value Information

Assets or liabilities that are required to be measured at fair value are reported using the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. FASB ASC Topic 820-10 Fair Value Measurements and Disclosures establishes three levels of input that may be used to measure fair value:

- Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2: Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include items where the determination of fair value requires significant management judgment or estimation.

Revenue Recognition

Aircraft and engine lease revenues are recognized as operating lease revenues on a straight-line basis over the term of the applicable lease agreements. Customer payments for leased aircraft and equipment are typically paid monthly in advance.

Revenues from contracts with customers are recognized under Accounting Standards Codification "Revenue from Contracts with Customers (Topic 606) ("ASC 606") to depict the transfer of goods or services to a customer at an amount that reflects the consideration the Company expects to receive in exchange for those goods or services. ACMI Services revenues are generated from airline service agreements and are typically based on hours or miles flown, the number of aircraft operated and number of crew resources provided during a month. ACMI Services revenues are usually recognized over time using the invoice practical expedient based on the number of hours or miles operated and the number of crews and aircraft required for scheduled flights during the period. Certain agreements include provisions for incentive payments based upon on-time reliability. These incentives are measured on a monthly basis and recorded to revenue in the corresponding month earned. Under CMI agreements, the Company's airlines have an obligation to provide integrated services including flight crews, aircraft maintenance and insurance for the customer's cargo network. Under ACMI agreements, the Company's airlines are also obligated to provide aircraft. Under CMI and ACMI agreements, customers are generally responsible for aviation fuel, landing fees, navigation fees and certain other flight expenses. When functioning as the customers' agent for arranging such services, the Company records amounts reimbursable from the customer as revenues net of the related expenses as the costs are incurred. Under charter agreements, the Company's airline is obligated to provide full services for one or more flights having specific origins and destinations. Under charter agreements in which the Company's airline is responsible for fuel, airport fees and all flight services, the related costs are recorded in operating expenses. Any sales commissions paid for charter agreements are generally expensed when incurred because the amortization period is less than one year. There are no customer rewards programs associated with services offered by the Company nor does the Company sell passenger tickets or issue freight bills. Customers for ACMI Services are invoiced monthly or more frequently.

The Company's revenues for customer contracts for airframe maintenance and aircraft modification services that do not have an alternative use and for which the Company has an enforceable right to payment are generally recognized over time based on the percentage of costs completed. Services for airframe maintenance and aircraft modifications typically have project durations lasting a few weeks to several months. Other revenues for aircraft part sales, component repairs and line service are recognized at a point in time typically when the parts are delivered to the customer and the services are completed. For airframe maintenance, aircraft modifications and aircraft component repairs, contracts include assurance warranties that are not sold separately.

The Company records revenue based on the estimated transaction price for its airframe maintenance and aircraft modification contracts using the costs to costs input method. For such services, the Company estimates the earnings on a contract as the difference between the expected revenue and estimated costs to complete a contract and recognizes revenues and earnings based on the proportion of costs incurred compared to the total estimated costs. Unexpected or abnormal costs that are not reflected in the price of a contract are excluded from calculations of progress toward contract obligations. The Company's estimates consider the timing and extent of the services, including the amount and rates of labor, materials and other resources required to perform the services. These production costs are specifically planned and monitored for regulatory compliance. The expenditure of these costs closely reflects the progress made toward completion of an airframe maintenance and aircraft modification project. The Company recognizes adjustments in estimated earnings on a contract under the cumulative catch-up method in which the impact of the adjustment on estimated earnings of a contract is recognized in the period the adjustment is identified.

The Company offers engine power coverage under separate customer contracts with certain lessees of CAM's General Electric powered Boeing 767-200 aircraft. Under this service, the Company is responsible for providing and maintaining engines to its lease customers as needed through a pool of engines. Revenues generated from engine power coverage contracts are recognized over time using the invoice practical expedient as engines are operated. Additionally, the Company acts as an agent for certain performance obligations for engine maintenance contracts with customers and recognizes the net amount of consideration retained. The transaction price for certain engine maintenance contracts are estimated and adjusted based upon expected engine cycles over the term of the contract and the estimated value of parts required for future services.

The Company's ground services revenues include load transfer and sorting services, facility and equipment maintenance services. These revenues are recognized as the services are performed for the customer over time. Revenues from related facility and equipment maintenance services are recognized over time and at a point in time depending on the nature of the customer contracts.

For customers that are not a governmental agency or department, the Company generally receives partial payment in advance of services, otherwise customer balances are typically paid within 30 to 60 days of service.

Accounting Standards Updates

The Company adopted Accounting Standards Update 2016-13 "Financial Instruments - Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13") on January 1, 2020. Under ASU 2016-13, an entity is required to utilize an "expected credit loss model" on certain financial instruments, including trade receivables. This model requires an entity to estimate expected credit losses over the lifetime of the financial asset including trade receivables that are not past due. Operating lease receivables are not within the scope of Topic 326. The Company's adoption of ASU 2016-13 did not have a material impact on the consolidated financial statements or related disclosures.

In August 2020, the Financial Accounting Standards Board ("FASB") issued ASU 2020-06, "Accounting for Convertible Instruments and Contracts in an Entity's Own Equity" ("ASU 2020-06"). This new standard removes the separation models for convertible debt with cash conversion or beneficial conversion features. It eliminates the "treasury stock" method for convertible instruments and requires application of the "if-converted" method for certain agreements. The Company adopted ASU 2020-06 on January 1, 2022 using the modified retrospective approach which resulted in the following adjustments:

(in thousands)	1	December 31, 2021	Adoption of ASU 2020-06	January 1, 2022
Balance Sheet line item:				
Principal value	\$	(258,750)	\$ _	\$ (258,750)
Unamortized issuance cost	\$	2,889	\$ _	\$ 2,889
Unamortized discount	\$	24,215	\$ (24,215)	\$ <u> </u>
Convertible Debt	\$	(231,646)	\$ (24,215)	\$ (255,861)
Net deferred tax liability	\$	(217,291)	\$ 5,527	\$ (211,764)
Additional paid-in capital	\$	(1,074,286)	\$ 39,559	\$ (1,034,727)
Retained earnings	\$	(309,430)	\$ (20,871)	\$ (330,301)

After adopting ASU 2020-06, the Company's Convertible Notes due 2024 (as defined and discussed in Note F) are reflected entirely as a liability as the embedded conversion feature is no longer separately presented within stockholders' equity, which also eliminated the non-cash discount. Accordingly, earnings no longer reflect the discount amortization expense which was \$6.4 million of interest expense, net of income taxes during 2021. After giving effect for the adoption, the effective interest rate on the Convertible Notes is 1.5%.

ASU 2020-06 requires the application of the more dilutive if-converted method when calculating the impact of the Convertible Notes on earnings per diluted share. The adoption of ASU 2020-06 does not change the accounting treatment of shares to be delivered by the convertible note hedges (see Note F) purchased by the Company that are

designed to offset the shares issued to settle its Convertible Notes, which are anti-dilutive and not reflected in earnings per diluted share.

NOTE B—GOODWILL, INTANGIBLES AND EQUITY INVESTMENTS

Goodwill reflects the excess purchase price over the estimated fair value of net assets acquired in a business acquisition. As of December 31, 2022, 2021 and 2020, the goodwill amounts for reporting units that have goodwill were separately tested for impairment. To perform the goodwill impairment test, the Company determined the fair value of the reporting units using industry market multiples and discounted cash flows utilizing a market-derived cost of capital (level 3 fair value inputs). The goodwill amounts were not impaired. The carrying amounts of goodwill are as follows (in thousands):

	CAM	ACMI Services	All Other	Total
Carrying value as of December 31, 2020	\$ 153,290	\$ 234,571	\$ 8,113	\$ 395,974
Carrying value as of December 31, 2021	\$ 153,290	\$ 234,571	\$ 8,113	\$ 395,974
Carrying value as of December 31, 2022	\$ 153,290	\$ 234,571	\$ 8,113	\$ 395,974

The Company's acquired intangible assets are as follows (in thousands):

	Airline		A	mortizing	
	Ce	rtificates	_I	ntangibles	 Total
Carrying value as of December 31, 2020	\$	9,000	\$	111,316	\$ 120,316
Amortization				(11,165)	(11,165)
Carrying value as of December 31, 2021	\$	9,000	\$	100,151	\$ 109,151
Amortization				(12,483)	(12,483)
Carrying value as of December 31, 2022	\$	9,000	\$	87,668	\$ 96,668

The airline certificates have an indefinite life and therefore are not amortized. The Company amortizes finite-lived intangible assets, including customer relationship and STC intangibles, over 3 to 16 remaining years. The Company recorded intangible amortization expense of \$12.5 million, \$11.2 million and \$11.4 million for the years ending December 31, 2022, 2021 and 2020, respectively. Estimated amortization expense for the next five years is \$10.2 million, \$10.2 million, \$9.4 million, \$4.5 million and \$4.5 million.

Stock warrants issued to a lessee (see Note C) as an incentive are recorded as a lease incentive asset using their fair value at the time that the lessee has met its performance obligations and amortized against revenues over the duration of related aircraft leases. The Company's lease incentive granted to the lessee was as follows (in thousands):

	Lease		
	I	ncentive	
Carrying value as of December 31, 2020	\$	126,007	
Amortization		(23,094)	
Carrying value as of December 31, 2021	\$	102,913	
Amortization		(23,263)	
Carrying value as of December 31, 2022	\$	79,650	

The lease incentive began to amortize in April 2016 with the commencement of certain aircraft leases. As of December 31, 2022, based on the warrants granted to date, the Company expects to record amortization, as a reduction to the lease revenue, of \$18.7 million, \$15.7 million, \$15.8 million, \$12.8 million and \$6.7 million for each of the next five years ending December 31, 2027.

The Company has a 49% ownership in a joint-venture agreement with Precision Aircraft Solutions, LLC, to develop a passenger-to-freighter conversion program for Airbus A321-200 aircraft. In April of 2022, the Company acquired a 40% ownership interest in the joint-venture company GA Telesis Engine Services, LLC to provide engine tear-down services to harvest and sell engine parts. The Company accounts for its investment in these joint ventures under the equity method of accounting, in which the carrying value of each investment is reduced for the Company's share of the non-consolidated affiliates' operating results.

During the 2022, 2021 and 2020 years, we contributed \$14.9 million, \$2.5 million and \$13.3 million to 321 Precision Conversions, LLC, respectively. The Company also contributed \$1.6 million to GA Telesis Engines Services, LLC during 2022.

The carrying value of the joint ventures totaled \$18.9 million and \$10.3 million at December 31, 2022 and 2021, respectively, and are reflected in "Other Assets" in the Company's consolidated balance sheets. The Company monitors its investments in affiliates for indicators of other-than-temporary declines in value on an ongoing basis in accordance with GAAP. If the Company determines that an other-than-temporary decline in value has occurred, it recognizes an impairment loss, which is measured as the difference between the recorded carrying value and the fair value of the investment. The fair value is generally determined using an income approach based on discounted cash flows or using negotiated transaction values.

NOTE C—SIGNIFICANT CUSTOMERS

Three customers each account for a significant portion of the Company's consolidated revenues. The percentage of the Company's revenues for the Company's three largest customers, for the years ended December 31, 2022, 2021 and 2020 are as follows:

	Year Ended December 31,						
	2022	2021	2020				
Customer	P	ercentage of Revenu	ie				
U.S. Department of Defense ("DoD")	30%	26%	31%				
Amazon	34%	35%	30%				
DHL	12%	12%	12%				

The accounts receivable from the Company's three largest customers as of December 31, 2022 and 2021 are as follows (in thousands):

	Year End	Year Ending December			
	2022		2021		
Customer	Accoun	Accounts Receivable			
DoD	\$ 125,1	56 \$	57,998		
Amazon	86,6)7	68,429		
DHL	19,6	14	9,111		

DoD

The Company is a provider of cargo and passenger airlift services to the DoD. The Company's airlines are eligible to bid for military charter operations for passenger and cargo transportation through contracts awarded by the DoD. The DoD awards flights to U.S. certificated airlines through annual contracts and through temporary "expansion" routes.

DHL

The Company has had long-term contracts with DHL Network Operations (USA), Inc. and its affiliates ("DHL") since August 2003. The Company leases Boeing 767 aircraft to DHL under both long-term and short-term

lease agreements. Under a separate crew, maintenance and insurance ("CMI") agreement, the Company operates Boeing 767 aircraft that DHL leases from the Company. Pricing for services provided through the CMI agreement is based on pre-defined fees, scaled for the number of aircraft operated and the number of flight crews provided to DHL for its U.S. network. The Company provides DHL with scheduled maintenance services for aircraft that DHL leases. The Company also provides additional air cargo transportation services for DHL through ACMI agreements in which the Company provides the aircraft, crews, maintenance and insurance under a single contract. As of December 31, 2022, the Company leased 14 Boeing 767 freighter aircraft to DHL comprised of three Boeing 767-200 aircraft and eleven Boeing 767-300 aircraft, with expirations between 2023 and 2028. Further, beginning in third quarter of 2022, the Company began to operate four Boeing 767 aircraft provided by DHL under an additional CMI agreement which currently runs through August of 2027.

