Risk Factors Comparison 2024-01-31 to 2023-01-27 Form: 10-K

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An investment in our common stock or debt securities involves risks and uncertainties **,** and our actual results and future trends may differ materially from our past or projected future performance. We urge investors to consider carefully the risk factors described below in evaluating the information contained in this report. Risks Related to Our Business and Operations We depend heavily on commercial airlines, subjecting us to unique risks. Market conditions have a significant impact on demand for our commercial aircraft and related services. The commercial aircraft market is predominantly driven by long- term trends in airline passenger and cargo traffic. The principal factors underlying long- term traffic growth are sustained economic growth and political stability both in developed and emerging markets. Demand for our commercial aircraft is further influenced by airline profitability, availability of aircraft financing, world trade policies, government- to- government relations, technological advances, price and other competitive factors, fuel prices, terrorism, pandemics, epidemics and environmental regulations. Historically, the airline industry has been cyclical and very competitive and has experienced significant profit swings and constant challenges to be more cost competitive. Significant deterioration in the global economic environment, the airline industry generally or the financial stability of one or more of our major customers could result in fewer new orders for aircraft or services, or could cause customers to seek to postpone or cancel contractual orders and / or payments to us, which could result in lower revenues, profitability and cash flows and a reduction in our contractual backlog. In addition, because our commercial aircraft backlog consists of aircraft scheduled for delivery over a period of several years, any of these macroeconomic, industry or customer impacts could unexpectedly affect deliveries over a long period. We enter into firm fixed- price aircraft sales contracts with indexed price escalation clauses, which could subject us to losses if we have cost overruns or if increases in our costs exceed the applicable escalation rate. Commercial aircraft sales contracts are often entered into years before the aircraft are delivered. In order to help account for economic fluctuations between the contract date and delivery date, aircraft pricing generally consists of a fixed amount as modified by price escalation formulas derived from labor, commodity and other price indices. Our revenue estimates are based on current expectations with respect to these escalation formulas, but the actual escalation amounts are outside of our control. Escalation factors can fluctuate significantly from period to period. Changes in escalation amounts can significantly impact revenues and operating margins in our **BCA** ~~Commercial Airplanes~~ business. We derive a significant portion of our revenues from a limited number of commercial airlines. We can make no assurance that any customer will exercise purchase options, fulfill existing purchase commitments or purchase additional products or services from us. In addition, fleet decisions, airline consolidations or financial challenges involving any of our major commercial airline customers could significantly reduce our revenues and limit our opportunity to generate profits from those customers. Airlines also are experiencing increased fuel and other costs, and the global economy ~~is~~ **has** ~~experiencing~~ **experienced** high inflation. Our Commercial Airplanes business depends on our ability to maintain a healthy production system, ensure every airplane in our production system conforms to ~~our~~ exacting specifications, achieve planned production rate targets, successfully develop and certify new aircraft or new derivative aircraft, and meet or exceed stringent performance and reliability standards. The commercial aircraft business is extremely complex, involving extensive coordination and integration with U. S **.** and non- U. S. suppliers, highly- skilled labor performed by thousands of employees of ours and other partners, and stringent and evolving regulatory requirements and performance and reliability standards. ~~The~~ **We have experienced and may continue to experience production quality issues, including in our supply chain. On January 10, 2024, the** FAA **notified us that it** has ~~been working~~ **initiated an investigation into our quality control system. This was followed by the FAA announcing actions** to ~~implement~~ **increase its oversight of us, including conducting (1) an audit involving the 737- 9 production line and suppliers to evaluate compliance with approved quality procedures, (2) increased monitoring of 737- 9 in- service events, and (3) an assessment of** safety ~~reforms such as~~ **risks around delegated authority and quality oversight, and examination of options to move** ~~the~~ **these** ~~2018~~ **functions under independent third parties. On January 24, 2024, the** FAA **stated** ~~Reauthorization Act and the 2020 Aircraft Certification, Safety and Accountability Act (ACSAA). One of these, section 116 of the ACSAA prohibited the FAA from issuing a type certificate to aircraft after December 27, 2022 unless the aircraft' s flight crew alerting system met certain specifications. The Consolidated Appropriations Act, 2023 amended Section 116 of the ACSAA, such~~ that ~~applications~~ **it will not approve production rate increases or additional production lines** for ~~original or amended type certifications that were submitted to the FAA prior to December 27, 2020, including those~~ -- **the** ~~of the 737- 7 and 737- 10, are no longer subject to the crew alerting specifications of Section 116. Additionally, beginning one year after the FAA issues the type certificate for the 737- 10, any new~~ 737 MAX ~~aircraft must include certain safety enhancements~~ **until it is satisfied that we are in full compliance with required quality control procedures. We are currently unable** to ~~be issued~~ **reasonably estimate what impact the January 5, 2024 Alaska Airlines accident** ~~an~~ **and** ~~original airworthiness certification by~~ the **related** FAA **actions** ~~. These enhancements are included in Boeing' s application for the certification for the 737- 10, and the sufficiency of these enhancements~~ will ~~be determined by the FAA. Beginning three years after the issuance of a type certificate for the 737- 10, all previously delivered 737 MAX aircraft must be retrofitted with these safety enhancements. As the holder of the type certificate, Boeing is required to bear any costs of these safety enhancement retrofits. We~~ have **on** ~~provisioned for the estimated costs associated with the safety enhancements and do not expect those costs to be material. If we experience delays in achieving certification and / or~~ **our financial position** ~~incorporating safety enhancements~~ , ~~future revenues,~~ **results of operations and** cash flows ~~and results of operations could be adversely impacted~~ . **The** ~~Comparable agencies in other countries may adopt similar changes. To the extent the FAA or similar regulatory agencies outside the U. S. implement more stringent~~

