

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

Form 10-K

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

For the Fiscal Year Ended December 31, 2022

or

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

For the transition period from _____ to _____

Commission File Number 0-7087

Astronics Corporation

(Exact Name of Registrant as Specified in its Charter)

New York
(State or other jurisdiction of
incorporation or organization)

16-0959303
(I.R.S. Employer
Identification No.)

130 Commerce Way, East Aurora, NY 14052
(Address of principal executive office)

Registrant's telephone number, including area code (716) 805-1599

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$.01 par value per share	ATRO	NASDAQ Stock Market

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
		Emerging Growth Company	<input type="checkbox"/>

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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

As of March 6, 2023, 32,282,681 shares were outstanding, consisting of 26,033,774 shares of Common Stock \$.01 par value and 6,248,907 shares of Class B Stock \$.01 par value. The aggregate market value, as of the last business day of the Company's most recently completed second fiscal quarter, of the shares of Common Stock and Class B Stock of Astronics Corporation held by non-affiliates was approximately \$298,000,000 (assuming conversion of all of the outstanding Class B Stock into Common Stock and assuming the affiliates of the Registrant to be its directors, executive officers and persons known to the Registrant to beneficially own more than 10% of the outstanding capital stock of the Corporation).

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's Proxy Statement for the 2023 Annual Meeting of Shareholders to be held May 23, 2023 are incorporated by reference into Part III of this Report.

Table of Contents
ASTRONICS CORPORATION
Index to Annual Report
on Form 10-K
Year Ended December 31, 2022

	Page
<u>PART I</u>	
Item 1.	Business 4
Item 1A.	Risk Factors 9
Item 1B.	Unresolved Staff Comments 17
Item 2.	Properties 17
Item 3.	Legal Proceedings 17
Item 4.	Mine Safety Disclosures 17
<u>PART II</u>	
Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities 18
Item 6.	[Reserved] 20
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations 20
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk 33
Item 8.	Financial Statements and Supplementary Data 34
Item 9.	Changes In and Disagreements with Accountants on Accounting and Financial Disclosure 74
Item 9A.	Controls and Procedures 75
Item 9B.	Other Information 75
Item 9C.	Disclosure Regarding Foreign Jurisdictions That Prevent Inspections 75
<u>PART III</u>	
Item 10.	Directors, Executive Officers and Governance 76
Item 11.	Executive Compensation 76
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters 76
Item 13.	Certain Relationships and Related Transactions and Director Independence 76
Item 14.	Principal Accountant Fees and Services 76
<u>PART IV</u>	
Item 15.	Exhibits and Financial Statement Schedules 77
Item 16.	Form 10-K Summary 81

FORWARD LOOKING STATEMENTS

Information included or incorporated by reference in this report that does not consist of historical facts, including statements accompanied by or containing words such as “may,” “will,” “should,” “believes,” “expects,” “expected,” “intends,” “plans,” “projects,” “approximate,” “estimates,” “predicts,” “potential,” “outlook,” “forecast,” “anticipates,” “presume” and “assume,” are forward-looking statements. Such forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are not guarantees of future performance and are subject to several factors, risks and uncertainties, the impact or occurrence of which could cause actual results to differ materially from the expected results described in the forward-looking statements. Certain of these factors, risks and uncertainties are discussed in the sections of this report entitled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” New factors, risks and uncertainties may emerge from time to time that may affect the forward-looking statements made herein. Given these factors, risks and uncertainties, investors should not place undue reliance on forward-looking statements as predictive of future results. Except as required by applicable law, we disclaim any obligation to update the forward-looking statements made in this report.

PART I

ITEM 1. BUSINESS

Astronics Corporation (“Astronics” or the “Company”) is a leading provider of advanced technologies to the global aerospace, defense and electronics industries. Our products and services include advanced, high-performance electrical power generation, distribution and seat motion systems, lighting and safety systems, avionics products, systems and certification, aircraft structures and automated test systems.

We have principal operations in the United States (“U.S.”), Canada, France and England, as well as engineering offices in the Ukraine and India. The operation in Ukraine is a small engineering office and we have not experienced any significant disruption in staffing or services as a result of the Ukrainian and Russian conflict.

Impact of the COVID-19 Pandemic

On March 11, 2020, the World Health Organization classified the COVID-19 outbreak as a pandemic. The spread of the COVID-19 pandemic disrupted businesses on a global scale, led to significant volatility in financial markets and affected the aviation and industrial industries. The impacts of the pandemic have placed labor and supply chain pressures on our business and we have been impacted by customer demand variability. Although we saw stable and growing backlog during 2022 in our aerospace business, COVID-19 related disruptions are ongoing and continue to adversely challenge our markets. While we remain bullish about the aerospace business, we believe the recovery to pre-pandemic activity, particularly in the widebody market, will take longer than originally anticipated at the outset of the pandemic. As economic activity continues to recover, we will continue to monitor the situation, assessing further possible implications on our operations, supply chain, liquidity, cash flow and customer orders.

See Part I, Item 1A, Risk Factors, for an additional discussion of risk related to supply chain disruptions.

In September 2021 the Company was awarded a grant of up to \$14.7 million from the U.S. Department of Transportation under the Aviation Manufacturing Jobs Protection Program (“AMJP”). The Company received \$7.4 million under the grant in 2021, \$5.2 million in the first quarter of 2022 and \$2.1 million in the third quarter of 2022. The grant benefit was recognized ratably over the six-month performance period as a reduction to cost of products sold in proportion to the compensation expense that the award is intended to defray. During the years ended December 31, 2022 and 2021, the Company recognized \$6.0 million and \$8.7 million of the award, respectively.

Additionally, the Company qualified for government subsidies from the Canadian and French governments as a result of the COVID-19 pandemic’s impact on our foreign operations. The Canadian and French subsidies are income-based grants intended to reimburse the Company for certain employee wages. The grants are recognized as income over the periods in which the Company recognizes as expenses the costs the grants are intended to defray. The amounts recognized during 2022 were immaterial.

For additional details regarding the subsidies and grants, and their impact on consolidated results of operations and financial position, see Note 1 to the consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report.

Refinancing

On January 19, 2023, the Company completed a financing transaction totaling \$205 million, which refinanced its previous revolving credit facility which was scheduled to mature in November 2023. The new financing consists of a \$90 million asset-based term loan (the “Term Loan Facility”) and a \$115 million asset-based revolving credit facility (the “ABL Revolving Credit Facility”). The Term Loan Facility requires monthly amortization beginning in April 2023, bears interest at the Secured Overnight Financing Rate (“SOFR”) plus 8.75%, is collateralized by real estate, fixed assets and intellectual property, and is scheduled to mature on the earlier of the maturity of the ABL Revolving Credit Facility or January 19, 2027. The ABL Revolving Credit Facility bears interest at SOFR plus between 2.25% and 2.75%, is collateralized by certain domestic accounts receivable and inventory, and is scheduled to mature on January 19, 2026. For additional information, see discussion in Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations, and Note 8, Long-Term Debt, of Item 8, Financial Statements and Supplementary Data, of this report.

Divestitures

On February 13, 2019, the Company completed a divestiture of its semiconductor test business within the Test Systems segment. The total proceeds of the divestiture included two elements of contingent purchase consideration (“earnout”). In the fourth quarter of 2021, the Company agreed to an earnout payment of \$10.7 million for the calendar 2020 earnout, which was

recorded in 2021 as a separate line item below operating loss and was received by the Company in early January 2022. In March 2022, the Company agreed with the earnout calculation for the calendar 2021 earnout in the amount of \$11.3 million. The Company recorded the gain and received the payment in the first quarter of 2022. In February 2023, the Company was notified by the buyer that they have calculated \$3.4 million as being payable for the calendar 2022 earnout. The Company is in the process of reviewing the calculation and expects to record the additional gain on sale, and receive the payment, in the first quarter of 2023. We are not eligible for any further earnout payments related to this divestiture. For further information, see Note 21 in Item 8, Financial Statements and Supplementary Data, of this report.