Amazon

The Company has been providing freighter aircraft, airline operations and services for cargo handling and logistical support for ASI, successor to Amazon.com Services, Inc., a subsidiary of Amazon.com, Inc. ("Amazon") since September 2015. On March 8, 2016, the Company entered into an Air Transportation Services Agreement (the "ATSA") with ASI, pursuant to which CAM leases Boeing 767 freighter aircraft to ASI. The ATSA also provides for the operation of aircraft by the Company's airline subsidiaries, and the management of ground services by the Company's subsidiary LGSTX Services, Inc. ("LGSTX"). As of December 31, 2022, the Company leased 42 Boeing 767 freighter aircraft to ASI with lease expirations between 2023 and 2031.

Amazon Investment Agreement

In conjunction with the execution of the ATSA, the Company and Amazon entered into an Investment Agreement and a Stockholders Agreement on March 8, 2016. The Investment Agreement called for the Company to issue warrants in three tranches granting Amazon the right to acquire up to 19.9% of the Company's outstanding common shares as described below. The first tranche of warrants, issued upon the execution of the Investment Agreement and all of which are now fully vested, granted Amazon the right to purchase approximately 12.81 million ATSG common shares, with the first 7.69 million common shares vesting upon issuance on March 8, 2016, and the remaining 5.12 million common shares vesting as the Company delivered additional aircraft leased under the ATSA. The second tranche of warrants, which were issued and vested on March 8, 2018, granted Amazon the right to purchase approximately 1.59 million ATSG common shares. The third tranche of warrants vested on September 8, 2020, and granted Amazon the right to purchase an additional 0.5 million ATSG common shares to bring Amazon's ownership, after the exercise in full of the three tranches of warrants, to 19.9% of the Company's pre-transaction outstanding common shares measured on a GAAP-diluted basis, adjusted for share issuances and repurchases by the Company following the date of the 2016 Investment Agreement and after giving effect to the warrants granted. The exercise price of the 14.9 million warrants issued under the 2016 Investment Agreement was \$9.73 per share, which represents the closing price of ATSG's common shares on February 9, 2016. Each of the three tranches of warrants were exercisable in accordance with their terms through March 8, 2021 (subject to extension if regulatory approvals, exemptions, authorizations, consents or clearances have not been obtained by such date).

On March 5, 2021, Amazon exercised warrants from the 2016 Investment Agreement for 865,548 shares of ATSG's common stock through a cashless exercise by forfeiting 480,047 warrants from the 2016 Investment Agreement as payment. For the cashless exchange, ATSG shares were valued at \$27.27 per share, its volume-weighted average price for the previous 30 trading days immediately preceding March 5, 2021. Also on March 5, 2021, Amazon notified the Company of its intent to exercise warrants from the 2016 Investment agreement for 13,562,897 shares of ATSG's common stock by paying \$132.0 million of cash to the Company. This exercise was contingent upon the approval of the United States Department of Transportation, and the expiration or termination of any applicable waiting period pursuant to the Hart-Scott-Rodino Antitrust Improvements Act of 1976. After receiving all required regulatory approvals and clearances, Amazon remitted the funds to the Company on May 7, 2021, and the Company issued the corresponding shares of ATSG's common stock, completing the warrant exercise.

The Company resumed repurchases of its own shares during October 2022 in conjunction with the expiration of certain government restrictions (see Note H) on September 30, 2022. On October 7, 2022, Amazon sold 250,000 shares of ATSG's common stock back to the Company for cash of \$5.9 million, pursuant to the terms of the 2016 Investment Agreement, as amended on March 5, 2021. Also on December 16, 2022, Amazon sold 260,000 shares of ATSG's common stock back to the Company for cash of \$7.0 million, pursuant to the terms of the same 2016 agreement. These transactions resulted in Amazon maintaining its ownership percentage of less than 19.9% of the

Company's outstanding shares at the time. Amazon has the option to sell additional shares of ATSG's common stock to the Company to maintain its ownership percentage of less than 19.9% of the Company's outstanding shares. Amazon's option to sell shares may impact the Company's earnings in future periods.

On December 22, 2018, the Company announced agreements with Amazon to 1) lease and operate ten additional Boeing 767-300 aircraft for ASI, 2) extend the term of the 12 Boeing 767-200 aircraft currently leased to ASI by two years to 2023 with an option for three more years, 3) extend the term of the eight Boeing 767-300 aircraft currently leased to ASI by three years to 2026 and 2027 with an option for three more years, and 4) extend the ATSA by five years through March 2026, with an option to extend for an additional three years. The Company leased all ten of the 767-300 aircraft in 2020. In conjunction with the commitment for ten additional 767 aircraft leases, extensions of twenty existing Boeing 767 aircraft leases and the ATSA described above, Amazon and the Company entered into another Investment Agreement on December 20, 2018. Pursuant to the 2018 Investment Agreement, Amazon was issued warrants for 14.8 million common shares. This group of warrants will expire if not exercised within seven years from their issuance date, in December of 2025 (subject to extension if regulatory approvals, exemptions, authorizations, consents or clearances have not been obtained by such date). The warrants have an exercise price of \$21.53 per share.

On May 29, 2020, ASI agreed to lease twelve more Boeing 767-300 aircraft from the Company. The first of these leases began in the second quarter of 2020 with the remaining eleven delivered in 2021. All twelve of these aircraft leases were for ten-year terms. Pursuant to the 2018 Investment Agreement, as a result of leasing 12 aircraft, Amazon was issued warrants for 7.0 million common shares, all of which have vested. These warrants will expire if not exercised by December 20, 2025 (subject to extension if regulatory approvals, exemptions, authorizations, consents or clearances have not been obtained by such date). The exercise price of these warrants is \$20.40 per share.

Issued and outstanding warrants are summarized below as of December 31, 2022:

		Common Sh	ares in millions	
	Exercise price	Vested	Non-Vested	Expiration
2018 Investment Agreement	\$21.53	14.8	0.0	December 20, 2025
2018 Investment Agreement	\$20.40	7.0	0.0	December 20, 2025

Additionally, Amazon can earn incremental warrants rights up to 2.9 million common shares under the 2018 Investment Agreement by leasing up to five more cargo aircraft from the Company before January 2026. Incremental warrants granted for ASI's commitment to any such future aircraft leases will have an exercise price based on the volume-weighted average price of the Company's shares during the 30 trading days immediately preceding the contractual commitment for each lease.

For all outstanding warrants vested, Amazon may select a cashless conversion option. Assuming ATSG's stock price at the time of conversion is above the warrant exercise price, Amazon would receive fewer shares in exchange for any warrants exercised under the cashless option by surrendering the number of shares with a market value equal to the exercise price.

The Company's accounting for the warrants and the sale option have been determined in accordance with the financial reporting guidance for financial instruments. Warrants and the sale option are classified as liabilities are marked to fair value at the end of each reporting period. The value of warrants is recorded as a customer incentive asset if it is probable of vesting at the time of grant and further changes in the fair value of warrant obligations are recorded to earnings. Upon a warrant vesting event, the customer incentive asset is amortized as a reduction of revenue over the duration of the related revenue contract.

In accordance with the 2016 Investment Agreement, on September 8, 2020, the final number of shares issuable under the third tranche of warrants was determined to be 0.5 million common shares. As a result, under U.S. GAAP, the value of the entire warrant grant under the 2016 Investment Agreement was remeasured on September 8, 2020, and their fair value of \$221 million was reclassified from balance sheet liabilities to paid-in-capital. Upon the execution of the 10th and final aircraft lease of the December 2018 commitment, warrants for 14.8 million shares were remeasured on October 1, 2020, and their fair value of \$154 million was reclassified from balance sheet liabilities to paid-in-capital. Upon execution of the 12th and final aircraft lease of the May 2020 commitment,

warrants for 7.0 million shares were remeasured on December 7, 2021, and their fair value of \$82.4 million was reclassified from balance sheet liabilities to paid-in-capital.

As of December 31, 2022 and 2021, the Company's liabilities reflected warrants from the 2018 Amazon agreements having a fair value of \$0.7 million and \$0.9 million, respectively. During the years ended December 31, 2022, 2021 and 2020, the re-measurements of warrants to fair value resulted in net non-operating gains of \$0.2 million and \$20.2 million and losses of \$95.5 million before the effect of income taxes, respectively.

The Company's earnings in future periods will be impacted by the re-measurements of warrant fair value, amortizations of the lease incentive asset and the related income tax effects. For income tax calculations, the value and timing of related tax deductions will differ from the guidance described above for financial reporting.

NOTE D—FAIR VALUE MEASUREMENTS

The Company's money market funds and interest rate swaps are reported on the Company's consolidated balance sheets at fair values based on market values from comparable transactions. The fair value of the Company's money market funds, convertible note, convertible note hedges and interest rate swaps are based on observable inputs (Level 2) from comparable market transactions.

The fair value of the stock warrant obligations resulting from aircraft leased to ASI were determined using a Black-Scholes pricing model which considers various assumptions, including ATSG's common stock price, the volatility of ATSG's common stock, the expected dividend yield, exercise price and the risk-free interest rate (Level 2 inputs). The fair value of the stock warrant obligations for unvested stock warrants, conditionally granted to Amazon for the execution of incremental, future aircraft leases, include additional assumptions including the expected exercise prices and the probabilities that future leases will occur (Level 3 inputs).

The following table reflects assets and liabilities that are measured at fair value on a recurring basis (in thousands):

As of December 31, 2022		Fair Value Measurement Using						
		Level 1		Level 2		Level 3		Total
Assets								
Cash equivalents—money market	\$	_	\$	4,047	\$	_	\$	4,047
Interest rate swap				677				677
Total Assets	\$		\$	4,724	\$		\$	4,724
Liabilities	'							
Stock warrant obligations						(695)		(695)
Total Liabilities	\$		\$		\$	(695)	\$	(695)

As of December 31, 2021	Fair Value Measurement Using						
		Level 1		Level 2		Level 3	Total
Assets							
Cash equivalents—money market	\$		\$	30,042	\$	_	\$ 30,042
Interest rate swap							_
Total Assets	\$		\$	30,042	\$		\$ 30,042
Liabilities							
Interest rate swap	\$		\$	(3,603)	\$	_	\$ (3,603)
Stock warrant obligations						(915)	(915)
Total Liabilities	\$		\$	(3,603)	\$	(915)	\$ (4,518)

At December 31, 2022 and 2021, unvested stock warrants from the 2018 Amazon agreement were valued using additional assumptions for an expected grant date, expected exercise price, the risk free rate to the expected grant date and the probabilities that future leases will occur.

As a result of higher market interest rates compared to the stated interest rates of the Company's fixed rate debt obligations, the fair value of the Company's debt obligations, based on Level 2 observable inputs, was approximately \$48.3 million less than the carrying value, which was \$1,464.9 million at December 31, 2022. As of December 31, 2021, the fair value of the Company's debt obligations was approximately \$37.1 million more than the carrying value, which was \$1,299.4 million. The non-financial assets, including goodwill, intangible assets and property and equipment are measured at fair value on a non-recurring basis.

NOTE E—PROPERTY AND EQUIPMENT

The Company's property and equipment consists primarily of cargo aircraft, aircraft engines and other flight equipment. Property and equipment, to be held and used, is summarized as follows (in thousands):

	D	ecember 31, 2022	D	ecember 31, 2021
Flight equipment	\$	3,506,134	\$	3,301,113
Ground equipment		70,092		64,641
Leasehold improvements, facilities and office equipment		40,183		38,769
Aircraft modifications and projects in progress		445,633		206,917
		4,062,042		3,611,440
Accumulated depreciation		(1,659,634)		(1,481,506)
Property and equipment, net	\$	2,402,408	\$	2,129,934

CAM owned aircraft with a carrying value of \$1,474.6 million and \$1,404.4 million that were under lease to external customers as of December 31, 2022 and 2021, respectively.

During the second quarter of 2020, the Company decided to retire its four Boeing 757 freighter aircraft as a result of customer preferences for other aircraft types. Three of the Boeing 757 freighter airframes have been removed from service and are available for sale. One remained in service through January 2021. The Pratt and Whitney engines that power these aircraft remain in use for lease to external customers. Separating the Boeing 757 freighters and engines while marketing the airframes, triggered a fair value assessment. As a result, an impairment charge totaling \$39.1 million was recorded primarily to reflect the market value of these assets as well as other surplus engines and parts. Fair values were determined using Level 3 inputs based primarily on independent appraisals and recent market transactions as well as the Company's assessment of existing market conditions based on industry knowledge.