~~regulations, we may incur additional compliance costs. In addition, the~~ introduction of new aircraft programs and / or derivatives, such as the 777X, 737- 7 and 737- 10, involves ~~increased~~ risks associated with meeting development, testing, certification and production schedules. **We are following the lead of the FAA as we work through the certification process, and the FAA will ultimately determine the timing of certification and entry into service.** In addition, **the development schedules of the 737- 7 and 737- 10 could be impacted by actions resulting from the Alaska Airlines accident. If** we ~~have experienced~~ - **experience delays** ~~production quality issues, including~~ in **achieving certification and /** ~~our~~ - **or** ~~supply chain~~ **incorporating safety enhancements** , **our financial position** ~~which have contributed to lower 787 deliveries~~ , **results** ~~including a suspension~~ of **operations** ~~787 deliveries from May 2021 to August 2022. We continue to conduct inspections~~ and **cash flows would be adversely impacted** ~~rework on built and stored 787 aircraft~~ . A number of our customers have contractual remedies, including compensation for late deliveries or rights to reject individual airplane deliveries based on delivery delays. Delays on the 737, 777X and 787 programs have resulted in, and may continue to result in, customers having the right to terminate orders, be compensated for late deliveries and / or substitute orders for other Boeing aircraft. We must minimize disruption caused by production changes, achieve operational stability and implement productivity improvements in order to meet customer demand and maintain our profitability. We have previously announced plans to adjust production rates on several of our commercial aircraft programs. ~~The 787 program is currently producing at low rates and we expect to gradually increase to 5 per month in 2023. Production of the 777X is currently paused and is expected to resume in 2023. The 737 program has experienced operational and supply chain challenges stabilizing production at 31 per month. We plan to gradually increase 737 production rates based on market demand and supply chain capacity.~~ In addition, we continue to seek opportunities to reduce the costs of building our aircraft, including working with our suppliers to reduce supplier costs, identifying and implementing productivity improvements and optimizing how we manage inventory. If production rate changes at any of our commercial aircraft assembly facilities are delayed or create significant disruption to our production system, or if our suppliers cannot timely deliver components **that comply with design specifications** to us at the cost and rates necessary to achieve our targets, we may be unable to meet delivery schedules and / or the financial performance of one or more of our programs may suffer. Operational challenges impacting the production system for one or more of our commercial aircraft programs could result in additional production delays and / or failure to meet customer demand for new aircraft, either of which would negatively impact our revenues and operating margins. Our commercial aircraft production system is extremely complex. Operational issues, including delays or defects in supplier components, failure to meet internal performance plans, or delays or failures to achieve required regulatory approval, could result in additional out- of- sequence work and increased production costs, as well as delayed deliveries to customers, impacts to aircraft performance and / or increased warranty or fleet support costs. We and our suppliers are experiencing supply chain disruptions **and constraints** ~~as a result of the lingering impacts of COVID- 19~~ , ~~global~~ **labor instability and inflationary pressures. We continue to monitor the health and stability of the** supply chain ~~constraints, and labor instability. We and our suppliers are also experiencing inflationary pressures. We continue to monitor the health and stability of the supply chain as we ramp up production~~ . These factors have **and may continue to** ~~reduced~~ - **reduce** overall productivity and adversely ~~impacted~~ -- **impact** our financial position, results of operations and cash flows. If our commercial aircraft fail to satisfy performance and reliability requirements and / or potentially required sustainability standards, we could face additional costs and / or lower revenues. Developing and manufacturing commercial aircraft that meet or exceed our performance and reliability standards and / or potentially required sustainability standards, as well as those of customers and regulatory agencies, can be costly and technologically challenging. These challenges are particularly significant with newer aircraft programs. Any failure of any Boeing aircraft to satisfy performance or reliability requirements could result in disruption to our operations, higher costs and / or lower revenues. Changes in levels of U. S. government defense spending or acquisition priorities **, as well as significant delays in U. S. government appropriations,** could negatively impact our **business,** financial position and results of operations. We derive a substantial portion of our revenue from the U. S. government, primarily from defense related programs with the United States Department of Defense (U. S. DoD). Levels of U. S. defense spending are very difficult to predict and may be impacted by numerous factors such as the evolving nature of the national security threat environment, U. S. national security strategy, U. S. foreign policy, the domestic political environment, macroeconomic conditions and the ability of the U. S. government to enact relevant legislation such as authorization and appropriations bills. The **government may also constrain discretionary spending by instituting enforceable spending caps. The** timeliness of **annual** ~~FY24 and future~~ appropriations for **U. S.