On October 6, 2021, the Company sold one of its Aerospace buildings for \$9.2 million. Net cash proceeds were approximately \$8.8 million and a gain on sale of approximately \$5.0 million was recorded. The operation has been integrated into another facility.

Products and Customers

Our Aerospace segment designs and manufactures products for the global aerospace industry. Product lines include lighting and safety systems, electrical power generation, distribution and seat motion systems, aircraft structures, avionics products, systems certification, and other products. Our Aerospace customers are the airframe manufacturers (“OEM”) that build aircraft for the commercial transport, military and general aviation markets, suppliers to those OEMs, aircraft operators such as airlines, suppliers to the aircraft operators, and branches of the U.S. Department of Defense. During 2022, this segment’s sales were divided 68% to the commercial transport market, 12% to the military aircraft market, 14% to the general aviation market and 6% to other markets. As a result of the COVID-19 pandemic and its adverse impact on air travel worldwide, the commercial aerospace industry has been significantly disrupted. Most of this segment’s sales are a result of contracts or purchase orders received from customers, placed on a day-to-day basis or for single year procurements rather than long-term multi-year contract commitments. On occasion, the Company does receive contractual commitments or blanket purchase orders from our customers covering multiple-year deliveries of hardware to our customers.

Our Test Systems segment designs, develops, manufactures and maintains automated test systems that support the aerospace and defense, communications and mass transit industries as well as training and simulation devices for both commercial and military applications. In the Test Systems segment, Astronics’ products are sold to a global customer base including OEMs and prime government contractors for both electronics and military products. The nature of our Test Systems business is such that it pursues large, often multi-year, projects.

Sales by segment, geographic region, major customer and foreign operations are provided in Note 20 in Item 8, Financial Statements and Supplementary Data, of this report.

We have historically had a significant concentration of business with two major customers; Panasonic Avionics Corporation (“Panasonic”) and The Boeing Company (“Boeing”). Sales to Panasonic accounted for less than 10% of sales in 2022 and 2021, and 11.1% of sales in 2020. Sales to Boeing accounted for 11.0% of sales in 2022, 10.0% of sales in 2021, and less than 10% of sales in 2020. Sales to Panasonic and Boeing are primarily in the Aerospace segment.

Strategy

Our strategy is to increase our value by developing technologies and capabilities either internally or through acquisition, and use those capabilities to provide innovative solutions to our targeted markets where our technology can be beneficial.

Practices as to Maintaining Working Capital

Liquidity is discussed in Part II, Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations, in the Liquidity and Capital Resources section of this report.

Competitive Conditions

We experience considerable competition in the market sectors we serve, principally with respect to product performance and price, from various competitors, many of which are substantially larger and have greater resources than we do. Success in the markets we serve depends upon product innovation, customer support, responsiveness and cost management. We continue to invest in developing the technologies and engineering support critical to competing in our markets.

Government Contracts

All U.S. government contracts, including subcontracts where the U.S. government is the ultimate customer, may be subject to termination at the election of the government. Our revenue stream relies on military spending. Approximately 11% of our 2022 consolidated sales were made to government-related markets.

Government Regulation

The Federal Aviation Administration (“FAA”) regulates the manufacture, repair and operation of all aircraft and aircraft parts operated in the United States. Its regulations are designed to ensure that all aircraft and aviation equipment are continuously maintained in proper condition to ensure safe operation of the aircraft. Similar rules apply in other countries. All aircraft must be maintained under a continuous condition monitoring program and must periodically undergo thorough inspection and maintenance. The inspection, maintenance and repair procedures for the various types of aircraft and equipment are prescribed by regulatory authorities and can be performed only by certified repair facilities utilizing certified technicians. Certification and conformance is required prior to installation of a part on an aircraft. Our operations may in the future be subject to new and more stringent regulatory requirements. In that regard, we closely monitor the FAA and industry trade groups in an attempt to understand how possible future regulations might impact us. Our businesses which sell products directly to the U.S. Government or for use in systems delivered to the U.S. Government can be subject to various laws and regulations governing pricing and other factors.

There has been no material adverse effect to our consolidated financial statements nor competitive positions as a result of these government regulations.

Raw Materials

Materials, supplies and components are purchased from numerous sources. We believe that the loss of any one source, although potentially disruptive in the short-term, would not materially affect our operations in the long-term. The COVID-19 pandemic has significantly disrupted the global supply chain for certain components. See further discussion within the Risk Factor discussion in Item 1A.

Seasonality

Our business is typically not seasonal.

Backlog

At December 31, 2022, our consolidated backlog was \$571.4 million. At December 31, 2021, our backlog was \$415.7 million. The increase in backlog is driven primarily by recovering demand from our commercial transport and general aviation customers, with increased OEM build rates and increased spending by commercial airlines on fleet improvements.

Backlog in the Aerospace segment was \$477.7 million at December 31, 2022, of which \$402.4 million is expected to be recognized as revenue in 2023. Backlog in the Test Systems segment was \$93.7 million at December 31, 2022. The Test Systems segment expects to recognize \$49.0 million of this backlog as revenue in 2023.

Patents

We have a number of patents. While the aggregate protection of these patents is of value, our only material business that is dependent upon the protection afforded by these patents is our cabin power distribution products. Our patents and patent applications relate to electroluminescence, instrument panels, cord reels and handsets, and a broad patent covering the cabin power distribution technology. We regard our expertise and techniques as proprietary and rely upon trade secret laws and contractual arrangements to protect our rights. We have trademark protection in our major markets.

Research and Development Expenses

Research and development costs are expensed as incurred and include salaries, benefits, consulting, material costs and depreciation. Research and development expenses amounted to \$48.3 million in 2022, \$43.3 million in 2021 and \$40.2 million in 2020. These costs are included in Cost of products sold.

Human Capital Resources

Human Capital Management and Corporate Culture

As of December 31, 2022, we employed approximately 2,400 employees, of whom approximately 2,000 were employed in the United States and approximately 400 were employed outside of the United States. We have approximately 110 hourly production employees at PECO who are subject to collective bargaining agreements. We also leverage temporary workers to provide flexibility for our business and manufacturing needs.

We greatly value our employees and recognize that, without them, the Company would not have achieved the success it has accomplished since inception. We strive to provide a positive, supportive work culture with a clear global vision and a collaborative work style. We strongly believe that a focus on learning and supporting career development can lead to success. Astronics Corporation regularly earns “best employer” awards.

As it relates to customers, investors, suppliers and partners, our Company is dedicated to conducting business with integrity and responsibility for the greater good. We promote honest and ethical conduct, compliance with applicable government regulations and accountability by all of its directors, officers and employees.

When considering an acquisition or partnership, we embed questions specific to human capital management within our due diligence approach. These questions are in the areas of culture, equal employment opportunity, compliance with governing bodies, ethics, as well as employee benefits. We ask these in an effort to ensure that the acquisition candidate is a positive cultural fit and to minimize any risk when assessing the acquisition candidate.

In addition, our Corporate Governance Guidelines outline expectations that the Board establish and promote policies that encourage a positive, supportive work culture. The Board recognizes that culture is critical to the long-term success of Astronics and our strategy.