NOTE F—DEBT OBLIGATIONS

Debt obligations consisted of the following (in thousands):

	December 31, 2022	December 31, 2021
Revolving credit facility	620,000	360,000
Senior notes	578,094	697,162
Convertible notes	256,903	231,646
Other financing arrangements	9,927	10,555
Total debt obligations	1,464,924	1,299,363
Less: current portion	(639)	(628)
Total long term obligations, net	\$ 1,464,285	\$ 1,298,735

The Company utilizes a syndicated credit agreement ("Senior Credit Agreement") which includes the ability to execute term loans and a revolving credit facility. On October 19, 2022, the Company amended the Senior Credit Agreement. This amendment i) increased the aggregate amount of the revolving credit facility from \$800 million to

\$1 billion, ii) extended the maturity date of the agreement from April 6, 2026 to October 19, 2027, iii) replaced LIBOR with SOFR as an interest rate benchmark, iv) reduced the collateral to outstanding loan ratio to 1.15:1.00 from 1.25:1:00, v) permits cash dividends and share repurchases provided the secured leverage ratio is less than 3.00 to 1.00 and the total leverage ratio is less than 3.50 to 1.00, and removed the annual limitation on cash dividends and share repurchases which was \$100 million.

The interest rate is a pricing premium added to SOFR based upon the Company's debt to its earnings before interest, taxes, depreciation and amortization expenses ("EBITDA") as defined under the Senior Credit Agreement. As of December 31, 2022, the unused revolving credit facility available to the Company at the trailing twelve-month EBITDA level was \$364.9 million, and additional permitted indebtedness under the Senior Credit Agreement subject to compliance with other covenants.

On March 1, 2023, the Company entered into an additional revolving credit facility domiciled in Ireland (the "Irish Facility"). The terms and conditions of the Irish Facility are similar to the Senior Credit Agreement in the U.S. The Irish Facility has a maximum capacity of \$100.0 million but has the ability to be upsized using the same accordion feature that is present in the Senior Credit Agreement. The maturity date of the Irish Facility is the same as the Senior Credit Agreement.

On January 28, 2020, the Company, through a subsidiary, completed a debt offering of \$500.0 million in senior unsecured notes (the "Senior Notes"). The Senior Notes were sold only to qualified institutional buyers in the United States pursuant to Rule 144A under the Securities Act of 1933, as amended (the "1933 Act"), and certain investors pursuant to Regulation S under the Securities Act. The Senior Notes are senior unsecured obligations that bear interest at a fixed rate of 4.75% per year, payable semiannually in arrears on February 1 and August 1 of each year, beginning on August 1, 2020. The Senior Notes will mature on February 1, 2028. The Senior Notes contain customary events of default and certain covenants which are generally no more restrictive than those set forth in the Senior Credit Agreement. The net proceeds of \$495.0 million from the Senior Notes were used to pay down the revolving credit facility. The Senior Notes do not require principal payments until maturity but prepayments are allowed without penalty beginning February 1, 2025.

On April 13, 2021, the Company, through a subsidiary, completed its offering of \$200.0 million of additional notes ("Additional Notes") under the existing Senior Notes. The Additional Notes are fully fungible with the Senior Notes, treated as a single class for all purposes under the indenture governing the existing notes with the same terms as those of the existing notes (other than issue date and issue price). The proceeds of \$205.5 million, net of scheduled interest payable, were used, in conjunction with draws from the revolving credit facility to repay the unsubordinated term loans. Upon retirement of the unsubordinated term loans, the company expensed debt issuance costs of \$6.5 million related to the unsubordinated term loans.

During 2022, the Company repurchased Senior Notes having a principal value of \$120.0 million in the open market at a 5.5% reducing the Senior Notes carrying value to \$578.0 million. The Company recognized a net pretax gain of \$4.5 million, net of fees, which was recorded under net gain of financial instruments on the income statement during the corresponding period.

The balance of the Senior Notes is net of debt issuance costs of \$5.4 million and \$7.8 million as of December 31, 2022 and 2021, respectively. Under the terms of the Senior Credit Agreement, interest rates are adjusted at least quarterly based on the Company's EBITDA, its outstanding debt level and prevailing SOFR or prime rates. At the Company's debt-to-EBITDA ratio as December 31, 2022, the SOFR based financing for the revolving credit facility bear variable interest rates of 5.22%.

The Senior Credit Agreement is collateralized by certain of the Company's Boeing 777, 767 and 757 aircraft. Under the terms of the Senior Credit Agreement, the Company is required to maintain certain collateral coverage ratios set forth in the Senior Credit Agreement. The Senior Credit agreement limits the amount of dividends the Company can pay and the amount of common stock it can repurchase to \$100.0 million during any calendar year, provided the Company's total debt to EBITDA ratio is under 3.50 times and the secured debt to EBITDA ratio is under 3.0 times, after giving effect to the dividend or repurchase. The Senior Credit Agreement contains covenants, including a maximum permitted total EBITDA to debt ratio, a fixed charge covenant ratio requirement, limitations on certain additional indebtedness, and on guarantees of indebtedness. The Senior Credit Agreement stipulates events of default, including unspecified events that may have material adverse effects on the Company. If an event of default occurs, the Company may be forced to repay, renegotiate or replace the Senior Credit Agreement.

In September 2017, the Company issued \$258.8 million aggregate principal amount of 1.125% Convertible Senior Notes due 2024 ("Convertible Notes") in a private offering to qualified institutional buyers pursuant to Rule 144A under the Securities Act. The Convertible Notes bear interest at a rate of 1.125% per year payable semi-annually in arrears on April 15 and October 15 each year, beginning April 15, 2018. The Convertible Notes mature on October 15, 2024, unless repurchased or converted in accordance with their terms prior to such date. The Convertible Notes are unsecured indebtedness, subordinated to the Company's existing and future secured indebtedness and other liabilities, including trade payables. Conversion of the Convertible Notes can only occur upon satisfaction of certain conditions and during certain periods, beginning any calendar quarter commencing after December 31, 2017 and thereafter, until the close of business on the second scheduled trading day immediately preceding the maturity date. Upon the occurrence of certain fundamental changes, holders of the Convertible Notes can require the Company to repurchase their notes at the cash repurchase price equal to the principal amount of the notes, plus any accrued and unpaid interest.

The Convertible Notes may be settled in cash, the Company's common shares or a combination of cash and the Company's common shares, at the Company's election. The initial conversion rate is 31.3475 common shares per \$1,000 principal amount of Convertible Notes (equivalent to an initial conversion price of approximately \$31.90 per common share). If a "make-whole fundamental change" (as defined in the offering circular with the Convertible Notes) occurs, the Company will, in certain circumstances, increase the conversion rate for a specified period of time.

In conjunction with the Convertible Notes, the Company purchased convertible note hedges under privately negotiated transactions for \$56.1 million, having the same number of the Company's common shares, 8.1 million shares and same strike price of \$31.90, that underlie the Convertible Notes. The convertible note hedges are expected to reduce the potential equity dilution with respect to ATSG's common stock, and/or offset any cash payments in excess of the principal amount due, as the case may be, upon conversion of the Convertible Notes. The Company's current intent and policy is to settle all Note conversions through a combination settlement which satisfies the principal amount of the Convertible Notes outstanding with cash.

The conversion feature of the Convertible Notes required bifurcation from the principal amount under the applicable accounting guidance. On January 1, 2022 the Company adopted ASU 2020-06 using the modified retrospective approach as discussed in Note A which recombined the value of the previously bifurcated embedded feature with the convertible note and eliminated the discount. The carrying value of the Company's convertible debt is shown below (in thousands):

	Dec	ember 31, 2022	December 31, 2021		
Principal value, Convertible Senior Notes, due 2024	\$	258,750	\$	258,750	
Unamortized issuance costs		(1,847)		(2,889)	
Unamortized discount				(24,215)	
Convertible debt	\$	256,903	\$	231,646	

In conjunction with the offering of the Convertible Notes, the Company also sold warrants to the convertible note hedge counterparties in separate, privately negotiated warrant transactions at a higher strike price and for the same number of the Company's common shares, subject to customary anti-dilution adjustments. The amount received for these warrants and recorded in Stockholders' Equity in the Company's consolidated balance sheets was \$38.5 million. These warrants could result in 8.1 million additional shares of ATSG's common stock, if the Company's traded market price exceeds the strike price which is \$41.35 per share and is subject to certain adjustments under the terms of the warrant transactions. The warrants could have a dilutive effect on the computation of earnings per share to the extent that the average traded market price of the Company's common shares for reporting periods exceed the strike price.

The scheduled cash principal payments for the Company's debt obligations, as of December 31, 2022, for the next five years are as follows (in thousands):

	 Principal Payments
2023	\$ 639
2024	259,400
2025	661
2026	672
2027	620,686
2028 and beyond	586,659
Total principal cash payments	1,468,717
Less: unamortized issuance costs, premiums and discounts	(3,793)
Total debt obligations	\$ 1,464,924

NOTE G—DERIVATIVE INSTRUMENTS

The Company maintains derivative instruments for protection from fluctuating interest rates. The table below provides information about the Company's interest rate swaps (in thousands):

	_	December	31, 2022	Decembe	r 31, 2021
Stated Interest Expiration Date Rate		Notional Amount	Market Value (Liability)	Notional Amount	Market Value (Liability)
March 31, 2022	1.900 %	_	_	50,000	(221)
March 31, 2022	1.950 %	_	_	75,000	(341)
March 31, 2023	2.425 %	125,625	677	133,125	(3,041)

The outstanding interest rate swaps are not designated as hedges for accounting purposes. The effects of future fluctuations in LIBOR interest rates on derivatives held by the Company will result in the recording of unrealized gains and losses into the statement of operations. The Company recorded a net gain on derivatives of \$4.3 million and \$9.8 million and a net loss of \$5.3 million for the years ending December 31, 2022, 2021 and 2020, respectively. The liability for outstanding derivatives is recorded in other liabilities and in accrued expenses.

NOTE H—COMMITMENTS AND CONTINGENCIES

Payroll Support Programs

During 2020, two of the Company's airline subsidiaries, OAI and ATI, received government funds totaling \$75.8 million pursuant to payroll support program agreements under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). In February 2021, OAI was approved for \$37.4 million of additional non-repayable government funds pursuant to a payroll support program agreement under the Consolidated Appropriations Act, 2021 (the "PSP Extension Law"). This grant was subsequently increased by \$5.6 million. Further, in April 2021, OAI was approved for \$40.0 million of additional non-repayable government funds pursuant to a payroll support program agreement under the American Rescue Plan Act of 2021 (the "American Rescue Plan").

The three programs are structured in a substantially similar manner. These grants are not required to be repaid if the Company complies with the provisions of the payroll support program agreements under CARES Act, the PSP Extension Law and the American Rescue Plan. The grants are recognized over the periods in which the Company recognizes the related expenses for which the grants are intended to compensate. The Company recognizes the grants as contra-expense during the periods in which passenger flight operations and combi flight operations levels

are expected to be negatively impacted by the pandemic. During the years ended December 31, 2021 and 2020, the Company recognized \$111.7 million and \$47.2 million of the grants, respectively. The Company recognized all of the CARES Act funds by the end of 2021.

In conjunction with the payroll support program agreements under the CARES Act, OAI and ATI agreed on behalf of themselves and ABX to refrain from conducting involuntary furloughs or reducing employee rates of pay or benefits through September 30, 2020. Thereafter, OAI agreed as a condition of receiving grants under the PSP Extension Law and the American Rescue Plan to refrain from conducting involuntary furloughs or reducing employee rates of pay or benefits through March 31, 2021, and September 30, 2021, respectively. Under the CARES Act, OAI and ATI agreed to limit, on behalf of themselves and certain affiliates, executive compensation through March 24, 2022; maintain certain air transportation service through March 1, 2022 and maintain certain internal controls and records relating to the funds and comply with certain reporting requirements. OAI further agreed as a condition of receiving grants under the PSP Extension Law and thereafter the American Rescue Plan, to limit executive compensation through October 1, 2022 and April 1, 2023, respectively. In addition, the Company was not permitted to pay dividends or repurchase its shares through September 30, 2022.

Lease Commitments

The Company leases property, aircraft, aircraft engines and other types of equipment under operating leases. The Company's airlines operate thirteen freighter aircraft provided by customers and four passenger aircraft leased from external companies. Property leases include hangars, warehouses, offices and other space at certain airports with fixed rent payments and lease terms ranging from one month to nine years. The Company is obligated to pay the lessor for maintenance, real estate taxes, insurance and other operating expenses on certain property leases. These expenses are variable and are not included in the measurement of the lease asset or lease liability. These expenses are recognized as variable lease expense when incurred and are not material. Equipment leases include ground support and industrial equipment as well as computer hardware with fixed rent payments and terms of one month to five years.