** government departments and agencies remains a recurrent risk. ~~A lapse in appropriations for government departments or agencies would result in a full or partial government shutdown, which could impact the Company' s operations. Alternatively,~~ Congress may fund government departments and agencies with one or more ~~Continuing~~ **continuing** ~~Resolutions~~ **resolutions** ~~; however~~ , ~~this~~ **which** ~~would~~ **could** ~~restrict~~ **delay new programs or competitions and / or negatively impact** the execution of certain program activities ~~and~~ **. A lapse in appropriations for government departments or agencies would result in a full or partial government shutdown, which could impact our operations. In the event of a prolonged shutdown, requirements to furlough employees in the U. S. DoD, the Department of Transportation, including the FAA, or other government agencies could result in payment** ~~delay~~ **delays , impair our ability to deliver commercial airplanes or perform work on existing contracts, delays in the certification of** new ~~programs~~ **aircraft or otherwise impact** ~~or~~ **our** ~~competitions~~ **operations, negatively impact future orders, and / or cause other disruptions or delays. There is uncertainty regarding which government functions would shut down or continue operations during a lapse in appropriations, and corresponding uncertainty regarding the extent or magnitude of potential impacts to our operations. For additional information on U. S. government appropriations and budgets, see " Management' s Discussion & Analysis- Additional Considerations- U. S. Government Funding " on page 28 of this Form 10- K** . In addition, ~~long- term uncertainty remains with respect to overall levels of defense spending in FY24 and beyond. U. S. government discretionary spending, including defense spending, is likely to continue to be subject to pressure. There~~ **there** continues to be uncertainty with respect to future acquisition priorities and program- level appropriations for the U. S. DoD and other government agencies (including NASA), including changes to national security and defense priorities, and tension between modernization investments, sustainment investments, and investments in new technologies or emergent capabilities. Future investment priority changes or budget cuts, including changes associated with the authorizations and appropriations process, could result in reductions, cancellations, and / or delays of existing contracts or programs ~~,~~ or future program opportunities. Any of these impacts could have a material effect on **our** ~~the results of the Company' s~~ financial position, results of operations and / or cash flows. **As** ~~In addition, as~~ a result of the significant ongoing uncertainty with respect to both U. S. defense spending and the evolving nature of the national security threat environment, we also expect the U. S. DoD to continue to emphasize affordability, innovation, cybersecurity and delivery of technical data and software in its procurement processes, including the implementation of cybersecurity compliance requirements on the Defense Industrial Base, for which the supply chain may not be fully prepared. ~~We~~ **If we** and our suppliers **are unable** ~~will need to continue~~ to adjust ~~successfully~~ to these changing acquisition priorities and policies ~~or~~ **,** our revenues and market share could be impacted. Our ability to deliver products and services that satisfy customer requirements is heavily dependent on the performance and financial stability of our subcontractors and suppliers, as well as on the availability of highly skilled labor, raw materials and other components. We rely on other companies, including U. S. and non- U. S. subcontractors and suppliers, to provide and produce raw materials, integrated components and sub- assemblies, and production commodities and to perform some of the services that we provide to our customers. Many of our suppliers are experiencing inflationary pressures, as well as **resource constraints and** disruptions due to **production quality issues** ~~the lingering impacts of COVID- 19~~ , global supply chain constraints, and labor instability. If one or more of our suppliers or subcontractors continue to experience financial difficulties, delivery delays or other performance problems, we may be unable to meet commitments to our customers and our financial position, results of operations and cash flows may continue to be adversely impacted. In addition, if one or more of the raw materials on which we depend (such as aluminum, titanium or composites) becomes unavailable to us or our suppliers, or is available only at very high prices, we may be unable to deliver one or more of our products in a timely fashion or at budgeted costs. ~~For example, we suspended purchasing titanium from Russia during 2022 as a result of the Russia Ukraine war.~~ We ~~believe we have~~ **continue proactively working to ensure** sufficient material and parts to avoid **potential near- term** production disruptions ~~in the near- term~~ , ~~but~~ **while also working to mitigate the risk of** future impacts ~~to our production~~ from disruptions ~~in~~ **to** our supply chain ~~are possible~~ . In some instances, we depend upon a single source of supply. Any service disruption from one of these suppliers, either due to circumstances beyond the supplier' s control, such as geopolitical developments, or as a result of performance problems or financial difficulties, could have a material adverse effect on our ability to meet commitments to our customers or increase our operating costs. **Some of our and our suppliers' workforces are represented by labor unions, which may lead to work stoppages. Approximately 57, 000 employees, which constitute 33 % of our total workforce, were union represented as of December 31, 2023 under collective bargaining agreements with varying durations and expiration dates. For additional information on our principal collective bargaining agreements, see " Business – Human Capital " on page 2 of this Form 10- K. We experienced a work stoppage in 2008 when a labor strike halted commercial aircraft and certain BDS program production. We may experience additional work stoppages in the future, which could adversely affect our business. We cannot predict how stable our union relationships, currently with 10 U. S. labor organizations and 4 non- U. S. labor organizations, will be or whether we will be able to meet the unions' requirements without impacting our financial condition. The unions may also limit our flexibility in managing our workforce and operations. Union actions at suppliers can also affect us. Work stoppages and instability in our union relationships could delay the production and / or development of our products, which could strain relationships with customers and result in lower revenues.** Competition within our markets and with respect to ~~the~~ **our** products ~~we sell~~ **and services** may reduce our future contracts and sales. The markets in which we operate are highly competitive and one or more of our competitors may have more extensive or more specialized engineering, manufacturing and marketing capabilities than we do in some areas. In our BCA business, we face aggressive international competition intent on increasing market share. In our BDS business, we anticipate that the effects of defense industry consolidation, shifting acquisition and budget priorities, and continued cost pressure at our U. S. DoD and non- U. S. customers will intensify competition for many of our BDS products. Our BGS segment faces competition from many of the same strong U. S. and non- U. S. competitors facing BCA and BDS. Furthermore, we are facing increased international competition and cross- border consolidation of competition, and U. S. procurement and compliance requirements that could limit our ability to be cost- competitive in the international market. There can be no assurance that we will be able to compete successfully