Compensation Programs and Employee Benefits

We believe that future success largely depends upon our continued ability to attract and retain highly skilled employees. We provide employees with competitive salaries and bonuses, opportunities for equity ownership, development programs that enable continued learning and growth and a robust employment package that promotes well-being across all aspects of their lives, including:

- Health and dental insurance
- Generous paid time off
- 401K, profit sharing, and bonus programs
- Flexible spending accounts
- Employee stock purchase plan
- Disability and life insurance
- Commute reduction, fitness, tuition programs
- Community service opportunities

The COVID-19 pandemic had a sudden and significant impact on the global economy, and particularly in the aerospace industry, causing us to make difficult cost conservation measures including workforce reductions activities to align capacity with expected demand as well as suspension of certain benefit programs. These measures were taken to maintain the financial health and liquidity of the business. We are continuously evaluating the impact of the COVID-19 pandemic, which is dependent on future developments, including the duration of the pandemic and the its impact on the global economy and the aerospace industry, which are uncertain and cannot be predicted at this time. We have reinstated all of the previously-suspended benefits.

Employee Engagement

The lifeblood of any organization is its employee base. We rely on our individual subsidiaries to regularly gather employee feedback, using the method each subsidiary believes is most appropriate. In some instances that feedback is obtained through “Town Hall” formats; in other instances, it is obtained through surveys. We also expect our managers to solicit and, where applicable, use employee feedback to improve its business practices and working environment. We are proud to have received numerous awards, recognizing both product quality as well as the ability to provide an excellent work environment.

Diversity and Inclusion

The Company believes that diversity and inclusion is critical for the attraction and retention of top talent, and employs policies and procedures to recruit women and minority talent as well as policies to ensure pay equality. Astronics has an Equal

Employment Opportunity Policy whereby the Company commits to providing equal employment opportunity and affirmative action plans for all qualified employees and applicants without regard to race, color, sex, sexual orientation, gender identity, religion, national origin, disability, veteran status, age, marital status, pregnancy, genetic information or other legally protected status.

Health and Safety

Astronics is committed to the safety of our customers and our employees. Each Astronics operation maintains environmental, health and safety policies and practices that seek to promote the operation of its businesses in a manner that is protective of the health and safety of the public and its employees.

Our operations offer several health and welfare programs to employees to promote fitness and wellness and to encourage preventative healthcare. In addition, our employees are offered a confidential employee assistance program that provides professional counseling to employees and their family members. Also, many of our operations offer green space for employees to use during their breaks.

Available information

We file our financial information and other materials as electronically required with the Securities and Exchange Commission (“SEC”). These materials can be accessed electronically via the Internet at www.sec.gov. We also make available free of charge through our website at www.astronics.com our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file those reports with, or furnish them to, the SEC. The information contained on our website is not incorporated by reference in this annual report on Form 10-K and should not be considered a part of this report.

Information About Our Executive Officers

The executive officers of the Company, their ages, their positions and offices with the Company, and the date each assumed their office with the Company as of December 31, 2022, are as follows:

Name and Age of Executive Officer	Positions and Offices with Astronics	Year First Elected Officer
Peter J. Gundermann Age 60	President, Chief Executive Officer and Director of the Company	2001
David C. Burney Age 60	Executive Vice President, Secretary and Chief Financial Officer of the Company	2003
Mark A. Peabody Age 63	President, Aerospace Segment and Executive Vice President of Astronics Corporation	2010
James S. Kramer Age 59	Luminescent Systems Inc. President and Executive Vice President of Astronics Corporation	2010
James F. Mulato Age 62	President of Astronics Test Systems, Inc. and Executive Vice President of Astronics Corporation	2019
Michael C. Kuehn Age 62	Astronics Connectivity Systems & Certification Corp. President and Executive Vice President of Astronics Corporation	2019

The principal occupation and employment for Messrs. Gundermann, Burney, Kramer, Kuehn, Mulato and Peabody for over five years has been with the Company in their respective current roles.

Mr. Kuehn and Mr. Mulato became Executive Vice Presidents of the Company on January 1, 2019.

ITEM 1A. RISK FACTORS

Our business faces many risks, and you should carefully consider the following risk factors, together with all of the other information included in this report, including the financial statements and related notes contained in Item 8 of this report, when deciding to invest in us. Any of the risks discussed below, or elsewhere in this report or in our other SEC filings, could have a material impact on our business, financial condition or results of operations. Additional risks not currently known to us or that we currently consider immaterial also may materially adversely affect our business, financial condition or results of operations in the future.

Market Risks

The loss of Boeing or Panasonic as major customers or a significant reduction in business with either of those customers would reduce our sales and earnings. In 2022 and 2021, we had a concentration of sales to Boeing representing approximately 11.0% and 10.0% of our sales, respectively. In 2020, we also had a concentration of sales to Panasonic representing approximately 11.1% of our sales. Revenue earned from sales to Boeing or Panasonic may decline or fluctuate significantly in the future. We may not be able to offset any decline in sales from Boeing or Panasonic with sales from new customers or other existing customers. The loss of these customers or a significant reduction in business with them would significantly reduce our sales and earnings. Accordingly, a portion of our potential for success will depend on our continued ability to develop and manage our relationships with Boeing and Panasonic.

The markets we serve are cyclical and sensitive to domestic and foreign economic conditions, conflicts and events, which may cause our operating results to fluctuate. The markets we serve are sensitive to fluctuations in general business cycles, global pandemics, domestic and foreign governmental tariffs, trade and monetary policies, national and international conflicts, and economic conditions and events, and are facing varying levels of pressure from the COVID-19 pandemic. The COVID-19 pandemic drastically reduced air traffic as travel restrictions and social distancing measures were implemented to help control the spread of the virus. While U.S. domestic air travel has recovered, international travel utilizing wide-body aircraft will take longer to fully recover. Furthermore, as companies and employees become accustomed to working remotely, business travel and the associated flight hours may not reach the pre-pandemic levels. As such, OEMs may continue to directionally match their wide-body aircraft production rates with the reduced, albeit recovering, air traffic volume, which could lower demand for our products. If the pandemic worsens or there is significant uncertainty in the commercial aerospace industry's recovery, we may find it difficult to access our existing financing or obtain additional financing and/or fund our operations and meet our debt service obligations.

In our Aerospace segment, demand by the general aviation markets for our products is dependent upon several factors, including capital investment, product innovations, economic growth and wealth creation and technology upgrades. In addition, the commercial airline industry is highly cyclical with significant downturns in the past and sensitive to such things as fuel price increases, labor disputes, global economic conditions, availability of capital to fund new aircraft purchase and upgrades of existing aircraft and passenger demand. A change in any of these factors could result in a further reduction in the amount of air travel and the ability of airlines to invest in new aircraft or to upgrade existing aircraft. Therefore, our business is directly affected by economic factors and other trends that affect our customers in the commercial aerospace industry. These factors would reduce orders for new aircraft and would likely reduce airlines' spending for cabin upgrades for which we supply products, thus reducing our sales and profits. A reduction in air travel may also result in our commercial airline customers being unable to pay our invoices on a timely basis or at all.

We are a supplier on various new aircraft programs just entering or expected to begin production in the future. As with any new program, there is risk as to whether the aircraft or program will be successful and accepted by the market. As is customary for our business, we purchase inventory and invest in specific capital equipment to support our production requirements generally based on delivery schedules provided by our customer. If a program or aircraft is not successful, we may have to write-off all or a part of the inventory, accounts receivable and capital equipment related to the program. A write-off of these assets could result in a significant reduction of earnings and cause covenant violations relating to our debt agreements. This could result in our being unable to borrow additional funds under our bank credit facility or being obliged to refinance or renegotiate the terms of our indebtedness.