The Company records the initial right-to-use asset and lease liability at the present value of lease payments scheduled during the lease term. For the years ended December 31, 2022 and 2021, non-cash transactions to recognize right-to-use assets and corresponding liabilities for new leases were \$34.7 million and \$14.7 million, respectively. Unless the rate implicit in the lease is readily determinable, the Company discounts the lease payments using an estimated incremental borrowing rate at the time of lease commencement. The Company estimates the incremental borrowing rate based on the information available at the lease commencement date, including the rate the Company could borrow for a similar amount, over a similar lease term with similar collateral. The Company's weighted-average discount rate for operating leases at December 31, 2022 and 2021 was 3.2% and 2.40%, respectively. Leases often include rental escalation clauses, renewal options and/or termination options that are factored into the determination of lease payments when appropriate. Although not material, the amount of such options is reflected below in the maturity of operating lease liabilities table. Lease expense is recognized on a straight-line basis over the lease term. Our weighted-average remaining lease term is 4.3 years and 3.8 years as of December 31, 2022 and 2021, respectively.

For the year ended December 31, 2022 and 2021, cash payments against operating lease liabilities were \$23.5 million and \$20.5 million, respectively. As of December 31, 2022, the maturities of operating lease liabilities are as follows (in thousands):

	Opera	ating Leases
2023	\$	25,301
2024		19,977
2025		13,776
2026		9,245
2027		4,186
2028 and beyond		8,649
Total undiscounted cash payments		81,134
Less: amount representing interest		(6,243)
Present value of future minimum lease payments		74,891
Less: current obligations under leases		23,316
Long-term lease obligation	\$	51,575

Purchase Commitments

The Company has agreements with vendors for the conversion of Boeing 767-300, Airbus A321 and Airbus A330 passenger aircraft into a standard configured freighter aircraft. The conversions primarily consist of the installation of a standard cargo door and loading system. As of December 31, 2022, the Company owned fifteen Boeing 767-300 aircraft and seven Airbus A321-200 aircraft that were in or awaiting the modification process. As of December 31, 2022, the Company has agreements to purchase sixteen more Boeing 767-300 passenger aircraft, two more Airbus A321-200 passenger aircraft and five Airbus A330-300 passenger aircraft through 2024. As of December 31, 2022, the Company's commitments to acquire and convert aircraft totaled \$715.9 million, including estimated payments of \$350.9 million through 2023 and the remaining payments through 2026. Actual conversion payments will be based on the achievement of progress milestones.

Hangar Foam Discharge

On August 7, 2022 the fire suppression system at one of the Company's aircraft maintenance hangars in Wilmington, Ohio malfunctioned and discharged a significant amount of expansive foam. The event impacted employees, three aircraft and equipment in and around the hangar at the time of discharge. The hangar resumed operations after approximately three weeks while the cause of the incident was investigated and the hangar was cleaned and restored. While one aircraft was returned to service, the timeframes needed to return two of the aircraft and related engines to operating condition are not known at this time. The Company maintains insurance for employee claims, remediation expenses, property and equipment damage, customer claims and business interruption subject to customary deductibles and policy limits. The anticipated insurance recoveries related to clean-up expenses, remediation, part repairs and property damages are recorded when receipt is probable. Insurance recoveries in excess of the net book value of the damaged operating assets and for business interruption claims are recorded when all contingencies related to the claim have been resolved.

Through December 31, 2022, the Company has recognized charges in operating income, and recorded insurance recoveries of \$4.9 million in loss recoveries for employee coverage, property damage, clean-up and repairs. The Company has received \$2.0 million of the insurance recoveries as of December 31, 2022. The remaining amount is reflected as a receivable. Additional claims related to the extent of the damages, business disruption losses, and insurance recoveries are ongoing.

Guarantees and Indemnifications

Certain leases and agreements of the Company contain guarantees and indemnification obligations to the lessor, or one or more other parties that are considered reasonable and customary (e.g. use, tax and environmental

indemnifications), the terms of which range in duration and are often limited. Such indemnification obligations may continue after expiration of the respective lease or agreement.

Other

In addition to the foregoing matters, the Company is also a party to legal proceedings in various federal and state jurisdictions from time to time arising out of the operation of the Company's business. The amount of alleged liability, if any, from these proceedings cannot be determined with certainty; however, the Company believes that its ultimate liability, if any, arising from pending legal proceedings, as well as from asserted legal claims and known potential legal claims which are probable of assertion, taking into account established accruals for estimated liabilities, should not be material to our financial condition or results of operations.

Employees Under Collective Bargaining Agreements

As of December 31, 2022, the flight crewmember employees of ABX, ATI and OAI and flight attendant employees of ATI and OAI were represented by the labor unions listed below:

Airline	Labor Agreement Unit	Percentage of the Company's Employees
ABX	International Brotherhood of Teamsters	6.1%
ATI	Air Line Pilots Association	10.2%
OAI	International Brotherhood of Teamsters	6.4%
ATI	Association of Flight Attendants	0.8%
OAI	Association of Flight Attendants	7.1%

NOTE I—PENSION AND OTHER POST-RETIREMENT BENEFIT PLANS

Defined Benefit and Post-retirement Healthcare Plans

ABX sponsors a qualified defined benefit pension plan for ABX crewmembers and a qualified defined benefit pension plan for a major portion of its ABX employees that meet minimum eligibility requirements. ABX also sponsors non-qualified defined benefit pension plans for certain employees. These non-qualified plans are unfunded. Employees are no longer accruing benefits under any of the defined benefit pension plans. ABX also sponsors a post-retirement healthcare plan for its ABX crewmembers, which is unfunded. Benefits for covered individuals terminate upon reaching age 65 under the post-retirement healthcare plans.

The accounting and valuation for these post-retirement obligations are determined by prescribed accounting and actuarial methods that consider a number of assumptions and estimates. The selection of appropriate assumptions and estimates is significant due to the long time period over which benefits will be accrued and paid. The long term nature of these benefit payouts increases the sensitivity of certain estimates of our post-retirement obligations. The assumptions considered most sensitive in actuarially valuing ABX's pension obligations and determining related expense amounts are discount rates and expected long term investment returns on plan assets. Additionally, other assumptions concerning retirement ages, mortality and employee turnover also affect the valuations. Actual results and future changes in these assumptions could result in future costs significantly higher than those recorded in our results of operations.

ABX measures plan assets and benefit obligations as of December 31 of each year. Information regarding ABX's sponsored defined benefit pension plans and post-retirement healthcare plans follow below. The accumulated benefit obligation reflects pension benefit obligations based on the actual earnings and service to-date of current employees.

Funded Status (in thousands):

	Pension Plans				Post-retirement Healthcare Plans			
		2022		2021		2022		2021
Accumulated benefit obligation	\$	648,242	\$	839,267	\$	2,672	\$	3,142
Change in benefit obligation								
Obligation as of January 1	\$	839,267	\$	873,826	\$	3,142	\$	3,484
Service cost		_				76		95
Interest cost		24,173		22,387		59		42
Special termination benefits		_						
Plan amendment		_		_		_		_
Plan transfers		2,386		3,125				
Benefits paid		(37,998)		(36,109)		(308)		(250)
Curtailments and settlement		_						
Actuarial gain		(179,586)		(23,962)		(297)		(229)
Obligation as of December 31	\$	648,242	\$	839,267	\$	2,672	\$	3,142
Change in plan assets								
Fair value as of January 1	\$	850,195	\$	843,895	\$	_	\$	_
Actual (loss) gain on plan assets		(188,855)		37,626		_		_
Plan transfers		2,386		3,125				_
Return of excess premiums		_		_		_		_
Employer contributions		1,304		1,658		308		250
Benefits paid		(37,998)		(36,109)		(308)		(250)
Settlement payments	\$		\$	<u> </u>	\$		\$	
Fair value as of December 31	\$	627,032	\$	850,195	\$		\$	
Funded status	0		0		0		0	
Overfunded plans, net asset	\$	13,194	\$	30,867	\$	_	\$	_
Underfunded plans								
Current liabilities	\$	(1,343)	\$	(1,345)	\$	(401)	\$	(399)
Non-current liabilities	\$	(33,063)	\$	(18,594)	\$	(2,271)	\$	(2,743)

Components of Net Periodic Benefit Cost

ABX's net periodic benefit costs for its defined benefit pension plans and post-retirement healthcare plans for the years ended December 31, 2022, 2021 and 2020, are as follows (in thousands):

	Pension Plans					Post-Retirement Healthcare Plan						
		2022	2021		2021 2020		2022		2021		2020	
Service cost	\$	_	\$		\$		\$	76	\$	95		139
Interest cost		24,173		22,387		27,880		59		42		91
Expected return on plan assets		(46,954)		(47,502)		(44,673)		_		_		_
Curtailments and settlements		_		_		(424)		_		_		(17)
Amortization of prior service cost		_		_		_		_		_		_
Amortization of net loss		2,630		7,058		3,763		45		186		124
Net periodic benefit cost (income)	\$	(20,151)	\$	(18,057)	\$	(13,454)	\$	180	\$	323	\$	337

Unrecognized Net Periodic Benefit Expense

The pre-tax amounts in accumulated other comprehensive loss that have not yet been recognized as components of net periodic benefit expense at December 31 are as follows (in thousands):

	Pensio	n Plans	Post-Retirement Healthcare Plans			
	2022	2022 2021		2021		
Unrecognized prior service cost	\$ —	\$ —	\$ —	\$ —		
Unrecognized net actuarial loss	144,268	90,675	76	418		
Accumulated other comprehensive loss	\$ 144,268	\$ 90,675	\$ 76	\$ 418		

The amounts of unrecognized net actuarial loss recorded in accumulated other comprehensive loss that is expected to be recognized as components of net periodic benefit expense during 2023 is \$19.0 million and \$0.0 million for the pension plans and the post-retirement healthcare plans, respectively.

Assumptions

Assumptions used in determining the funded status of ABX's pension plans at December 31 were as follows:

		Pension Plans	
	2022	2021	2020
Discount rate - crewmembers	5.50%	2.90%	2.55%
Discount rate - non-crewmembers	5.50%	3.00%	2.75%
Expected return on plan assets - crewmembers	6.75%	5.65%	5.75%
Expected return on plan assets - non-crewmembers	6.65%	5.65%	5.75%

Net periodic benefit cost was based on the discount rate assumptions at the end of the previous year.

The discount rate used to determine post-retirement healthcare obligations was 5.35%, 2.00% and 1.30% for pilots at December 31, 2022, 2021 and 2020, respectively. Post-retirement healthcare plan obligations have not been funded. The Company's retiree healthcare contributions have been fixed for each participant, accordingly, healthcare cost trend rates do not affect the post-retirement healthcare obligations.

Plan Assets

The weighted-average asset allocations by asset category are as shown below:

	Composition of as of Decei	f Plan Assets mber 31
Asset category	2022	2021
Cash	3 %	3 %
Equity securities	27 %	28 %
Fixed income securities	70 %	69 %
	100 %	100 %

ABX uses an investment management firm to advise it in developing and executing an investment policy. The portfolio is managed with consideration for diversification, quality and marketability. The investment policy permits the following ranges of asset allocation: equities -15% to 35%; fixed income securities -60% to 80%; cash -0% to 10%. Except for U.S. Treasuries, no more than 10% of the fixed income portfolio and no more than 5% of the equity portfolio can be invested in securities of any single issuer.

The overall expected long term rate of return was developed using various market assumptions in conjunction with the plans' targeted asset allocation. The assumptions were based on historical market returns.

Cash Flows

In 2022 and 2021, the Company made contributions to its defined benefit plans of \$1.3 million and \$1.7 million, respectively. The Company estimates that its contributions in 2023 will be approximately \$1.3 million for its defined benefit pension plans and \$0.4 million for its post-retirement healthcare plans.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid out of the respective plans as follows (in thousands):

	ension enefits	Healt	irement hcare efits
2023	\$ 41,571	\$	401
2024	43,877		482
2025	46,329		507
2026	48,101		471
2027	49,650		404
Years 2028 to 2032	253,065		1,022

Fair Value Measurements

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

Common Trust Funds—Common trust funds are composed of shares or units in non-publicly traded funds whereby the underlying assets in these funds (cash, cash equivalents, fixed income securities and equity securities) are publicly traded on exchanges and price quotes for the assets held by these funds are readily available. Holdings of common trust funds are classified as Level 2 investments.

Mutual Funds—Investments in this category include shares in registered mutual funds, unit trust and commingled funds. These funds consist of domestic equity, international equity and fixed income strategies. Investments in this category that are publicly traded on an exchange and have a share price published at the close of each business day are classified as Level 1 investments and holdings in the other mutual funds are classified as Level 2 investments.