against our current or future competitors or that the competitive pressures we face will not result in reduced revenues and market share. We derive a significant portion of our revenues from non- U. S. sales and are subject to the risks of doing business in other countries. In ~~2022~~ **2023** , non- U. S. customers, which ~~includes~~ - **include** foreign military sales (FMS), accounted for approximately ~~41~~ **42** % of our revenues. We expect that non- U. S. sales will continue to account for a significant portion of our revenues for the foreseeable future. **We** ~~As a result, we~~ are subject to risks of doing business internationally, including: • changes in regulatory requirements or other executive branch actions, such as Executive Orders; • changes in the global trade environment, including disputes with authorities in non- U. S. jurisdictions, including international trade authorities, that could impact sales and / or delivery of products and services outside the U. S. and / or impose costs on our customers in the form of tariffs, duties or penalties attributable to the importation of Boeing products and services; • changes to U. S. and non- U. S. government policies, including sourcing restrictions, requirements to expend a portion of program funds locally and governmental industrial cooperation or participation requirements; • fluctuations in international currency exchange rates; • volatility in international political and economic environments and changes in non- U. S. national priorities and budgets, which can lead to delays or fluctuations in orders; • the complexity and necessity of using non- U. S. representatives and consultants; • the uncertainty of the ability of non- U. S. customers to finance purchases, including the availability of financing from the

Export- Import Bank of the United States; • uncertainties and restrictions concerning the availability of funding credit or guarantees; • imposition of domestic and international taxes, export controls, tariffs, embargoes, sanctions (such as those imposed on Russia) and other trade restrictions; • the difficulty of management and operation of an enterprise spread over many countries; • compliance with a variety of non- U. S. laws, as well as U. S. laws affecting the activities of U. S. companies abroad; and • unforeseen developments and conditions, including terrorism, war, epidemics and international tensions and conflicts. While the impact of these factors is difficult to predict, any one or more of these factors could adversely affect our operations in the future. For example, since 2018, the U. S. and China have imposed tariffs on each other' s imports. Certain aircraft parts and components that Boeing procures are subject to these tariffs. We are mitigating import costs through Duty Drawback Customs procedures. Overall, the U. S.- China trade relationship remains stalled as economic and national security concerns continue to be a challenge. China is a significant market for commercial aircraft ~~. Boeing has~~ **and we have** long-standing relationships with our Chinese customers, who represent a key component of our commercial aircraft backlog. ~~For the 737 MAX, there is uncertainty regarding timing of resumption of deliveries in China which is still subject to final regulatory approvals.~~ If we are unable to **deliver aircraft to customers in China consistent with our assumptions and / or** obtain additional orders from China in the future, **we may experience reduced deliveries and /** ~~our~~ - **or lower** market share ~~could be adversely affected. Furthermore, following Russia' s invasion of Ukraine, we suspended our operations in Russia due to sanctions and export controls, and the war has negatively impacted, and could continue to adversely impact, our business and financial results~~ . Impacts from future potential deterioration in **geopolitical or** trade relations between the U. S. and one or more other countries ~~,~~ could have a material adverse impact on our financial position, results of operations and / or cash flows. We use estimates and make assumptions in accounting for contracts and programs. Changes in our estimates and / or assumptions could adversely affect our future financial results. Contract and program accounting require judgment relative to assessing risks, estimating revenues and costs and making assumptions for schedule and technical issues. Due to the size and nature of many of our contracts and programs, the estimation of total revenues and cost at completion is complicated and subject to many variables. Assumptions have to be made regarding the length of time to complete the contract or program because costs also include expected increases in wages and employee benefits, material prices and allocated fixed costs. Incentives or penalties related to performance on contracts are considered in estimating sales and profit rates and are recorded when there is sufficient information for us to assess anticipated performance. Customer and supplier claims and assertions are also assessed and considered in estimating revenues, costs and profit rates. Estimates of future award fees are also included in revenues and profit rates. With respect to each of our commercial aircraft programs, inventoriable production costs (including overhead), program tooling and other non- recurring costs and routine warranty costs are accumulated and charged as cost of sales by program instead of by individual units or contracts. A program consists of the estimated number of units (accounting quantity) of a product to be produced in a continuing, long- term production effort for delivery under existing and anticipated contracts limited by the ability to make reasonably dependable estimates. To establish the relationship of sales to cost of sales, program accounting requires estimates of (a) the number of units to be produced and sold in a program, (b) the period over which the units can reasonably be expected to be produced and (c) the units' expected sales prices, production costs, program tooling and other non- recurring costs, and routine warranty costs for the total program. Several factors determine accounting quantity, including firm orders, letters of intent from prospective customers and market studies. Changes to customer or model mix, production costs and rates, learning curve, changes to price escalation indices, costs of derivative aircraft, supplier performance, customer and supplier negotiations / settlements, supplier claims and / or certification issues can impact these estimates. In addition, on development programs such as the 777X, 737- 7 and 737- 10 we are subject to risks with respect to the timing and conditions of aircraft certification, including potential gaps between when aircraft are certified in various jurisdictions, changes in certification processes and our estimates with respect to **the** timing of future certifications, which could have an impact on overall program status. Any such change in estimates relating to program accounting may adversely affect future financial performance. Because of the significance of the judgments and