In our Test Systems segment, the market for our products is concentrated with a limited number of significant customers accounting for a substantial portion of the purchases of test equipment. In any one reporting period, a single customer or several customers may contribute an even larger percentage of our consolidated sales. In addition, our ability to increase sales will depend, in part, on our ability to obtain orders from current or new significant customers. The opportunities to obtain orders from these customers may be limited, which may impair our ability to grow sales. We expect that sales of our Test Systems products will continue to be concentrated with a limited number of significant customers for the foreseeable future. Additionally, demand for some of our test products is dependent upon government funding levels for our products, our ability to compete successfully for those contracts and our ability to develop products to satisfy the demands of our customers.

Our products are sold in highly competitive markets. Some of our competitors are larger, more diversified corporations and have greater financial, marketing, production and research and development resources than we do. As a result, they may be better able to withstand the effects of periodic economic downturns or other market changing events. Our operations and financial performance will be negatively impacted if our competitors:

- develop products that are superior to our products;
- develop products that are more competitively priced than our products;
- develop methods of more efficiently and effectively providing products and services; or
- adapt more quickly than we do to new technologies or evolving customer requirements.

We believe that the principal points of competition in our markets are product quality, price, design and engineering capabilities, product development, conformity to customer specifications, quality of support after the sale, timeliness of delivery and effectiveness of the distribution organization. Maintaining and improving our competitive position will require continued investment in manufacturing, engineering, quality standards, marketing, customer service and support and our distribution networks. If we do not maintain, or are otherwise unable to maintain, sufficient resources to make these investments, or are not successful in maintaining our competitive position, our business operations and financial performance will suffer.

We depend on government contracts and subcontracts with defense prime contractors and subcontractors that may not be fully funded, may be terminated, or may be awarded to our competitors. The failure to be awarded these contracts, the failure to receive funding or the termination of one or more of these contracts could reduce our sales. Sales to the U.S. government and its prime contractors and subcontractors represent a significant portion of our business. The funding of these programs is generally subject to annual congressional appropriations, and congressional priorities are subject to change. We cannot be certain that current levels of congressional funding for programs involving our products or services will continue and that our business related to these products and services will not decline or increase at currently anticipated levels, or that we will not be subject to delays in the negotiation of contracts or increased costs due to changes in the funding of U.S. government programs or government shutdowns. In addition, government expenditures for defense programs may decline or these defense programs may be terminated. A decline in governmental expenditures, a change in spending priorities (e.g., shifting funds to efforts to combat the impact of the pandemic or efforts to assist Ukraine in the Russia and Ukraine conflict), or the termination of existing contracts may result in a reduction in the volume of contracts awarded to us. Furthermore, on contracts for which we are a subcontractor and not the prime contractor, the U.S. government could terminate the prime contract for convenience or otherwise, irrespective of our performance as a subcontractor. Also, sales to the U.S. government and its contractors as well as foreign military and government customers, either directly or as a subcontractor to other contractors, often use a competitive bidding process and have unique purchasing and delivery requirements, which often makes the timing of sales to these customers unpredictable. We have resources applied to specific government contracts and if any of those contracts were terminated, we may incur substantial costs redeploying those resources.

Contracting in the defense industry is subject to significant regulation, including rules related to bidding, billing and accounting kickbacks and false claims, and any non-compliance could subject us to fines and penalties or possible debarment. Like all government contractors, we are subject to risks associated with this contracting. These risks include the potential for substantial civil and criminal fines and penalties. These fines and penalties could be imposed for failing to follow procurement integrity and bidding rules, employing improper billing practices or otherwise failing to follow cost accounting standards, receiving or paying kickbacks or filing false claims. We have been, and expect to continue to be, subjected to audits and investigations by government agencies. The failure to comply with the terms of our government contracts could harm our business reputation, which could significantly reduce our sales and earnings. It could also result in our suspension or debarment from future government contracts, which would adversely affect our business, financial condition, results of operations, and cash flows.

Strategic Risks

If we are unable to adapt to technological change, demand for our products may be reduced. The technologies related to our products have undergone, and in the future may undergo, significant changes. To succeed in the future, we will need to continue to design, develop, manufacture, assemble, test, market and support new products and enhancements on a timely and cost-effective basis, and we cannot be certain that we will be able to do so successfully, if at all, or on a timely, cost effective, or repeatable basis. Our competitors may develop technologies and products that are more effective than those we develop or that render our technology and products obsolete or noncompetitive. Furthermore, our products could become unmarketable if new industry standards emerge. We may have to modify our products significantly in the future to remain competitive, and new products we introduce may not be accepted by our customers.

Our new product development efforts may not be successful, which would result in a reduction in our sales and earnings. We may experience difficulties that could delay or prevent the successful development of new products or product

enhancements, and new products or product enhancements may not be accepted by our customers. Because it is generally not possible to predict the amount of time required and the costs involved in achieving certain research, development, and engineering objectives, the development expenses we incur may exceed our cost estimates and estimated product development schedules may be extended. Furthermore, any new products we develop may not generate sales sufficient to offset our costs. If any of these events occur, our sales and profits could be adversely affected.

We may incur losses and liabilities as a result of our acquisition strategy. Growth by acquisition involves risks that could adversely affect our financial condition and operating results, including:

- the potential exposure to unanticipated liabilities;
- the potential that expected benefits or synergies are not realized and that operating costs increase;
- the risks associated with incurring additional acquisition indebtedness, including that additional indebtedness could limit our cash flow availability for operations and our flexibility;
- difficulties in integrating the operations and personnel of acquired companies;
- the potential loss of key employees, suppliers or customers of acquired businesses; and
- diversion of management time and attention from our core business.

In addition, any acquisition, once successfully integrated, could negatively impact our financial performance if it does not perform as planned, does not increase earnings, or does not prove otherwise to be beneficial to us.

Operational Risks

Our business and operations could be adversely impacted in the event of a failure of our information technology infrastructure or adversely impacted by a successful cyber-attack. We are dependent on various information technologies throughout our Company to administer, store and support multiple business activities. We routinely experience various cybersecurity threats, threats to our information technology infrastructure, unauthorized attempts to gain access to our Company sensitive information, and denial-of-service attacks as do our customers, suppliers and subcontractors. We conduct regular periodic training of our employees as to the protection of sensitive information which includes security awareness training intended to prevent the success of “phishing” attacks.

The threats we face vary from attacks common to most industries, such as ransomware attacks to disable critical infrastructure and extort companies for ransom payments, to more advanced and persistent, highly organized adversaries, including nation states, which target us and other defense contractors because we protect sensitive information. If we are unable to protect sensitive information, our customers or governmental authorities could question the adequacy of our threat mitigation and detection processes and procedures, and depending on the severity of the incident, our customers’ data, our employees’ data, our intellectual property, and other third-party data (such as subcontractors, suppliers and vendors) could be compromised. As a consequence of their persistence, sophistication and volume, we may not be successful in defending against all such attacks. Due to the evolving nature of these security threats, the impact of any future incident cannot be predicted.

Although we work cooperatively with our customers, suppliers, and subcontractors to seek to minimize the impact of cyber threats, other security threats or business disruptions, we must rely on the safeguards put in place by these entities, which may affect the security of our information. These entities have varying levels of cybersecurity expertise and safeguards and their relationships with U.S. government contractors, such as Astronics, may increase the likelihood that they are targeted by the same cyber threats we face.

If we experience a data security breach from an external source or from an insider threat, we may have a loss in sales or increased costs arising from the restoration or implementation of additional security measures, either of which could adversely affect our business and financial results. Other potential costs could include damage to our reputation, loss of brand value, incident response costs, loss of stock market value, regulatory inquiries, litigation and management distraction. A security breach that involves classified information could subject us to civil or criminal penalties, loss of a government contract, loss of access to classified information, or debarment as a government contractor. Similarly, a breach that involves loss of customer-provided data could subject us to loss of a customer, loss of a contract, litigation costs and legal damages and reputational harm.