Fixed Income Investments—Securities in this category consist of U.S. Government or Agency securities, state and local government securities, corporate fixed income securities or pooled fixed income securities. Securities in this category that are valued utilizing published prices at the close of each business day are classified as Level 1 investments. Those investments valued by bid data prices provided by independent pricing sources are classified as Level 2 investments.

The pension plan assets measured at fair value on a recurring basis were as follows (in thousands):

As of December 31, 2022 Fair Value Measurement Usin						
	Lo	evel 1		Level 2		Total
Plan assets						
Common trust funds	\$	_	\$	19,114	\$	19,114
Mutual funds		_		166,143		166,143
Fixed income investments				441,772		441,772
Benefit Plan Assets	\$	_	\$	627,029	\$	627,029
Investments measured at net asset value ("NAV")						3
Total benefit plan assets					\$	627,032
As of December 31, 2021	Fair	Value Mea	asuren	nent Using		
	Le	evel 1		Level 2		Total
Plan assets						
Common trust funds	\$	_	\$	29,451	\$	29,451
Mutual funds		_		236,647		236,647
Fixed income investments				584,094		584,094
Benefit Plan Assets	\$	_	\$	850,192	\$	850,192
Investments measured at net asset value ("NAV")						3

Investments that were measured at NAV per share (or its equivalent) as a practical expedient have not been classified in the fair value hierarchy. These investments include hedge funds, private equity and real estate funds. Management's estimates are based on information provided by the fund managers or general partners of those funds.

Hedge Funds and Private Equity—These investments are not readily tradable and have valuations that are not based on readily observable data inputs. The fair value of these assets is estimated based on information provided by the fund managers or the general partners. These assets have been valued using NAV as a practical expedient.

The following table presents investments measured at fair value based on NAV per share as a practical expedient:

	Fair	·Value	Redemption Frequency	Redemption Notice Period		funded mitments
As of December 31, 2022						
Hedge Funds & Private Equity	\$	3	(1)(2)	90 days	\$	_
Real Estate		<u> </u>	(3)	90 days		_
Total investments measured at NAV	\$	3			\$	
		·			"	
As of December 31, 2021						
Hedge Funds & Private Equity	\$	3	(1)(2)	90 days	\$	_
Real Estate			(3)	90 days		_
Total investments measured at NAV	\$	3			\$	_

- (1) Quarterly hedge funds
- (2) None private equity
- (3) Monthly

Defined Contribution Plans

The Company sponsors defined contribution capital accumulation plans (401k) that are funded by both voluntary employee salary deferrals and by employer contributions. Expenses for defined contribution retirement plans were \$20.9 million, \$19.5 million and \$15.4 million for the years ended December 31, 2022, 2021 and 2020, respectively.

NOTE J—INCOME TAXES

The Company's deferred income taxes reflect the value of its net operating loss carryforwards and the tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their amounts used for income tax calculations.

At December 31, 2022, the Company had cumulative net operating loss carryforwards ("NOL CFs") for federal income tax purposes of approximately \$278.0 million, which do not expire but whose use may be limited to 80% of taxable income in any given year. The deferred tax asset balance includes \$2.7 million net of a \$0.3 million valuation allowance related to state NOL CFs, which have remaining lives ranging from one to twenty years. These NOL CFs are attributable to excess tax deductions related primarily to the accelerated tax depreciation of fixed assets, the timing of amortization related to Amazon warrants and cash contributions for its benefit plans. At December 31, 2022 and 2021, the Company determined that, based upon projections of taxable income, it was more likely than not that the Federal NOL CF's will be utilized, accordingly, no allowance against these deferred tax assets was recorded. The Company had alternative minimum tax credits of \$3.1 million which were recovered in 2020.

The significant components of the deferred income tax assets and liabilities as of December 31, 2022 and 2021 are as follows (in thousands):

	 December 31			
	2022		2021	
Deferred tax assets:				
Net operating loss carryforward and federal credits	\$ 63,200	\$	93,294	
Warrants	31,524		32,075	
Operating lease obligation	15,727		13,266	
Post-retirement employee benefits	3,081		_	
Employee benefits other than post-retirement	5,666		6,919	
Inventory reserve	2,920		2,714	
Deferred revenue	4,863		10,918	
Other	13,519		8,789	
Deferred tax assets	140,500		167,975	
Deferred tax liabilities:				
Accelerated depreciation	(326,804)		(327,321)	
Post-retirement employee benefits	_		(1,330)	
Partnership items	(6,365)		(6,014)	
Operating lease assets	(15,492)		(13,029)	
State taxes	(24,207)		(19,158)	
Goodwill and intangible assets	(18,952)		(14,553)	
Valuation allowance against deferred tax assets	(3,861)		(3,861)	
Deferred tax liabilities	 (395,681)		(385,266)	
Net deferred tax (liability)	\$ (255,181)	\$	(217,291)	

The following summarizes the Company's income tax provisions (benefits) (in thousands):

	Years Ended December 31					
		2022		2021		2020
Current taxes:						
Federal	\$	6,965	\$	_	\$	(1,332)
Foreign		784		_		_
State		2,082		2,402		1,235
Deferred taxes:						
Federal		45,644		65,027		19,701
Foreign		(57)		_		_
State		8,642		4,795		(1,209)
Total deferred tax expense		54,229		69,822		18,492
Total income tax expense (benefit) from continuing operations	\$	64,060	\$	72,224	\$	16,314
Income tax expense (benefit) from discontinued operations	\$	633	\$	722	\$	2,081

The reconciliation of income tax from continuing operations computed at the U.S. statutory federal income tax rates to effective income tax rates is as follows:

	Years	Years Ended December 31					
	2022	2021	2020				
Statutory federal tax rate	21.0 %	21.0 %	21.0 %				
Foreign income taxes	0.2 %	— %					
State income taxes, net of federal tax benefit	3.3 %	1.8 %	5.1 %				
Tax effect of non-deductible warrant expense	— %	— %	16.6 %				
Tax effect of stock compensation	0.2 %	— %	— %				
Tax effect of other non-deductible expenses	0.1 %	0.5 %	3.2 %				
Change to state statutory tax rates	(0.1)%	— %	(5.4)%				
Other	(0.1)%	0.7 %	(1.1)%				
Effective income tax rate	24.6 %	24.0 %	39.4 %				

The income tax deductibility of the warrant expense is less than the expense required by GAAP because for tax purposes, the warrants are valued at a different time and under a different valuation method.

The reconciliation of income tax from discontinued operations computed at the U.S. statutory federal income tax rates to effective income tax rates is as follows:

	Yea	Years Ended December 31					
	2022	2021	2020				
Statutory federal tax rate	21.0 %	21.0 %	21.0 %				
State income taxes, net of federal tax benefit	1.8 %	1.8 %	1.8 %				
Change in federal statutory tax rates	%	%	%				
Effective income tax rate	22.8 %	22.8 %	22.8 %				

The Company files income tax returns in the U.S. Federal jurisdiction and various international, state and local jurisdictions. The returns may be subject to audit by the Internal Revenue Service ("IRS") and other jurisdictional authorities. International returns consist primarily of disclosure returns where the Company is covered by the sourcing rules of U.S. international treaties. The Company recognizes the impact of an uncertain income tax position in the financial statements if that position is more likely than not of being sustained on audit, based on the technical merits of the position. At December 31, 2022, 2021 and 2020, the Company's unrecognized tax benefits were \$0.0 million, \$0.0 million and \$0.0 million respectively. Accrued interest and penalties on tax positions are recorded as a component of interest expense. Interest and penalties expense was immaterial for 2022, 2021 and 2020.

The Company began to file, effective in 2008, federal tax returns under a common parent of the consolidated group that includes ABX and all the wholly-owned subsidiaries. The returns for 2021, 2020 and 2019 related to the consolidated group remain open to examination. The consolidated federal tax returns prior to 2019 remain open to federal examination only to the extent of net operating loss carryforwards carried over from or utilized in those years. State and local returns filed for 2005 through 2021 are generally also open to examination by their respective jurisdictions, either in full or limited to net operating losses. The Company files tax returns with the Republic of Ireland for its leasing operations based in Ireland.

NOTE K—ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Accumulated other comprehensive income (loss) includes the following items by components for the years ended December 31, 2022, 2021 and 2020 (in thousands):

	Defined Benefit Pension	Defined Benefit Post- Retirement	Foreign Currency Translation	Total
Balance as of January 1, 2020	(61,152)	(702)	(12)	(61,866)
Other comprehensive income (loss) before reclassifications:				
Actuarial gain (loss) for retiree liabilities	(25,712)	74	_	(25,638)
Foreign currency translation adjustment	_		(2)	(2)
Amounts reclassified from accumulated other comprehensive income:				
Actuarial costs (reclassified to salaries, wages and benefits)	3,763	124	_	3,887
Income Tax (Expense) or Benefit	5,008	(45)		4,963
Other comprehensive income (loss), net of tax	(16,941)	153	(2)	(16,790)
Balance as of December 31, 2020	(78,093)	(549)	(14)	(78,656)
Other comprehensive income (loss) before reclassifications:				
Actuarial gain for retiree liabilities	14,087	228	_	14,315
Foreign currency translation adjustment	_		(6)	(6)
Amounts reclassified from accumulated other comprehensive income:				
Actuarial costs (reclassified to salaries, wages and benefits)	7,056	188		7,244
Income Tax (Expense) or Benefit	(4,881)	(96)		(4,977)
Other comprehensive income (loss), net of tax	16,262	320	(6)	16,576
Balance as of December 31, 2021	(61,831)	(229)	(20)	(62,080)
Other comprehensive income (loss) before reclassifications:				
Actuarial gain (loss) for retiree liabilities	(56,223)	297	_	(55,926)
Amounts reclassified from accumulated other comprehensive income:				
Actuarial costs (reclassified to salaries, wages and benefits)	2,630	45	_	2,675
Income Tax (Expense) or Benefit	12,006	(77)		11,929
Other comprehensive income (loss), net of tax	(41,587)	265		(41,322)
Balance as of December 31, 2022	(103,418)	36	(20)	(103,402)

NOTE L—STOCK-BASED COMPENSATION

The Company's Board of Directors has granted stock incentive awards to certain employees and board members pursuant to a long term incentive plan which was approved by the Company's stockholders in May 2005 and in May 2015. Employees have been awarded non-vested stock units with performance conditions, non-vested stock units with market conditions and non-vested restricted stock. The restrictions on the non-vested restricted stock awards lapse at the end of a specified service period, which is typically three years from the date of grant. Restrictions could lapse sooner upon a business combination, death, disability or after an employee qualifies for retirement. The non-vested stock units will be converted into a number of shares of Company stock depending on performance and market conditions at the end of a specified service period, lasting approximately three years. The performance condition awards will be converted into a number of shares of Company stock based on the Company's average return on invested capital during the service period. Similarly, the market condition awards will be converted into a number of shares depending on the appreciation of the Company's stock compared to the Nasdaq Transportation

Index. Board members have been granted time-based awards that vest after a period of twelve months. The Company expects to settle all of the stock unit awards by issuing new shares of stock. The table below summarizes award activity.

				Year Ended I)ece	mber 31			
	2022 202			21		202	20		
	Number of gr		eighted verage nt-date r value	Number of Awards	Weighted average f grant-date fair value		Number of Awards	a gra	eighted verage ant-date ir value
Outstanding at beginning of period	978,188	\$	17.49	1,085,023	\$	17.14	963,832	\$	17.67
Granted	292,577		35.19	273,845		26.65	437,054		18.85
Converted	(327,160)		20.43	(316,430)		22.76	(278,163)		21.34
Expired	(3,000)		40.02	(58,650)		24.79	(34,100)		19.40
Forfeited	(11,400)		27.44	(5,600)		23.31	(3,600)		21.62
Outstanding at end of period	929,205	\$	21.83	978,188	\$	17.49	1,085,023	\$	17.14
Vested	497,128	\$	13.05	414,949	\$	11.43	460,685	\$	13.00

The average grant-date fair value of each performance condition award, non-vested restricted stock award and time-based award granted by the Company was \$33.84, \$26.69 and \$18.39 for 2022, 2021 and 2020, respectively, the fair value of the Company's stock on the date of grant. The average grant-date fair value of each market condition award granted was \$46.20, \$26.50 and \$20.41 for 2022, 2021 and 2020, respectively. The market condition awards were valued using a Monte Carlo simulation technique based on volatility over three years for the awards granted in 2022, 2021 and 2020 using daily stock prices and using the following variables:

	2022	2021	2020
Risk-free interest rate	2.5%	0.3%	0.7%
Volatility	38.3%	39.7%	35.0%

For the years ended December 31, 2022, 2021 and 2020, the Company recorded expense of \$8.3 million, \$7.4 million and \$7.5 million, respectively, for stock incentive awards. At December 31, 2022, there was \$8.7 million of unrecognized expense related to the stock incentive awards that is expected to be recognized over a weighted-average period of 1.4 years. As of December 31, 2022, none of the awards were convertible, 322,156 units of the Board members' time-based awards had vested and none of the outstanding shares of the restricted stock had vested. These awards could result in a maximum number of 1,214,655 additional outstanding shares of ATSG's common stock depending on service, performance and market results through December 31, 2024.