estimation processes described above, materially different revenues and profit amounts could be recorded if we used different assumptions, revised our estimates, or if the underlying circumstances were to change. Changes in underlying assumptions, circumstances or estimates may adversely affect future period financial performance. For additional information on our accounting policies for recognizing sales and profits, see our discussion under " Management' s Discussion and Analysis – Critical Accounting ~~Policies &~~ Estimates – Accounting for Long-term Contracts / Program Accounting " on pages ~~48~~ **46** - ~~49~~ **47** and Note 1 to our Consolidated Financial Statements on pages ~~59~~ **57** - ~~69~~ **67** of this Form 10- K. We may not realize the anticipated benefits of mergers, acquisitions, joint ventures / strategic alliances or divestitures. As part of our business strategy, we may merge with or acquire businesses and / or form joint ventures and strategic alliances. Whether we realize the anticipated benefits from these acquisitions and related activities depends, in part, upon our ability to integrate the operations of the acquired business, the performance of the underlying product and service portfolio, and the performance of the management team and other personnel of the acquired operations. Accordingly, our financial results could be adversely affected by unanticipated performance issues, legacy liabilities, transaction- related charges, amortization of expenses related to intangibles, charges for impairment of long- term assets, credit guarantees, partner performance and indemnifications. Consolidations of joint ventures could also impact our reported results of operations or financial position. While we believe that we have established appropriate and adequate procedures and processes to mitigate these risks, there is no assurance that these transactions will be successful. We also may make strategic divestitures from time to time. These transactions may result in continued financial involvement in the divested businesses, such as through guarantees or other financial arrangements, following the transaction. Nonperformance by those divested businesses could affect our future financial results through additional payment obligations, higher costs or asset write- downs. Risks Related to Our Contracts We conduct a significant portion of our business pursuant to U. S. government contracts, which are subject to unique risks. In ~~2022~~ **2023** , ~~40~~ **37** % of our revenues were earned pursuant to U. S. government contracts, which include **Foreign Military Sales (**

FMS) through the U. S. government. Business conducted pursuant to such contracts is subject to extensive procurement regulations and other unique risks. Our sales to the U. S. government are subject to extensive procurement regulations, and changes to those regulations could increase our costs. New procurement regulations or climate or cyber- related contractual disclosures, or changes to existing requirements, could increase our compliance costs or otherwise have a material impact on the operating margins of our BDS and BGS businesses. These requirements may also result in withheld payments and / or reduced future business if we fail to comply. For example, proposals to raise domestic content thresholds for our U. S. government contracts could have negative impacts on our business. Compliance costs attributable to current and potential future procurement regulations such as these could negatively impact our financial position, results of operations and / or cash flows. The U. S. government may modify, curtail or terminate one or more of our contracts. The U. S. government contracting party may modify, curtail or terminate its contracts and subcontracts with us, without prior notice and either at its convenience or for default based on performance. In addition, funding pursuant to our U. S. government contracts may be reduced or withheld as part of the U. S. Congressional appropriations process due to ~~fiscal constraints,~~ changes in U. S. national security strategy and / or priorities **, fiscal constraints, including enforceable spending caps, a sequester or a lack of funding available to pay incurred obligations, or** ~~or~~ **for** other reasons. Further uncertainty with respect to ongoing programs could also result in the event that the U. S. government finances its operations through temporary funding measures such as " ~~continuing~~ **Continuing** ~~resolutions~~ **Resolutions** " rather than full- year appropriations. Any loss or anticipated loss or reduction of expected funding and / or modification, curtailment or termination of one or more large programs could have a material adverse effect on our financial position, results of operations and / or cash flows. We are subject to U. S. government inquiries and investigations, including periodic audits of costs that we determine are reimbursable under U. S. government contracts. U. S. government agencies, including the Defense Contract Audit Agency and the Defense Contract Management Agency, routinely audit government contractors. These agencies review our performance under contracts, cost structure and compliance with applicable laws, regulations and standards, as well as the adequacy of and our compliance with our internal control systems and policies. Any costs found to be misclassified or inaccurately allocated to a specific contract will be deemed non- reimbursable, and to the extent already reimbursed, must be refunded. Any inadequacies in our systems and policies could result in withholds on billed receivables, penalties and reduced future business. Furthermore, if any audit, inquiry or investigation uncovers improper or illegal activities, we could be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or debarment from doing business with the U. S. government. We also could suffer reputational harm if allegations of impropriety were made against us, even if such allegations are later determined to be false. We enter into fixed- price contracts **,** which could subject us to losses if we have cost overruns. Our BDS and BGS defense businesses generated approximately ~~60~~ **58** % and ~~69~~ **65** % of their ~~2022~~ **2023** revenues from fixed- price contracts. While fixed- price contracts enable us to benefit from performance improvements, cost reductions and efficiencies, they also subject us to the risk of reduced margins or incurring losses if we are unable to achieve estimated costs and revenues. If our estimated costs exceed our estimated price, we recognize reach- forward losses which can significantly affect our reported results. For example, during the year ended December 31, ~~2022~~ **2023** , BDS recorded **$ 1, 585 million of** additional losses on ~~several~~ **its five most significant** fixed **-** price development programs **(Commercial Crew, KC- 46A Tanker, MQ- 25, T- 7A Red Hawk, and VC- 25B Presidential Aircraft)** . We continue to experience ~~near- term~~ production disruptions and inefficiencies due to **technical challenges,** supplier disruption ~~, labor instability~~ and factory