Our inability to adequately enforce and protect our intellectual property or defend against assertions of infringement could prevent or restrict our ability to compete.

We rely on patents, trademarks and proprietary knowledge and technology, both internally developed and acquired, in order to maintain a competitive advantage. Our inability to defend against the unauthorized use of these rights and assets could have an adverse effect on our results of operations and financial condition. We cannot assure you that our means of protecting our proprietary rights in the United States or abroad will be adequate, or that others will not develop technologies similar or superior to our technology or design around our proprietary rights. Litigation may be necessary to protect our intellectual property rights or defend against claims of infringement. This litigation could result in significant costs and divert our management’s focus away from operations. Refer to the risk factor related to pending patent

infringement litigation below and Note 19 to the consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report for further discussion.

If critical components or raw materials used to manufacture our products or used in our development programs become scarce or unavailable, then we may incur delays in manufacturing and delivery of our products and in completing our development programs, which has damaged, and could continue to damage, our business, results of operations and financial condition. Due to increased demand across a range of industries, the global supply chain for certain critical components or raw materials used in the manufacture of our products and used in our development programs has experienced significant strain in recent periods. Particularly, the market for electronic components is experiencing increased demand, creating substantial uncertainty regarding our suppliers' continued production of key components for our products. The COVID-19 pandemic has also contributed to and exacerbated this strain. This constrained supply environment has adversely affected, and could further affect, availability, lead times and cost of components, and could impact our ability to complete development programs, respond to accelerated or quick-turn delivery requests from customers, or meet customer demand and product delivery dates for our end customers where we cannot timely secure adequate supply of these components. Moreover, if any of our suppliers become financially unstable, or otherwise unable or unwilling to provide us with raw materials or components, then we may have to find new suppliers. It may take several months to locate alternative suppliers, if required, or to redesign our products to accommodate components from different suppliers. We may experience significant delays in manufacturing and shipping our products to customers and incur additional development, manufacturing and other costs to establish alternative sources of supply if we lose any of these sources or are required to redesign our products. We cannot predict if we will be able to obtain replacement components within the time frames that we require at an acceptable cost, if at all.

In an effort to mitigate these risks, in some cases, we have incurred higher costs to secure available inventory, or have extended or placed non-cancellable purchase commitments with suppliers, which introduces inventory risk if our forecasts and assumptions prove inaccurate. While we may attempt to recover the increased costs through price increases to our customers, we may be unable to mitigate the effect on our results of operations. We have also multi-sourced and pre-ordered components and raw materials inventory in some cases in an effort to reduce the impact of the adverse supply chain conditions we have experienced. Despite our attempts to mitigate the impact on our business, these constrained supply conditions are expected to adversely impact our costs of goods sold, including our ability to continue to reduce the cost to produce our products in a manner consistent with prior periods. In addition, some suppliers have indicated that, as a result of current shortages, they intend to cease manufacture of certain components used in our products. Limits on manufacturing availability or capacity or delays in production or delivery of components or raw materials due to COVID-related restrictions could further delay or inhibit our ability to obtain supply of components and produce finished goods. There can be no assurance that the impacts of the pandemic on the supply chain will not continue, or worsen, in the future. These supply chain constraints and their related challenges could result in shortages, increased material costs or use of cash, engineering design changes, and delays in new product introductions, each of which could adversely impact our growth, gross margin and financial results. These types of negative financial impacts on our business may become more acute as supply chain pressures increase.

Our financial results could be adversely impacted by the escalation of labor and benefit costs. Consistent with the experience of other employers, our labor, medical and workers' compensation costs have increased substantially in recent years and are expected to continue to rise. If this trend continues, the cost of labor and to provide healthcare and other benefits to our employees could increase, adversely impacting profitability. As the labor market recovers from the effects of the COVID-19 pandemic, competition for employees has escalated which has increased costs associated with attracting and retaining employees. We cannot be certain that we will be able to maintain an adequately skilled labor force necessary to operate efficiently or that our labor costs will not increase as a result of a shortage in the availability of skilled employees. Changes to healthcare regulations involving the Patient Protection and Affordable Care Act may also increase the cost of providing such benefits to our employees. We cannot predict the ultimate content, timing, or effect of any healthcare reform legislation or the impact of potential legislation or related proposals and policies on our results. Any significant increases in the costs attributable to our self-insured health and workers' compensation plans could adversely impact our business, results of operations, financial condition and cash flows.

Price inflation for labor and materials, further exacerbated by the Russian invasion of Ukraine, could adversely affect our business, results of operations and financial condition. We experienced considerable price inflation in our costs for labor and materials during 2022, which adversely affected our business, results of operations and financial condition. We may not be able to pass through inflationary cost increases under our existing fixed-price contracts. Our ability to raise prices to reflect increased costs may be limited by competitive conditions in the market for our products and services. Russia's invasion of Ukraine, and prolonged conflict there, may continue to result in increased inflation, escalating energy and commodity prices and increasing costs of materials. We continue to work to mitigate such pressures on our business operations as they develop. To the extent the war in Ukraine adversely affects our business as discussed above, it may also have the effect of heightening

many of the other risks described herein, such as those relating to cybersecurity, supply chain, volatility in prices and market conditions, any of which could negatively affect our business and financial condition.

If our subcontractors fail to perform their contractual obligations, our prime contract performance and our ability to obtain future business could be materially and adversely impacted. Many of our contracts involve subcontracts with other companies upon which we rely to perform a portion of the services we must provide to our customers. There is a risk that we may have disputes with our subcontractors, including disputes regarding the quality and timeliness of work performed by the subcontractor or customer concerns about the subcontractor. Failure by our subcontractors to satisfactorily provide, on a timely basis, the agreed-upon supplies or perform the agreed-upon services may materially and adversely impact our ability to perform our obligations with our customer and could result in the assessment of late delivery penalties. Subcontractor performance deficiencies could result in a customer terminating our contract for default. A default termination could expose us to liability and substantially impair our ability to compete for future contracts and orders.

Some of our contracts contain late delivery penalties Failure to deliver in a timely manner due to supplier and supply chain problems, labor availability, development schedule slides, manufacturing difficulties, or similar schedule-related events could have a material adverse effect on our business. No significant penalties have been incurred to date.

Our results of operations are affected by our fixed-price contracts, which could subject us to losses in the event that we have cost overruns. For the year ended December 31, 2022, fixed-price contracts represented almost all of the Company's sales. On fixed-price contracts, we agree to perform the scope of work specified in the contract for a predetermined price. Depending on the fixed price negotiated, these contracts may provide us with an opportunity to achieve higher profits based on the relationship between our costs and the contract's fixed price. However, we bear the risk that increased or unexpected costs may reduce our profit or cause us to incur a loss on the contract, which would reduce our net earnings. Because our ability to terminate contracts is generally limited, we may not be able to terminate our performance requirements under these contracts at all or without substantial liability and, therefore, in the event we are sustaining reduced profits or losses, we could continue to sustain these reduced profits or losses for the duration of the contract term.

The failure of our products may damage our reputation, necessitate a product recall or result in claims against us that exceed our insurance coverage, thereby requiring us to pay significant damages. Defects in the design and manufacture of our products may necessitate a product recall. We include complex system design and components in our products that could contain errors or defects, particularly when we incorporate new technology into our products. If any of our products are defective, we could be required to redesign or recall those products or pay substantial damages or warranty claims. Such an event could result in significant expenses, disrupt sales and affect our reputation and that of our products. We are also exposed to product liability claims. We carry aircraft and non-aircraft product liability insurance consistent with industry norms. However, this insurance coverage may not be sufficient to fully cover the payment of any potential claim. Additionally, should insurance market conditions change, aircraft and non-aircraft product liability insurance coverage may not be available in the future at a cost acceptable to us. A product recall or a product liability claim not covered by insurance could have a material adverse effect on our business, financial condition and results of operations.