NOTE M—COMMON STOCK AND EARNINGS PER SHARE

Earnings per Share

The calculation of basic and diluted earnings per common share is as follows (in thousands, except per share amounts):

	December 31					
	2022		2021			2020
Numerator:						
Earnings from continuing operations - basic	\$	196,438	\$	228,980	\$	25,079
Gain from stock warrants revaluation, net of tax	\$	(170)	\$	(15,564)	\$	_
Convertible debt interest charge, net of tax	\$	3,051	\$	_	\$	_
Earnings from continuing operations - diluted	\$	199,319	\$	213,416	\$	25,079
Denominator:						
Weighted-average shares outstanding for basic earnings per share		73,611		68,853		59,128
Common equivalent shares:						
Effect of stock-based compensation awards and warrants		6,602		7,363		803
Effect of convertible debt		8,111		_		_
Weighted-average shares outstanding assuming dilution		88,324		76,216		59,931
Basic earnings per share from continuing operations	\$	2.67	\$	3.33	\$	0.42
Diluted earnings per share from continuing operations	\$	2.26	\$	2.80	\$	0.42

Basic weighted average shares outstanding for purposes of basic earnings per share are less than the shares outstanding due to 226,449 shares, 283,139 shares and 365,100 shares of restricted stock for 2022, 2021 and 2020, respectively, which are accounted for as part of diluted weighted average shares outstanding in diluted earnings per share.

The determination of diluted earnings per share requires the exclusion of the fair value re-measurement of the stock warrants recorded as a liability (see Note C), if such warrants have an anti-dilutive effect on earnings per share. The dilutive effect of the weighted-average diluted shares outstanding is calculated using the treasury method for periods in which equivalent shares have a dilutive effect on earnings per share. Under this method, the number of diluted shares is determined by dividing the assumed proceeds of the warrants recorded as a liability by the average stock price during the period and comparing that amount with the number of corresponding warrants outstanding.

In conjunction with the offering of the Convertible Notes (see note F), the Company also sold warrants for ATSG common stock, subject to customary anti-dilution adjustments. The amount received for these warrants and recorded in Stockholders' Equity in the Company's consolidated balance sheets was \$38.5 million. These warrants may result in 8.1 million additional shares of common stock, if ATSG's traded market price exceeds the strike price which is \$41.35 per share and is subject to certain adjustments under the terms of the warrant transactions.

NOTE N—SEGMENT AND REVENUE INFORMATION

The Company operates in two reportable segments. The CAM segment consists of the Company's aircraft and engine leasing operations. The ACMI Services segment consists of the Company's airline operations, including CMI agreements as well as ACMI, charter service and passenger service agreements that the Company has with its customers. The Company's aircraft maintenance services, aircraft modification services, ground services and other support services, are not large enough to constitute reportable segments and are combined in All other. Intersegment revenues are valued at arms-length market rates.

The Company's segment information from continuing operations is presented below (in thousands):

	Year Ended December 31					
	2022		2021			2020
Total revenues:						
CAM	\$	434,686	\$	370,287	\$	308,661
ACMI Services		1,404,348		1,185,128		1,147,279
All other		430,326		375,571		334,300
Eliminate inter-segment revenues		(223,891)		(196,704)		(219,665)
Total	\$	2,045,469	\$	1,734,282	\$	1,570,575
Customer revenues:						
CAM	\$	317,167	\$	273,288	\$	205,047
ACMI Services		1,404,254		1,185,113		1,147,252
All other		324,048		275,881		218,276
Total	\$	2,045,469	\$	1,734,282	\$	1,570,575

The Company's external customer revenues from other activities for the years ending December 31, 2022, 2021 and 2020 are presented below (in thousands):

	Year Ended December 31,						
		2022	2021			2020	
Aircraft maintenance, modifications and part sales	\$	145,998	\$	127,378	\$	114,425	
Ground services		107,080		99,133		73,949	
Other, including aviation fuel sales		70,970		49,370		29,902	
Total customer revenues	\$	324,048	\$	275,881	\$	218,276	

The Company recognized \$4.7 million of non-lease revenue that was reported in deferred revenue at the beginning of the year, compared to \$3.0 million in 2021. Current deferred revenue of \$17.0 million and \$8.3 million as of December 31, 2022 and 2021, respectively, for contracts with customers is derived from other activities as described above. Revenue related to deferred revenue will be recognized based on percentage of completion. Customers are required to pay deposits and may be required to make milestone payments for these services resulting in deferred revenue. Long-term contract assets were \$0.0 million as of December 31, 2022 compared to \$0.8 million as of December 31, 2021. Cash will be collected over the term of the multi-year agreement based on number cycles per period while revenue is recognized as parts are provided for engine maintenance services. This may result in a contract asset or liability based on the timing of engine maintenance services.

CAM's leases do not contain residual guarantees. Approximately 12% of CAM's leases to external customers contain purchase options at projected market values. As of December 31, 2022, minimum future payments from external customers for leased aircraft and equipment were scheduled to be \$276.1 million, \$220.5 million, \$197.5 million, \$171.7 million and \$139.5 million, respectively, for the next 5 years ending December 31, 2027 and \$253.1 million thereafter. CAM's external customer revenues for non-lease activities were \$35.1 million and \$18.6 million during 2022 and 2021 respectively for engine services and the sale of spare engine parts. ACMI Services external

customer revenues included approximately \$10.1 million, \$13.2 million and \$13.2 million for the years ended December 31, 2022, 2021 and 2020, respectively, for the rental income of specific aircraft included in the consideration paid by customers under certain contracts.

The Company had revenues of approximately \$839.0 million, \$701.9 million and \$699.2 million for 2022, 2021 and 2020, respectively, derived primarily from aircraft leases in foreign countries, routes with flights departing from or arriving in foreign countries or aircraft maintenance and modification services performed in foreign countries. All revenues from the CMI agreement with DHL and the ATSA agreement with ASI are attributed to U.S. operations. As of December 31, 2022 and 2021, the Company had 25 and 21 aircraft, respectively, deployed outside of the United States.

The Company's other segment information from continuing operations is presented below (in thousands):

—		Year Ended December 31,					
_	2022	2021	2020				
Depreciation and amortization expense:							
CAM \$	231,663	\$ 203,675	\$ 172,003				
ACMI Services	96,996	101,541	101,748				
All other	2,405	3,232	4,316				
Total \$	331,064	\$ 308,448	\$ 278,067				
Interest expense							
CAM	30,880	38,160	39,304				
ACMI Services	13,818	18,066	20,542				
Segment earnings (loss):							
CAM \$	143,008	\$ 106,161	\$ 77,424				
ACMI Services	95,198	158,733	114,128				
All other	2,579	112	(5,933)				
Net unallocated interest expense	(1,748)	(2,525)	(2,825)				
Impairment of aircraft and related assets	_	_	(39,075)				
Net gain (loss) on financial instruments	9,022	29,979	(100,771)				
Debt issuance costs	_	(6,505)	_				
Other non-service components of retiree benefit costs, net	20,046	17,827	12,032				
Loss from non-consolidated affiliate	(7,607)	(2,577)	(13,587)				
Pre-tax earnings from continuing operations	260,498	\$ 301,205	\$ 41,393				

The Company's assets are presented below by segment (in thousands). Cash and cash equivalents are reflected in Assets - All other.

	 December 31					
	2022		2021		2020	
Assets:						
CAM	\$ 2,510,559	\$	2,218,012	\$	2,037,628	
ACMI Services	921,522		872,311		811,516	
All other	 157,812		177,012		152,601	
Total	\$ 3,589,893	\$	3,267,335	\$	3,001,745	

During 2022, the Company had capital expenditures for property and equipment of \$83.7 million and \$514.3 million for the ACMI Services and CAM, respectively.

NOTE O—DISCONTINUED OPERATIONS

The Company's results of discontinued operations consist primarily of changes in liabilities related to benefits for former employees previously associated with ABX's former hub operation for DHL. The Company may incur expenses and cash outlays in the future related to pension obligations, self-insurance reserves for medical expenses and wage loss for former employees. For the years ending December 31, 2022 and 2021, the Company had liabilities of \$1.1 million and \$3.8 million, respectively, for employee compensation and benefits. During 2022, 2021 and 2020, pre-tax earnings from discontinued operations were \$2.8 million, \$3.2 million and \$9.1 million, respectively.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

As of December 31, 2022, the Company carried out an evaluation, under the supervision and with the participation of the Company's Chief Executive Officer and Chief Financial Officer of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based upon the evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective to ensure that information required to be disclosed by the Company in the reports filed or submitted by it under the Exchange Act is recorded, processed, summarized and reported within time periods specified in the Securities and Exchange Commission rules and forms and is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

(b) Changes in Internal Controls

There were no changes in internal control over financial reporting during the most recently completed fiscal year that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Management's Annual Report on Internal Controls over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control system is 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.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2022. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework* (2013).

Based on management's assessment of those criteria, management believes that, as of December 31, 2022, the Company's internal control over financial reporting was effective.

The effectiveness of our internal controls over financial reporting as of December 31, 2022 has been audited by our independent registered accounting firm as stated in its attestation report that follows this Form 10-K.

March 1, 2023

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Air Transport Services Group, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Air Transport Services Group, Inc. and subsidiaries (the "Company") as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements and financial statement schedule as of and for the year ended December 31, 2022, of the Company and our report dated March 1, 2023, expressed an unqualified opinion on those consolidated financial statements and financial statement schedule.

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 Annual Report on Internal Controls over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Deloitte & Touche LLP

Cincinnati, Ohio March 1, 2023

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The response to this Item is incorporated herein by reference to the definitive Proxy Statement for the 2023 Annual Meeting of Stockholders (the "2023 Proxy Statement") under the captions "Election of Directors," "Delinquent Section 16(a) Reports" and "Corporate Governance and Board Matters."

ITEM 11. EXECUTIVE COMPENSATION

The response to this Item is incorporated herein by reference to the 2023 Proxy Statement under the captions "Executive Compensation" (excluding the information under the caption "Pay Versus Performance") and "Director Compensation."

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

The responses to this Item are incorporated herein by reference to the 2023 Proxy Statement under the captions "Equity Compensation Plan Information," "Voting at the Meeting," "Stock Ownership of Management" and "Common Stock Ownership of Certain Beneficial Owners."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The response to this Item is incorporated herein by reference to the 2023 Proxy Statement under the captions "Related Person Transactions" and "Independence."

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The response to this Item is incorporated herein by reference to the 2023 Proxy Statement under the caption "Fees of the Independent Registered Public Accounting Firm."

PART IV

ITEM 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

(a) List of Documents filed as part of this Form 10-K:

(1) Consolidated Financial Statements

The following are filed in Part II, Item 8 of this Form 10-K:

Report of Independent Registered Public Accounting Firm (PCAOB ID No. 34)

Consolidated Balance Sheets

Consolidated Statements of Operations

Consolidated Statements of Comprehensive Income

Consolidated Statements of Cash Flows

Consolidated Statements of Stockholders' Equity

Notes to Consolidated Financial Statements

(2) Financial Statement Schedules

Schedule II—Valuation and Qualifying Account

Description	b	alance at eginning of period	ch	dditions arged to nd expenses	Deductions	lance at end of period
Accounts receivable reserve:						
Year ended:						
December 31, 2022	\$	741,806	\$	395,339	\$ 198,084	\$ 939,061
December 31, 2021		996,860		168,360	423,414	741,806
December 31, 2020		974,882		880,967	858,989	996,860

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

(3) Exhibits

The following exhibits are filed with or incorporated by reference into this Form 10-K. Exhibit numbers bearing an asterisk (*) identifies a management contract or compensatory plan or arrangement.