performance. These factors have contributed to significant earnings charges on a number of fixed- price development programs which are expected to adversely affect cash flows in future periods, and may result in future earnings charges and adverse cash flow effects **. Production and supplier disruptions, inefficiencies, technical challenges, quality issues and labor instability also contributed to lower earnings on fixed- price production programs in 2023** . New programs could also have risk for reach- forward loss upon contract award and during the period of contract performance. The long **-** term nature of many of our contracts makes the process of estimating costs and revenues on fixed- price contracts inherently risky. Fixed- price contracts often contain price incentives and penalties tied to performance, which can be difficult to estimate and have significant impacts on margins. In addition, some of our contracts have specific provisions relating to cost, schedule and performance. Estimating costs to complete fixed- price development contracts is generally subject to more uncertainty than fixed- price production contracts. Many of these development programs have highly complex designs **and technical challenges** . In addition, technical or quality issues ~~that arise during development~~ could lead to schedule delays and ~~higher costs~~ - **cost impacts** ~~to complete~~ , **which could increase our estimated cost to perform the work or reduce our estimated price, either of** which could result in a material charge or otherwise adversely affect our financial condition ~~. Examples of significant BDS fixed- price development contracts include Commercial Crew, KC- 46A Tanker, MQ- 25, T- 7A Red Hawk, VC- 25B Presidential Aircraft, and commercial and military satellites~~ . We enter into cost- type contracts, which also carry risks. Our BDS and BGS defense businesses generated approximately ~~40~~ **42** % and ~~31~~ **35** % of their ~~2022~~ **2023** revenues from cost- type contracting arrangements. Some of these are development programs that have complex design and technical challenges. These cost- type programs typically have award or incentive fees that are subject to uncertainty and may be earned over extended periods. In these cases the associated financial risks are primarily ~~in~~ reduced **award or incentive** fees, lower profit rates or program cancellation if cost, schedule or technical performance issues arise. **Examples of** ~~Programs~~ **programs** ~~whose~~ **with cost- type** contracts ~~are primarily cost- type~~ include Ground- based Midcourse Defense, Proprietary and Space Launch System programs. We enter into contracts that include in- orbit incentive payments that subject us to risks. Contracts in the commercial satellite industry and certain government satellite contracts include in- orbit incentive payments. These in- orbit payments may be paid over time after final satellite acceptance or paid in full prior to final satellite acceptance. In both cases, the in- orbit incentive payment is at risk if the satellite does not perform to specifications for up to 15 years after acceptance. The net present value of in- orbit incentive fees we ultimately expect to realize is recognized as revenue in the construction period. If the satellite fails to meet contractual performance criteria, customers will not be obligated to continue making in- orbit payments and / or we may be required to provide refunds to the customer and incur significant charges. Risks Related to Cybersecurity and Business Disruptions Unauthorized access to our, our customers' and / or our suppliers' information and systems could negatively impact our business. We rely extensively on information technology systems and networks to operate our company and meet our business objectives. **We face various cyber security threats, including attempts to gain unauthorized access to our systems and networks, denial- of- service attacks, threats to our information technology infrastructure, ransomware and phishing attacks, and attempts to gain unauthorized access to our company-, customer- and employee- sensitive information. These threats come from a variety of actors some of which are highly organized and sophisticated such as nation- state actors and criminal enterprises. In addition, the techniques used in cyberattacks evolve rapidly, including from emerging technologies, such as advanced forms of automation and artificial intelligence.** As cyber threats increase in volume and sophistication, the risk to the security of these systems and networks – and to the confidentiality, integrity, and availability of the data they house – continues to evolve, requiring constant vigilance and concerted, company- wide risk management efforts. A ~~cyberattack~~ **cyber- related attack** or security breach, whether experienced directly or through our supply chain **or third party- service providers** , could, among other serious consequences, result in loss of intellectual property; **allow** unauthorized access to **or cause the publication of** various categories of sensitive, proprietary or customer data; **cause** disruption or degradation of **our** business operations **;** ~~, or~~ compromise ~~of~~ **our** products or services **; and / or result in reputational harm** . To address these risks, we maintain an extensive network of technical security controls, policy enforcement mechanisms, monitoring systems **, contractual arrangements, tools and related services,** and management **and Board** oversight ~~. We also have established a Cybersecurity Governance Council to strengthen governance and coordination of cybersecurity activities~~ . While these measures are designed to prevent, detect ~~and~~ **,** respond to **, and mitigate** unauthorized activity, there is no guarantee that they will be sufficient to prevent or mitigate the risk of a ~~cyberattack~~ **cyber- related attack or incident, or allow us to detect, report or respond adequately in a timely manner. We have experienced, and may in the future experience, whether directly or through** ~~or~~ **our supply chain, third- party service providers or** ~~the~~ **other channels** ~~potentially serious reputational~~ , **cybersecurity incidents. While prior cyber- related attacks and incidents (including those at our wholly- owned subsidiaries Boeing Distribution, Inc. in 2023 and Jeppesen Inc. in 2022) have not materially affected our business strategy, results of operations or financial condition, there is no guarantee that a future cyber- related attack or incident would not result in significant** operational **, regulatory** , or financial impacts that ~~may result. In November 2022, we discovered a cybersecurity incident that impacted certain systems of Jeppesen, a wholly owned Boeing subsidiary that provides flight planning and navigation services. We determined that the incident posed no risk to flight safety. We promptly notified law enforcement, regulatory authorities and customers, launched an investigation, and took additional steps to protect the integrity of our systems. While this incident has not had