Financial Risks

We have incurred losses in prior fiscal years and our future profitability is not certain. For the year ended December 31, 2022, we incurred a net loss of \$35.7 million. Our operating results for future periods are subject to numerous uncertainties and we cannot be certain that we will be profitable or that we will not experience substantial net losses in the future. If we are not able to increase revenue and reduce our costs, we may not be able to achieve profitability in future periods and our business, financial condition, results of operations and cash flows may be adversely affected.

Our ABL Revolving Credit Facility and Term Loan Facility contain financial and restrictive covenants that we may be unable to satisfy, and that, if not satisfied, could result in the acceleration of any outstanding indebtedness thereunder and limit our ability to borrow additional funds. In addition, the terms of our ABL Revolving Credit Facility and Term Loan Facility contain covenants that restrict our current and future operations, particularly our ability to take certain actions. Our ABL Revolving Credit Facility and Term Loan Facility each subject us to various financial and other affirmative and negative covenants with which we must comply on an ongoing or periodic basis. These include financial covenants pertaining to minimum trailing four quarter EBITDA requirements, minimum liquidity requirements, minimum fixed charge coverage ratio requirements, maximum capital expenditure requirements, and excess cash flow repayment provisions. An unexpected decline in our revenues or operating income, including occurring as a result of events beyond our control, could cause us to violate our financial covenants. A covenant violation could result in a default under the ABL Revolving Credit Facility and Term Loan Facility. If any such default occurs, the lenders may elect to declare all outstanding borrowings, together with accrued interest and other amounts payable thereunder, to be immediately due and payable. Further, as the amount available to us under our credit facilities is subject to borrowing base calculations determined by the value of accounts

receivable and inventory (under our ABL Revolving Credit Facility) and real estate and fixed assets (under our Term Loan Facility), an unexpected decline in the value of these assets would require a mandatory prepayment. If any of these events were to occur, we may not be able to pay our debts and other monetary obligations as they come due, and our ability to continue to operate as a going concern could be impaired, which could in turn cause a significant decline in our stock price and could result in a significant loss of value for our shareholders. Furthermore, the lenders also have the right in these circumstances to terminate any commitments they have to provide further borrowings, which could leave us without access to sufficient liquidity to operate our business. In addition, following an event of default, the lenders under the ABL Revolving Credit Facility and Term Loan Facility will have the right to proceed against the collateral granted to them to secure the debt, which includes our available accounts receivable, inventory, machinery and equipment, real estate and intellectual property. If the debt under the ABL Revolving Credit Facility and Term Loan Facility were to be accelerated, we cannot assure you that our assets would be sufficient to repay in full our debt.

Additionally, our ABL Revolving Credit Facility and Term Loan Facility also contain a number of restrictive covenants that impose significant operating and financial restrictions on the Company and our subsidiaries and may limit our ability to engage in acts that we believe to be in our long-term best interests. The ABL Revolving Credit Facility and Term Loan Facility includes covenants restricting, among other things, the ability of the Company and our subsidiaries to:

- incur additional indebtedness;
- pay dividends on or repurchase our capital stock;
- make certain acquisitions or investments;
- sell assets; and
- engage in certain business activities.

The amount of debt we have outstanding, as well as any debt we may incur in the future, could have an adverse effect on our operational and financial flexibility. As of December 31, 2022, we had approximately \$164.0 million of debt outstanding. Changes to our level of debt subsequent to December 31, 2022 could have significant consequences to our business, including the following:

- Depending on interest rates and debt maturities, a substantial portion of our cash flow from operations could be dedicated to paying principal and interest on our debt, thereby reducing funds available for our acquisition strategy, capital expenditures or other purposes;
- A significant amount of additional debt could make us more vulnerable to changes in economic conditions or increases in prevailing interest rates;
- Our ability to obtain additional financing for acquisitions, capital expenditures or for other purposes could be impaired;
- The increase in the amount of debt we have outstanding and the associated interest expense increases the risk of non-compliance with some of the covenants in our debt agreements which require us to maintain specified financial ratios; and
- We may be more leveraged than some of our competitors, which may result in a competitive disadvantage.

Subject to the limits contained in our ABL Revolving Credit Facility and Term Loan Facility, we may incur additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other purposes. If we do so, the risks described above related to our debt could intensify.

A write-off of all or part of our goodwill or other intangible assets could adversely affect our operating results and net worth. At December 31, 2022, goodwill and net intangible assets were approximately 9.5% and 12.9% of our total assets, respectively. In 2020, we recorded goodwill impairment charges associated with four Aerospace reporting units, totaling \$86.3 million. We had no such impairment charges during 2022 or 2021. Our goodwill and other intangible assets may increase in the future since our strategy includes growing through acquisitions. We may have to write-off all or part of our goodwill or purchased intangible assets if their value becomes impaired. Although this write-off would not result in an outlay of cash and is not included in the financial covenant calculation, it could reduce our earnings and net worth significantly.

We are subject to financing and interest rate exposure risks that could adversely affect our business, liquidity and operating results. Changes in the availability, terms and cost of capital, and increases in interest rates could cause our cost of doing business to increase and place us at a competitive disadvantage. At December 31, 2022, all of our debt was subject to variable interest rates.

Our future operating results could be impacted by estimates used to calculate impairment losses on long-lived assets. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make significant and subjective estimates and assumptions that may affect the reported amounts of tangible and intangible long-lived assets in the financial statements. These estimates are integral in the determination of whether a potential non-cash impairment loss exists as well as the calculation of that loss. Actual future results could differ from those estimates. As

discussed in Note 22 to the consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report, we recorded a long-lived asset impairment charge of approximately \$0.7 million in the year ending December 31, 2020. We had no such impairment charges in 2022 or 2021.

Changes in discount rates and other estimates could affect our future earnings and equity. Our goodwill asset impairment evaluations are determined using valuations that involve several assumptions, including discount rates, cash flow estimates, growth rates and terminal values. Certain of these assumptions, particularly the discount rate, are based on market conditions and are outside of our control. Changes in these assumptions could affect our future earnings and equity.

Additionally, pension obligations and the related costs are determined using actual results and actuarial valuations that involve several assumptions. The most critical assumption is the discount rate. Other assumptions include mortality, salary levels and retirement age. The discount rate assumptions are based on current market conditions and are outside of our control. Changes in these assumptions could affect our future earnings and equity.

Changes in tax laws and regulations or exposure to additional tax liabilities could adversely affect our financial results. Changes in U.S. (federal or state) or foreign tax laws and regulations, or their interpretation and application, including those with retroactive effect, could result in increases in our tax expense and affect profitability and cash flows. For example, beginning in 2022, the Tax Cuts and Jobs Act of 2017 eliminated the option to deduct research and development expenditures immediately in the year incurred and requires taxpayers to amortize such expenditures over five years for tax purposes. The most significant impact of this provision is to the cash tax liability for 2023 (as the liability for 2022 is partially offset by certain tax credits and loss carryforwards); the impact will decline annually thereafter over the five-year amortization period to an immaterial amount in year six.

Legal and Compliance Risks

We currently are involved in, and may become involved in the future in, legal proceedings that, if adversely adjudicated or settled, could materially and adversely impact our financial condition. As an aerospace company, we may become a party to litigation, including, among others, matters alleging product liability, warranty claims, intellectual property infringement, breach of commercial or government contract or other legal actions. In general, litigation claims can be expensive and time consuming to bring or defend against and could result in settlements or damages that could significantly and adversely impact our results of operations and financial condition.