Exhibit No.	Description of Exhibit			
	Articles of Incorporation			
3.1	Restated Certificate of Incorporation of Air Transport Services Group, Inc. (25)			
3.2	First Amendment to Restated Certificate of Incorporation of Air Transport Services Group, Inc. (28)			
3.3	Amended and Restated Bylaws of Air Transport Services Group, Inc. (10)			

	Instruments defining the rights of security holders	
4.1	Indenture, dated September 29, 2017, by and between Air Transport Services Group, Inc. and U.S. Bank National Association. (22)	
4.2	Form of 1.125% Convertible Senior Notes due 2024 (included in Exhibit 4.1). (22)	
4.3	Description of Capital Stock registered under the Securities Exchange Act. (32)	
4.4	Indenture, dated January 28, 2020, by and among Cargo Aircraft Management, Inc., Air Transport Services Group, Inc., the guarantors named therein and Regions Bank, as trustee. (31)	
4.5	Form of 4.750% Senior Notes due 2028 (included in Exhibit 4.4). (31)	
4.6	Supplemental Indenture, dated as of April 13, 2021, among Cargo Aircraft Management, Inc., the guarantors party thereto, and Regions Bank, an Alabama state banking corporation, as trustee. (36)	
	Material Contracts	
10.1*	Director compensation fee summary. (2)	
10.2	Guaranty by Air Transport Services Group, Inc. in favor of DHL Express (USA), Inc., dated May 8, 2009 (3), as amended by Amendment to the Guaranty dated as of January 14, 2015 (14)	
10.3*	Form of Time-Based Restricted Stock Award Agreement under Air Transport Services Group, Inc. 2005 Amended and Restated Long-Term Incentive Plan. (3)	
10.4*	Form of Performance-Based Stock Unit Award Agreement under Air Transport Services Group, Inc. 2005 Amended and Restated Long-Term Incentive Plan. (3)	
10.5*	Form of Restricted Stock Unit Award Agreement under Air Transport Services Group, Inc. 2005 Amended and Restated Long-Term Incentive Plan. (12)	
10.6	Conversion Agreement dated August 3, 2010, between Cargo Aircraft Management, Inc., M&B Conversions Limited and Israel Aerospace Industries Ltd. (4)	
10.7	Credit Agreement, dated as of May 9, 2011, among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc., the Lenders from time to time party thereto, SunTrust Bank, as Administrative Agent, Regions Bank and JPMorgan Chase Bank, N.A., as Syndication Agents, and Bank of America, N.A., as Documentation Agent. (5)	
10.8	Guarantee and Collateral Agreement, dated as of May 9, 2011, made by Cargo Aircraft Management, Inc. and certain of its Affiliates in favor of SunTrust Bank, as Administrative Agent. (5)	
10.9	Amendment to Confidentiality and Standstill Agreement, dated as of June 11, 2012, between Air Transport Services Group, Inc. and Red Mountain Capital Partners LLC. (6)	
10.10*	Form of amended and restated change-in-control agreement in effect between Air Transport Services Group, Inc. and its executive officers. (8)	
10.11	Amendment to the Credit Agreement, dated July 20, 2012, among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc., the Lenders from time to time party thereto, SunTrust Bank, as Administrative Agent, Regions Bank and JPMorgan Chase Bank, N.A., as Syndication Agents, and Bank of America, N.A., as Documentation Agent. (7)	
10.12	Amended and Restated Lease Agreement, dated December 27, 2012, between Clinton County Port Authority and Air Transport Services Group, Inc. (9)	
10.13	Loan Agreement, Chapter 166, Ohio Revised Code, dated December 1, 2012, between the Director of Development Services Agency of Ohio and Clinton County Port Authority. (9)	

10.14 Guaranty Agreement, dated December 1, 2012, among Air Transport Services Group, Inc., Airborne Maintenance and Engineering Services, Inc., Air Transport International, LLC. Clinton County Port Authority, the Director of Development Services Agency of Ohio, and the Huntington National Bank. (9) 10.15 Lease Agreement for the Jump Hangar Facility, dated December 1, 2012, between Clinton County Port Authority and Air Transport International, LLC. (9) 10.16 Leasehold Mortgage, Assignment of Leases and Rents, Security Agreement and Financing Statement, dated December 1, 2012, among Air Transport International, LLC and the Director of Development Services Agency of Ohio. (9) 10.17 Bond Purchase Agreement, dated December 13, 2012, among the State of Ohio, acting by and through its Treasurer of State, the Development Services Agency of Ohio, acting by and through a duly authorized representative, Clinton County Port Authority, Air Transport International, LLC and Stifel, Nicolaus & Company, Inc. (9) 10.18* Air Transport Services Group, Inc. Nonqualified Deferred Compensation Plan, dated October 31, 2013. (11) 10.19 Second Amendment to the Credit Agreement, dated October 22, 2013, among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc., the Lenders from time to time party thereto, SunTrust Bank, as Administrative Agent, Regions Bank and JPMorgan Chase Bank, N.A., as Syndication Agents, and Bank of America, N.A., as Documentation Agents. (11) 10.20 Third Amendment to Credit Agreement and First Amendment to Guarantee and Collateral Agreement, dated May 6, 2014, by and among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc., each of the Guarantors party thereto, each of the financial institutions party thereto as "Lenders", and SunTrust Bank as Administrative Agent. (13) 10.21 Amended and Restated Air Transportation Services Agreement between DHL Network Operations (USA), Inc., ABX Air, Inc. and Cargo Aircraft Management, Inc., dated January 14, 2015. Those portions of the Agreement marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC. (14) 10.22 Fifth Amendment to Credit Agreement, dated May 8, 2015, by and among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc., each of the Guarantors party thereto, each of the financial institutions party thereto as "Lenders" and SunTrust Bank, in its capacity as Administrative Agent. (15) 10.23 Air Transportation Services Agreement, dated as of March 8, 2016, by and between Airborne Global Solutions, Inc. and Amazon Fulfillment Services Inc. Those portions of the Agreement marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC. (16) 10.24 Investment Agreement, dated as of March 8, 2016, by and between Air Transport Services Group, Inc., and Amazon.com, Inc. Those portions of the Agreement marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC. (16) 10.25 Warrant to Purchase Common Stock, issued March 8, 2016, by and between Air Transport Services Group, Inc. and Amazon.com. Those portions of the Warrant marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC. (16) 10.26 Stockholders Agreement, dated as of March 8, 2016, by and between Air Transport Services Group, Inc., and Amazon.com, Inc. Those portions of the Agreement marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC. (16) 10.27 Amended and Restated Credit Agreement, dated as of May 31, 2016, among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc., the Lenders from time to time party hereto, SunTrust Bank, as Administrative Agent, Regions Bank and JPMorgan Chase

Bank, N.A., as Syndication Agents and Bank of America, N.A., as Documentation Agent. (17)

10.28	Guarantee and Collateral Agreement made by Cargo Aircraft Management, Inc. and certain of its Affiliates in favor of SunTrust Bank, as Administrative Agent, dated as of May 31, 2016. (17)
10.29*	Air Transport Services Group, Inc. Executive Incentive Compensation Plan, last modified August 5, 2016. (17)
10.30*	Form of Time-Based Restricted Stock Award Agreement under Air Transport Services Group, Inc. 2015 Amended and Restated Long-Term Incentive Plan. (18)
10.31*	Form of Performance-Based Stock Unit Award Agreement under Air Transport Services Group, Inc. 2015 Amended and Restated Long-Term Incentive Plan. (18)
10.32*	Form of Restricted Stock Unit Award Agreement under Air Transport Services Group, Inc. 2015 Amended and Restated Long-Term Incentive Plan. (18)
10.33	Stock Purchase Agreement, dated June 21, 2016, between Air Transport Services Group, Inc. and Red Mountain Partners, L.P. (19)
10.34	First Amendment to the Amended and Restated Credit Agreement, dated as of March 31, 2017, among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc., the Lenders from time to time party hereto, SunTrust Bank, as Administrative Agent, Regions Bank and JPMorgan Chase Bank, N.A., as Syndication Agents and Bank of America, N.A., as Documentation Agent. (20)
10.35	Underwriting Agreement, dated May 31, 2017, by and among Air Transport Services Group, Inc., Red Mountain Partners, L.P. and Merrill Lynch, Pierce, Fenner & Smith Incorporated. (21)
10.36	Second Amendment to the Amended and Restated Credit Agreement, entered into on September 25, 2017, by and among Air Transport Services Group, Inc., Cargo Aircraft Management, Inc., as borrower, the guarantors party thereto, the lenders party thereto and SunTrust Bank, as Administrative Agent. (23)
10.37	Purchase Agreement, dated September 25, 2017, by and among Air Transport Services Group, Inc. and Goldman Sachs & Co. LLC and SunTrust Robinson Humphrey, Inc., as representatives of the initial purchasers named therein. (22)
10.38	Base Convertible Bond Hedge Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Goldman Sachs & Co. LLC. (22)
10.39	Base Convertible Bond Hedge Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Bank of America, N.A. (22)
10.40	Base Convertible Bond Hedge Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and JPMorgan Chase Bank, National Association, London Branch. (22)
10.41	Base Convertible Bond Hedge Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Bank of Montreal. (22)

10.42 Additional Convertible Bond Hedge Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Goldman Sachs & Co. LLC. (22) Additional Convertible Bond Hedge Confirmation, dated September 25, 2017, between Air 10.43 Transport Services Group, Inc., and Bank of America, N.A. (22) 10.44 Additional Convertible Bond Hedge Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and JPMorgan Chase Bank, National Association, London Branch. (22) 10.45 Additional Convertible Bond Hedge Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Bank of Montreal. (22) 10.46 Bank Warrant Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Goldman Sachs & Co. LLC. (22) 10.47 Bank Warrant Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Bank of America, N.A. (22) 10.48 Bank Warrant Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and JPMorgan Chase Bank, National Association, London Branch. (22) Bank Warrant Confirmation, dated September 25, 2017, between Air Transport Services Group, 10.49 Inc., and Bank of Montreal. (22) 10.50 Additional Warrant Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Goldman Sachs & Co. LLC. (22) 10.51 Additional Warrant Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Bank of America, N.A. (22) 10.52 Additional Warrant Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and JPMorgan Chase Bank, National Association, London Branch. (22) 10.53 Additional Warrant Confirmation, dated September 25, 2017, between Air Transport Services Group, Inc., and Bank of Montreal. (22) 10.54* Air Transport Services Group, Inc. Severance Plan for Senior Management. (24) 10.55 Confirmation Agreement, dated August 23, 2017, between Mutual of America Life Insurance Company and ABX Air, Inc., relating to the ABX Air Retirement Income Plan. (24) 10.56 Second Amended and Restated Credit Agreement, dated as of November 9, 2018, among Cargo Aircraft Management, Inc., as borrower: Air Transport Services Group, Inc.; the lenders from time to time party thereto; SunTrust Bank, as Administrative Agent; Bank of America, N.A. and PNC Bank, National Association, as Co-Syndication Agents; and Regions Bank, JPMorgan Chase Bank, N.A. and Branch Banking and Trust Company, as Co-Documentation Agents. (26) 10.57 Second Amended and Restated Guarantee and Collateral Agreement made by Cargo Aircraft Management, Inc. and certain of its Affiliates in favor of SunTrust Bank, as Administrative Agent, dated as of November 9, 2018. (26) 10.58 Purchase and Sale Agreement, by and among Air Transport Services Group, Inc. and the Sellers and the Sellers' Representative, dated as of October 1, 2018. Pursuant to Item 601(b)(2) of Regulation S-K, certain exhibits and schedules have been omitted from this filing. The registrant agrees to furnish the Commission on a supplemental basis a copy of any omitted exhibit or schedule. (26) 10.59 Investment Agreement, dated as of December 20, 2018, by and between Air Transport Services Group, Inc. and Amazon.com, Inc. Those portions of the Agreement marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC. (26)