a material impact on us, future incidents like this one~~ could ~~have material~~ **materially affect** ~~impact on~~ our business **strategy** , **results of** operations ~~, and reputation~~ **or financial condition** . In addition, we manage information and information technology systems for certain customers and ~~/ or~~ suppliers. Many of these customers and ~~/ or~~ suppliers face similar security threats. If we were unable to protect against the unauthorized access, release ~~and /~~ or corruption of our customers' ~~and /~~ or suppliers' confidential, classified or personally identifiable information, ~~our reputation could be damaged, and / or~~ we could **suffer a loss of business, face regulatory actions or** face financial or other losses **that could materially affect our business strategy, results of operations or financial condition** . Business disruptions could seriously affect our future sales and financial condition or increase our costs and expenses. Our business may be impacted by disruptions including threats to physical security or our information technology systems, extreme weather (including effects of climate change) or other acts of nature, and pandemics or other public health crises. Any of these disruptions could affect our internal operations or our suppliers' operations and delay delivery of products and services to our customers. Any significant production delays, or any destruction, manipulation or improper use of Boeing' s or our suppliers' data, information systems or networks could impact our sales, increase our expenses and / or have an adverse effect on the reputation of Boeing and of our products and services. Risks Related to Legal and Regulatory Matters The outcome of litigation and of government inquiries and investigations involving our business is unpredictable **,** and an adverse decision in any such matter could have a material effect on our financial position and results of operations. We are involved in a number of litigation matters. These matters may divert financial and management resources that would otherwise be used to benefit our operations. No assurances can be given that the results of these matters will be favorable to us. An adverse resolution of any of these lawsuits, or future lawsuits, could have a material impact on our financial position and results of operations. In addition, we are subject to extensive regulation under the laws of the United States and its various states, as well as other jurisdictions in which we operate **and / or market our products** . As a result, we are sometimes subject to government inquiries and investigations due, among other things, to our business relationships with the U. S. government, the heavily regulated nature of our industry, and in the case of environmental proceedings, our current or past ownership of certain property. Any such inquiry or investigation could result in an adverse ruling against us, which could have a material impact on our financial position, results of operations and / or cash flows. Our operations expose us to the risk of material environmental liabilities. We are subject to various U. S. federal, state, local and non- U. S. laws and regulations related to environmental protection, including the discharge, treatment, storage, disposal and remediation of **pollutants,** hazardous substances and wastes. We could incur substantial costs, including cleanup costs, fines and civil or criminal sanctions, as well as third- party claims for property damage or personal injury, if we were to violate or become liable under environmental laws or regulations. In some cases, we are subject to such costs due to environmental impacts attributable to our current or past manufacturing operations or the operations of companies we have acquired. In other cases, we are subject to such costs due to an indemnification agreement between us and a third party relating to such environmental liabilities. In all cases, our current liabilities and ongoing cost assessments are based on current laws and regulations. New laws and regulations, more stringent enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new remediation requirements could result in additional costs. For additional information relating to environmental contingencies, see Note 13 to our Consolidated Financial Statements. We may be adversely affected by global climate change or by legal, regulatory or market responses to such change. Increasing stakeholder environmental, social and governance (ESG) expectations, physical and transition risks associated with climate change, emerging ESG regulation, contractual requirements, and policy requirements may pose risk to our market outlook, brand and reputation, financial outlook, cost of capital, global supply chain and production continuity, which may impact our ability to achieve long- term business objectives. Changes in environmental and climate change laws or regulations could lead to additional operational restrictions and compliance requirements upon us or our products, require new or additional ~~investment~~ **investments** in **production systems or** product designs, result in **additional** carbon offset investments or otherwise ~~could~~ negatively impact our business and / or competitive position. ~~Increasing~~ **Increasingly stringent** aircraft performance standards **and** ~~, increasing sustainability disclosure~~ requirements **including but not limited to** ~~in the U. S. and globally, and requirements on~~ manufacturing and product air pollutant emissions, **potential carbon pricing mechanisms** ~~especially greenhouse gas (GHG) emissions~~ , **and sustainability disclosure requirements in the U. S. and other jurisdictions** may result in increased costs or reputational risks and could limit our ability to manufacture and / or market certain of our products at acceptable costs, or at all **. For example, certain jurisdictions including the State of California and the European Union have enacted legislation which would require more stringent greenhouse gas emissions and climate risk reporting** . Physical impacts of climate change, increasing global chemical restrictions and bans, and water and waste requirements may drive increased costs to us and our suppliers and impact our production continuity and data facilities. Finally, from time to time, in alignment with our sustainability priorities, we establish and publicly announce goals and commitments to improve our environmental performance, such as our ~~recent~~ operational goals in areas of GHG emissions, energy, water and waste. If we fail to achieve or ~~improperly~~ **inadequately** report ~~on~~ our progress toward achieving **such** ~~our sustainability~~ goals and commitments, the resulting negative publicity could adversely affect our reputation and / or our access to capital. Risks Related to Financing and Liquidity We may be unable to obtain debt to fund our operations and contractual commitments at competitive rates, on commercially reasonable terms or in sufficient amounts. We depend, in part, upon the issuance of debt to fund our operations and contractual commitments. ~~In addition, our debt balances have increased significantly since 2019, driven primarily by impacts related to the 737 MAX grounding and the COVID- 19 pandemic, and we expect to continue to actively manage our liquidity.