Currently, our AES subsidiary is a defendant in actions filed in various jurisdictions by Lufthansa Technik AG relating to an allegation of patent infringement and based on rulings to date we have concluded that losses related to these proceedings are probable. If these actions are decided adversely against the Company, the associated damages could result in a material adverse effect on our results of operations or financial condition.

Refer to Note 19 of our consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report for discussion on this and other legal proceedings. Other than these proceedings, we are not party to any significant pending legal proceedings that management believes will result in a material adverse effect on our results of operations or financial condition.

Our operations in foreign countries expose us to political and currency risks and adverse changes in local legal and regulatory environments. In 2022, approximately 9% of our sales were made by our subsidiaries in foreign countries, predominately in our subsidiaries in France and Canada. Net assets held by our foreign subsidiaries total \$36.6 million at December 31, 2022. Approximately 22% of our consolidated sales in 2022 were made to customers outside of the United States. Our financial results may be adversely affected by fluctuations in foreign currencies and by the translation of the financial statements of our foreign subsidiaries from local currencies into U.S. dollars. We expect international operations and export sales to continue to contribute to our earnings for the foreseeable future. Both the sales from international operations and export sales are subject in varying degrees to risks inherent in doing business outside of the U.S. Such risks include the possibility of unfavorable circumstances arising from host country laws or regulations, changes in tariff and trade barriers and import or export licensing requirements, and political or economic reprioritization, insurrection, civil disturbance or war.

Government regulations could limit our ability to sell our products outside the U.S. and could otherwise adversely affect our business. Certain of our sales are subject to compliance with U.S. export regulations. Our failure to obtain, or fully adhere to the limitations contained in, the requisite licenses, meet registration standards or comply with other government export regulations would hinder our ability to generate sales of our products outside the U.S. Compliance with these government regulations may also subject us to additional fees and operating costs. The absence of comparable restrictions on competitors in other countries may adversely affect our competitive position. In order to sell our products in European Union countries, we must satisfy certain technical requirements. If we are unable to comply with those requirements with respect to a significant quantity of our products, our sales in Europe would be restricted. Doing business internationally also subjects us to numerous

U.S. and foreign laws and regulations, including regulations relating to import-export control, technology transfer restrictions, foreign corrupt practices and anti-boycott provisions. Our failure, or failure by an authorized agent or representative that is attributable to us, to comply with these laws and regulations could result in administrative, civil or criminal liabilities and could, in the extreme case, result in monetary penalties, suspension or debarment from government contracts or suspension of our export privileges, which would have a material adverse effect on us.

Trade policies, treaties, and tariffs could have a material adverse effect on our business.Our business is dependent on the availability of raw materials and components for our products, particularly electrical components common in the semiconductor industry. There is continued uncertainty about the future relationship between the United States and various other countries, most significantly China, with respect to trade policies, treaties, tariffs, and taxes. Under the Biden administration, changes in U.S. administrative policy could lead to changes in existing trade agreements, greater restrictions on free trade generally, and significant increases in tariffs on goods imported into the United States, particularly tariffs on products manufactured in China and Mexico, among other possible changes. These developments, or the perception that any of them could occur, could have a material effect on global economic conditions and the stability of global financial markets, and could significantly reduce global trade and, in particular, trade between the impacted nations and the United States.

We may face reputational, regulatory or financial risks from a perceived, or an actual, failure to achieve our sustainability goals.The increased focus on sustainability practices and disclosures is rapidly evolving, as is the criteria to measure our sustainability performance; both of which could result in greater expectations and may cause us to undertake costly initiatives to satisfy the evolving criteria. As we advance our sustainable business model, we are pursuing programs that we believe will improve our environmental practices, social engagement and how we govern ourselves. We periodically publish information about our sustainability goals, standards and frameworks. Achievement of these objectives is subject to risks and uncertainties, many of which are outside of our direct control, and it is possible we may fail, or be perceived to have failed, in the achievement of our sustainability goals. Also, certain customers, associates, shareholders, investors, suppliers, business partners, government agencies and non-governmental organizations may not be satisfied with our sustainability efforts. A failure or perceived failure of our sustainability goals could negatively affect our reputation and our results of operations.

This uncertainty includes: (i) the possibility of altering the existing tariffs or penalties on products manufactured outside the United States, including the U.S. government's 25% tariff on a range of products from China; (ii) the effects stemming from the removal of such previously imposed tariffs; (iii) subsequent tariffs imposed by the United States on any other U.S. trading partners such as Russia; and (iv) potential tariffs imposed by trading partners on U.S. goods. The institution of trade tariffs on items imported by us from other countries could increase our costs, which could have a negative impact on our business.

We cannot predict whether, and to what extent, there may be changes to international trade agreements or whether quotas, duties, tariffs, exchange controls or other restrictions on our products will be changed or imposed. In addition, an open conflict or war across any region could affect our ability to obtain raw materials. For example, the current military conflict between Russia and Ukraine, and related sanctions, export controls or other actions that may be initiated by nations, including the United States, the European Union or Russia (e.g., potential cyberattacks, disruption of energy flows, etc.) or potential sanctions or relevant export controls related to China or Taiwan could adversely affect our business and/or our supply chain or our business partners or customers in other countries beyond Russia and Ukraine. Although we currently maintain alternative sources for raw materials, if we are unable to source our products from the countries where we wish to purchase them, either because of the occurrence or threat of wars or other conflicts, regulatory changes or for any other reason, or if the cost of doing so increases, it could have a material adverse effect on our business, financial condition and results of operations. Disruptions in the supply of raw materials and components could temporarily impair our ability to manufacture our products for our customers or require us to pay higher prices to obtain these raw materials or components from other sources, which could have a material adverse effect on our business and our results of operations.

General Risks

Our future success depends to a significant degree upon the continued contributions of our management team and technical personnel.The loss of members of our management team could have a material and adverse effect on our business. In addition, competition for qualified technical personnel in our industry is intense, and we believe that our future growth and success will depend on our ability to attract, train and retain such personnel.

Future terror attacks, war, or other civil disturbances could negatively impact our business.Continued terror attacks, war or other disturbances could lead to economic instability and decreases in demand for our products, which could negatively impact our business, financial condition and results of operations. Terrorist attacks world-wide have caused instability from time to time in global financial markets and the aviation industry. The long-term effects of terrorist attacks on us are unknown. These attacks and the U.S. government's continued efforts against terrorist organizations may lead to additional armed hostilities or to further acts of terrorism and civil disturbance in the U.S. or elsewhere, which may further contribute to economic instability.

If we fail to meet expectations of securities analysts or investors due to fluctuations in our sales or operating results, our stock price could decline significantly. Our sales and earnings may fluctuate from quarter to quarter due to a number of factors, including delays or cancellations of programs and the impacts of the ongoing COVID-19 pandemic and supply chain challenges on revenues and costs. It is likely that in some future quarters our operating results may fall below the expectations of securities analysts or investors. In this event, the trading price of our stock could decline significantly.

Our stock price is volatile. For the year ended December 31, 2022, our stock price ranged from a low of \$7.61 to a high of \$14.71. The price of our common stock has been and likely will continue to be subject to wide fluctuations in response to a number of events and factors, such as:

- our ability to comply with the financial and other affirmative and negative covenants included in our ABL Revolving Credit Facility and Term Loan Facility;
- quarterly variations in operating results;
- variances of our quarterly results of operations from securities analyst estimates;
- changes in financial estimates;
- announcements of technological innovations and new products;
- news reports relating to trends in our markets;
- the cancellation of major contracts or programs with our customers; and
- impacts of the COVID-19 pandemic on the aerospace industry and our Company.