10.60 Warrant to Purchase Common Stock, issued December 20, 2018, by and between Air Transport Services Group, Inc. and Amazon.com. Inc. Those portions of the Warrant marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC. (266 10.61 Amended and Restated Stockholders Agreement, dated as of December 20, 2018, by and between Air Transport Services Group, Inc. and Amazon.com, Inc. Those portions of the Agreement marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC. (27) 10.62 First Amendment to Second Amended and Restated Credit Agreement, dated as of February 13. 2019, by and among Cargo Aircraft Management, Inc., as Borrower; Air Transport Services Group, Inc.; each of the Guarantors party hereto; each of the financial institutions party hereto as "Lenders"; and SunTrust Bank, in its capacity as Administrative Agent. (29) Second Amendment to Second Amended and Restated Credit Agreement, dated as of May 24, 10.63 2019, by and among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc.; each of the financial institutions party hereto as "Lenders"; and SunTrust Bank, in its capacity as Administrative Agent. (29) 10.64 Third Amendment to Second Amended and Restated Credit Agreement, dated as of November 4, 2019, by and among Cargo Aircraft Management, Inc., as Borrower; Air Transport Services Group, Inc.; each of the financial institutions party hereto as "Lenders"; and SunTrust Bank, in its capacity as Administrative Agent. (30) 10.65 Fourth Amendment to Second Amended and Restated Credit Agreement, dated as of January 28, 2020, by and among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc.; each of the financial institutions party thereto as Lenders; and SunTrust Bank, in its capacity as Administrative Agent. (31) 10.66 Payroll Support Program Agreement, dated May 20, 2020, by and between Omni Air International, LLC and the U.S. Department of Treasury under the Coronavirus Aid, Relief and Economic Security Act. (33) Payroll Support Program Agreement, dated May 29, 2020, by and between Air Transport 10.67 International, Inc. and the U.S. Department of Treasury under the Coronavirus Aid, Relief and Economic Security Act. (33) 10.68 Warrant to Purchase Common Stock, issued May 29, 2020, by and between Air Transport Services Group, Inc. and Amazon.com, Inc. Those portions of this Agreement marked with an [*] have been excluded because the information is both (i) not material and (ii) would be competitively harmful if publicly disclosed. (33) 10.69 Amendment to Warrants to Purchase Common Stock, issued December 14, 2020, by and between Air Transport Services Group, Inc. and Amazon.com, Inc. (34) Payroll Support Program Extension Agreement, dated February 2, 2021, by and between Omni 10.70 Air International, LLC and the U.S. Department of Treasury under Subtitle A of Title IV of Division N of the Consolidated Appropriations Act, 2021. (37) 10.71 Amendment to Investment Agreement, dated as of March 5, 2021, by and between Air Transport Services Group, Inc., and Amazon.com, Inc. (37) 10.72 Third Amended and Restated Credit Agreement, dated as of April 6, 2021, by and among Cargo Aircraft Management, Inc., as borrower, Air Transport Services Group, Inc., the lenders and other financial institutions from time to time a party thereto, Truist Bank, as administrative agent and a lender, Bank of America, N.A., JPMorgan Chase Bank, N.A., and PNC Bank, National Association, as co-syndication agents and Regions Bank, as documentation agent. (35) 10.73* Summary of the Key Terms and Conditions of the Air Transport Services Group, Inc. Amended and Restated 2015 Long-Term Incentive Plan. (38) Air Transport Services Group, Inc. Amended and Restated 2015 Long-Term Incentive Plan. 10.74* (38)10.75* Letter agreement setting out a compensation arrangement between Mike Berger, Chief Commercial Officer, and Air Transport Services Group, Inc., dated May 10, 2022. (39)

10.76	First Amendment to Third Amended and Restated Credit Agreement and Other Credit Documents, dated as of October 19, 2022, by and among Cargo Aircraft Management, Inc., as Borrower, Air Transport Services Group, Inc. ("ATSG"), certain other subsidiaries of ATSG party thereto, each of the financial institutions party thereto as "Lenders" and Truist Bank, in its capacity as Administrative Agent (40)
	Code of Ethics
14.1	Code of Ethics—CEO and CFO (1)
	List of Significant Subsidiaries
21.1	List of Significant Subsidiaries of Air Transport Services Group, Inc., filed within.
	Consent of experts and counsel
23.1	Consent of independent registered public accounting firm, filed herewith.
	Certifications
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

its

- (1) The Company's Code of Ethics can be accessed from the Company's Internet website at www.atsginc.com.
- (2) Incorporated by reference to the Company's Proxy Statement for the 2022 Annual Meeting of Stockholders, Corporate Governance and Board Matters, filed April 14, 2022, with the Securities and Exchange Commission.
- (3) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2010.
- (4) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 3, 2010. Those portions of the Agreement marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC.
- (5) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 3, 2011.
- (6) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on June 18, 2012.
- (7) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on July 24, 2012.
- (8) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 2, 2012.

- (9) Incorporated by reference to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 4, 2013. Those portions of the Agreement marked with an [*] have been omitted pursuant to a request for confidential treatment and have been filed separately with the SEC.
- (10) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on November 7, 2022.
- (11) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 6, 2013.
- (12) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 12, 2014.
- (13) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 5, 2014.
- Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 8, 2015, as amended by the Company's Quarterly Report on Form 10-Q/A filed with the Securities and Exchange Commission on August 7, 2015.
- (15) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 7, 2015.
- Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2016.
- (17) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 8, 2016.
- (18) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on March 15, 2016.
- (19) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on June 27, 2016.
- (20) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 8, 2017.
- (21) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on June 2, 2017.
- (22) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on September 29, 2017.
- (23) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on September 25, 2017.
- (24) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2017.
- (25) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 8, 2018.
- Incorporated by reference to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 1, 2019.
- Incorporated by reference to the Company's Annual Report on Form 10-K/A filed with the Securities and Exchange Commission on March 29, 2019.
- (28) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 6, 2019.
- (29) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on May 29, 2019.
- (30) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on November 6, 2019.
- (31) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on January 28, 2020.
- (32) Incorporated by reference to the Company's Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 2, 2020.
- (33) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 7, 2020.
- Incorporated by reference to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 1, 2021.

- (35) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on April 6, 2021.
- (36) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on April 13, 2021.
- (37) Incorporated by reference to the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2021
- (38) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on June 1, 2022.
- (39) Incorporated by reference to the Company's Form 10-Q filed with the Securities and Exchange Commission on August 9, 2022.
- (40) Incorporated by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on October 20, 2022.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

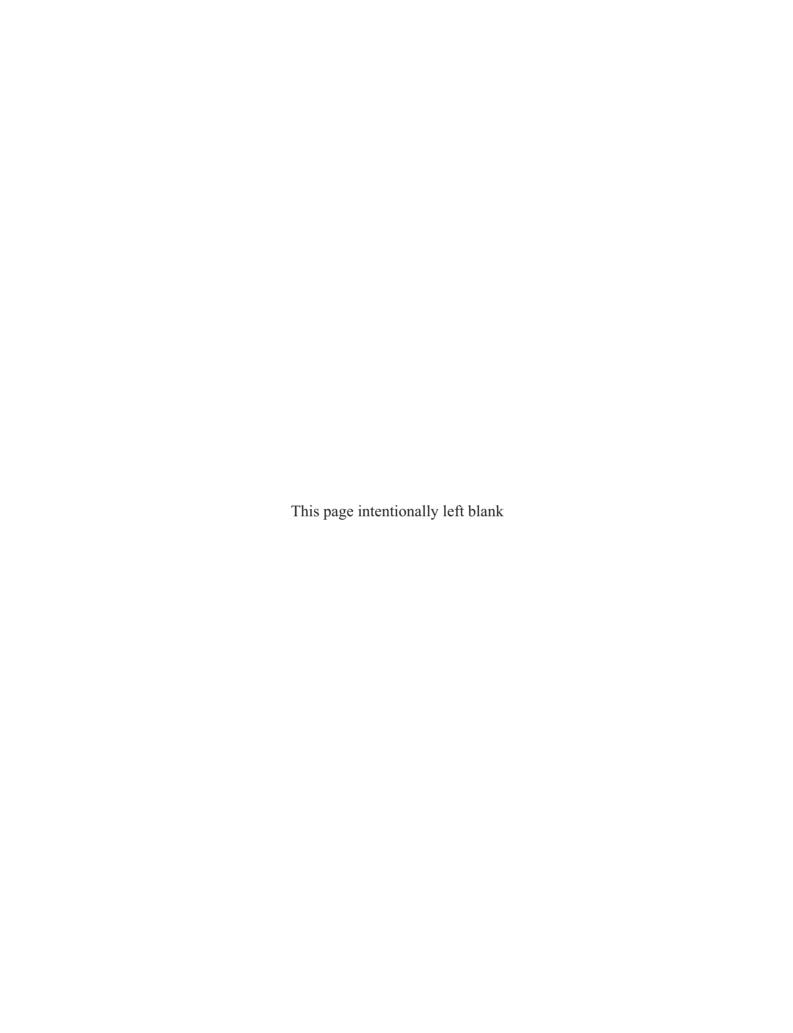
Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

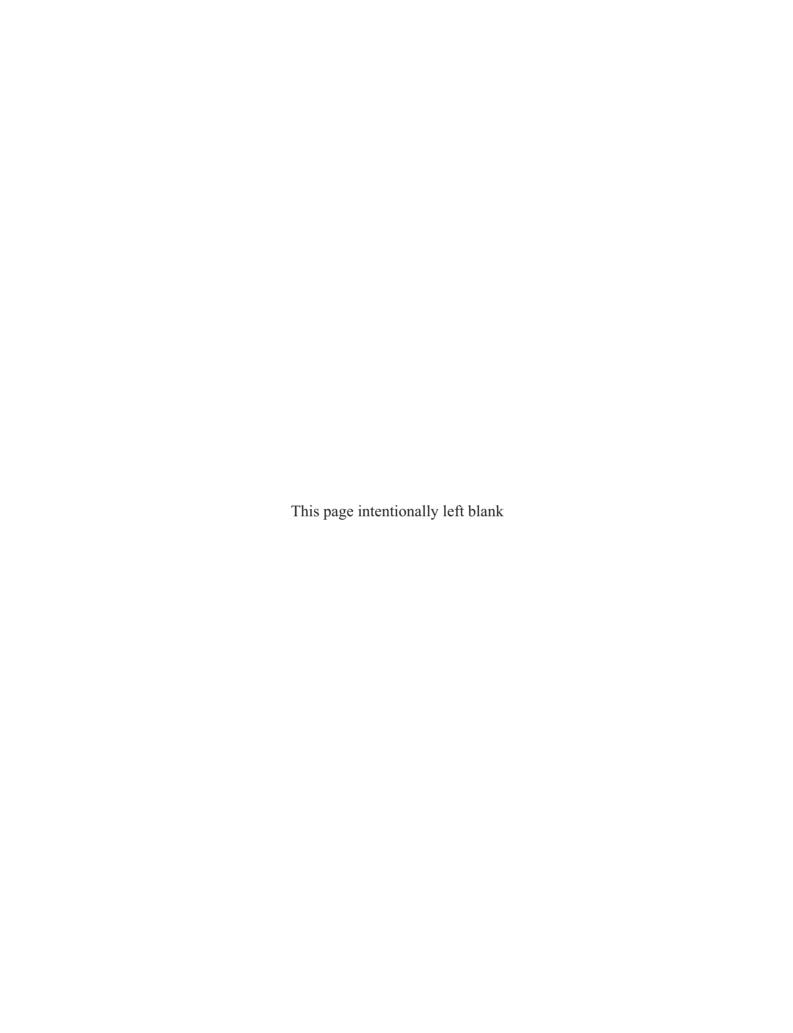
Air Transport Services Group, Inc.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Richard F. Corrado	Chief Executive Officer (Principal Executive Officer)	March 1, 2023
Richard F. Corrado	_	

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Joseph C. Hete	Director and Chairman of the Board	March 1, 2023
Joseph C. Hete		
/S/ PHYLLIS J. CAMPBELL	Director	March 1, 2023
Phyllis J. Campbell	•	
	Director, President and Chief Executive Officer	
/S/ RICHARD F. CORRADO Richard F. Corrado	(Principal Executive Officer)	March 1, 2023
/S/ JEFFREY A. DOMINICK	Director	March 1, 2023
Jeffrey A. Dominick		
/s/ RAYMOND E. JOHNS JR.	Director	March 1, 2023
Raymond E. Johns, Jr.		
/s/ Laura J. Peterson	Director	March 1, 2023
Laura J. Peterson		
/S/ RANDY D. RADEMACHER	Lead Independent Director	March 1, 2023
Randy D. Rademacher	•	,
/s/ J. Christopher Teets	Director	March 1, 2023
J. Christopher Teets	•	,
/s/ Jeffrey J. Vorholt	Director	March 1, 2023
Jeffrey J. Vorholt	•	
/s/ Paul S. Williams	Director	March 1, 2023
Paul S. Williams	•	
	Chief Financial Officer (Principal Financial	
/s/ Quint O. Turner	Officer and Principal Accounting Officer)	March 1, 2023
Quint O. Turner		





INVESTOR INFORMATION

STOCK INFORMATION

NASDAQ: ATSG

Company documents electronically filed with the SEC also may be found at www.atsginc.com

INVESTOR RELATIONS

Inquiries may be directed to investor.relations@atsginc.com

INDEPENDENT AUDITORS

Deloitte & Touche LLP Cincinnati, OH

REGISTRAR & TRANSFER AGENT

Computershare Investor Services 877.581.5548 or 781.575.2879 www.computershare.com/investor P.O. Box 505000 462 South 4th Street, Ste 1600 Louisville, KY 40233-5000

ANNUAL MEETING

The annual meeting of stockholders will be May 24, 2023 at 11am EDT via a live audio webcast at www.virtualshareholdermeeting.com/ATSG2023

BOARD OF DIRECTORS



Back Row: Jeffrey A. Dominick, Richard F. Corrado, Randy D. Rachemacher, Jeffrey J. Vorholt, Paul S. Williams
Center Row: Raymond E. Johns, Jr., Joseph C. Hete, Phyllis J. Campbell
Front Row: Laura Peterson, J. Christopher Teets























Air Transport Services Group 145 Hunter Drive Wilmington, OH 45177