~~ As of December 31, ~~2022~~ **2023** , our debt totaled $ ~~57~~ **52** . ~~0~~ **3** billion of which approximately $ ~~14~~ **17** . ~~5~~ **7** billion of principal payments on outstanding debt will become due over the next three years. In addition, as of December 31, ~~2022~~ **2023** , our airplane financing commitments totaled $ ~~16~~ **17** . ~~1~~ **0** billion ~~. Our increased debt balance resulted in downgrades to our credit ratings in 2020, and our ratings remained unchanged in 2022 and 2021~~ . If we require additional funding in order to pay off existing debt, address further impacts to our business related to market developments, fund outstanding financing commitments or meet other business requirements, our market liquidity may not be sufficient. These risks will be particularly acute if we are subject to further credit rating downgrades **such as those we experienced in 2020** . A number of factors could cause us to incur increased borrowing costs and to have greater difficulty accessing public and private markets for debt. These factors include disruptions or declines in the global capital markets and / or a decline in our financial performance, outlook or credit ratings and / or changes in demand for our products and services. The occurrence of any or all of these events may adversely affect our ability to fund our operations and contractual or financing commitments. Substantial pension and other postretirement benefit obligations have a material impact on our earnings, shareholders' equity and cash flows from operations, and could have significant adverse impacts in future periods. Many of our employees have earned benefits under defined benefit pension plans. Potential pension contributions include both mandatory amounts required under the Employee Retirement Income Security Act and discretionary contributions to improve the plans' funded status. The extent of future contributions depends heavily on market factors such as the discount rate and the actual return on plan assets. We estimate future contributions to these plans using assumptions with respect to these and other items. Changes to those assumptions could have a significant effect on future contributions as well as on our annual pension costs and / or result in a significant change to shareholders' equity. For U. S. government contracts, we allocate pension costs to individual contracts based on U. S. Cost Accounting Standards **,** which can also affect contract profitability. We also provide other postretirement benefits to certain of our employees, consisting principally of health care coverage for eligible retirees and qualifying dependents. Our estimates of future costs associated with these benefits are also subject to assumptions, including estimates of the level of medical cost increases. For a discussion regarding how our financial statements can be affected by pension and other postretirement plan accounting policies, see " Management' s Discussion and Analysis – Critical Accounting ~~Policies &~~ Estimates – Pension Plans " on ~~page~~ **pages** ~~50~~ **47- 48** of this Form 10- K. Although under Generally Accepted Accounting Principles in the United States of America (GAAP) the timing of periodic pension and other postretirement benefit expense and plan contributions are not directly related, the key economic factors that affect GAAP expense would also likely affect the amount of cash or stock we would contribute to our plans. Our insurance coverage may be inadequate to cover all significant risk exposures. We are exposed to liabilities that are unique to the products and services we provide. We maintain insurance for certain risks and, in some circumstances, we may receive indemnification from the U. S. government. The amount of our insurance coverage may not cover all claims or liabilities, and we may be forced to bear substantial costs. For example, liabilities arising from the use of certain of our products, such as aircraft technologies, space systems, spacecraft, satellites, missile systems, weapons, cybersecurity, border security systems, anti- terrorism technologies and / or air traffic management systems may not be insurable on commercially reasonable terms. While some of these products are shielded from liability within the U. S. under the SAFETY Act provisions of the 2002 Homeland Security Act, no such protection is available outside the U. S., potentially resulting in significant liabilities. ~~See Note 21 of the Consolidated Financial Statements for discussion of legal proceedings resulting from the October 29, 2018 accident of Lion Air Flight 610 and the March 10, 2019 accident of Ethiopian Airlines~~

~~Flight 302.~~ The amount of insurance coverage we maintain may be inadequate to cover these or other claims or liabilities. A significant portion of our customer financing portfolio is concentrated among certain customers and in certain types of Boeing aircraft, which exposes us to concentration risks. A significant portion of our customer financing portfolio **, which is comprised of financing receivables and operating lease equipment,** is concentrated among certain customers and in distinct geographic regions. Our portfolio is also concentrated by varying degrees across Boeing aircraft product types, most notably 717 ~~and 747- 8~~ aircraft, and among customers that we believe have less than investment- grade credit. If one or more customers holding a significant portion of our portfolio assets experiences financial difficulties or otherwise defaults on or does not renew its leases with us at their expiration, and we are unable to redeploy the aircraft on reasonable terms, or if the types of aircraft that are concentrated in our portfolio suffer greater than expected declines in value, our financial position, results of operations and / or cash flows could be materially adversely affected. ~~Risks Related to Labor Some of our and our suppliers' workforces are represented by labor unions, which may lead to work stoppages. Approximately 50, 000 employees, which constitute 32 % of our total workforce, were union represented as of December 31, 2022. We experienced a work stoppage in 2008 when a labor strike halted commercial aircraft and certain BDS program production. We may experience additional work stoppages in the future, which could adversely affect our business. We cannot predict how stable our union relationships, currently with 11 U. S. labor organizations and 12 non- U. S. labor organizations, will be or whether we will be able to meet the unions' requirements without impacting our financial condition. The unions may also limit our flexibility in dealing with our workforce. Union actions at suppliers can also affect us. Work stoppages and instability in our union relationships could delay the production and / or development of our products, which could strain relationships with customers and result in lower revenues.~~