In addition, the stock market in general, and the market prices for companies in the aerospace and defense industry in particular, have experienced significant price and volume fluctuations that often have been unrelated to the operating performance of the companies affected by these fluctuations. These broad market fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. Global health crises, such as the current COVID-19 pandemic, with the breadth of its impact worldwide, and particularly on the aerospace industry, could also cause significant volatility in the market price.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2. PROPERTIES

On December 31, 2022, we own or lease 1.2 million square feet of space, distributed by segment as follows:

	Owned	Leased	Total
Aerospace	625,000	405,000	1,030,000
Test Systems	—	122,000	122,000
Total Square Feet	<u>625,000</u>	<u>527,000</u>	<u>1,152,000</u>

We have principal operations in the U.S., Canada, France and the UK, as well as engineering offices in Ukraine and India.

Upon the expiration of our current leases, we believe that we will be able to either secure renewal terms or enter into leases for or purchases of alternative locations at market terms. We believe that our properties have been adequately maintained and are generally in good condition.

ITEM 3. LEGAL PROCEEDINGS

Currently, we are involved in legal proceedings relating to allegations of patent infringement and, based on rulings to date, we have concluded that losses related to certain of these proceedings are probable. For a discussion of contingencies related to legal proceedings, see Note 19 to our consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report.

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

The Company's Common Stock is traded on the Nasdaq Global Select Market under the symbol "ATRO". The approximate number of shareholders of record as of March 6, 2023, was 0 for Common Stock and 0 for Class B Stock.

The Company has not paid any cash dividends in the three-year period ended December 31, 2022. The Company has no plans to pay cash dividends as it plans to retain all cash from operations as a source of capital to service debt and finance working capital and growth in the business.

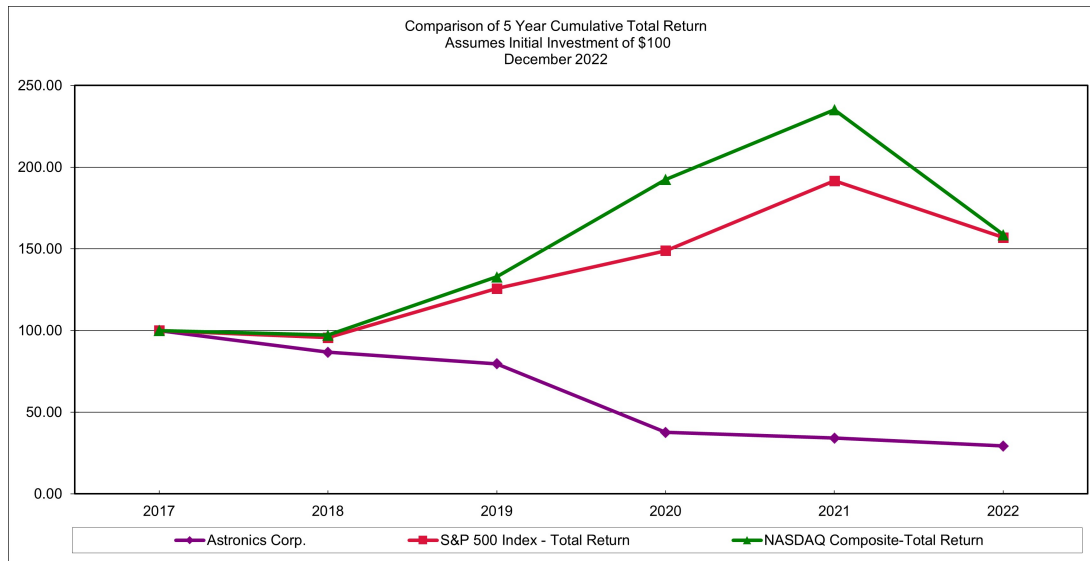
The following table summarizes our purchases of our common stock for the quarter ended December 31, 2022:

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid Per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</u>	<u>Maximum Dollar Value of Shares that may yet be Purchased Under the Program</u>
October 2 - October 29	—	\$ —	—	\$ 41,483,815
October 30 - November 26	—	\$ —	—	\$ 41,483,815
November 27 - December 31*	588	\$ 10.14	—	\$ 41,483,815
Total	588	\$ 10.14	—	

*Represents shares withheld for taxes on the net settlement of RSU issuances

On September 17, 2019, the Board of Directors authorized an additional share repurchase program. This program authorizes repurchases of up to \$50 million of common stock. Cumulative repurchases under this plan were approximately 310,000 shares at a cost of \$8.5 million before the 10b5-1 plan associated with the share repurchase program was terminated on February 3, 2020. There have been no repurchases under this plan since that date.

The following graph compares the Company's annual percentage change in cumulative total return on common shares over the past five years with the cumulative total return of companies comprising the S&P 500 Index and the NASDAQ Composite Index. This presentation assumes that \$100 was invested in shares of the relevant issuers on December 31, 2017, and that dividends received were immediately invested in additional shares. The graph plots the value of the initial \$100 investment at one-year intervals for the fiscal years shown.



		2017	2018	2019	2020	2021	2022
Astronics Corp.	Return %	—	(13.30)	(8.21)	(52.67)	(9.30)	(14.18)
	Cum \$	100.00	86.70	79.58	37.67	34.17	29.32
S&P 500 Index - Total Returns	Return %	—	(4.38)	31.49	18.40	28.71	(18.11)
	Cum \$	100.00	95.62	125.72	148.85	191.58	156.88
NASDAQ Composite-Total Return	Return %	—	(2.84)	36.69	44.92	22.18	(32.54)
	Cum \$	100.00	97.16	132.81	192.47	235.15	158.65

ITEM 6. [Reserved]

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

OVERVIEW

Astronics Corporation, through its subsidiaries, is a leading supplier of advanced technologies and products to the global aerospace and defense industries. Our products and services include advanced, high-performance electrical power generation and distribution systems, seat motion solutions, lighting and safety systems, avionics products, aircraft structures, systems certification, and automated test systems.

We have two reportable segments, Aerospace and Test Systems. Our Aerospace segment has principal operating facilities in the United States, Canada and France. Our Test Systems segment has principal operating facilities in the United States and the United Kingdom. We have engineering offices in Ukraine and India.

Our Aerospace segment designs and manufactures products for the global aerospace industry. Product lines include lighting and safety systems, electrical power generation, distribution and seat motion systems, aircraft structures, avionics products, systems certification, and other products. Our primary Aerospace customers are the airframe manufacturers ("OEM") that build aircraft for the commercial transport, military and general aviation markets, suppliers to those OEMs, aircraft operators such as airlines, suppliers to the aircraft operators, and branches of the U.S. Department of Defense ("USDOD"). Our Test Systems segment designs, develops, manufactures and maintains automated test systems that support the aerospace and defense and mass transit industries as well as training and simulation devices for both commercial and military applications. In the Test Systems segment, Astronics' products are sold to a global customer base including OEMs and prime government contractors for both electronics and military products.

Our strategy is to increase our value by developing technologies and capabilities, either internally or through acquisition, and using those capabilities to provide innovative solutions to our targeted markets where our technology can be beneficial.

Important factors affecting our growth and profitability are the ongoing impacts of the COVID-19 pandemic and the timing and extent of recovery (as discussed more fully below), supply chain and labor market pressures, the rate at which new aircraft are produced, government funding of military programs, our ability to have our products designed into new aircraft and the rates at which aircraft owners, including commercial airlines, refurbish or install upgrades to their aircraft. New aircraft build rates and aircraft owners spending on upgrades and refurbishments is cyclical and dependent on the strength of the global economy. Once one of our products is designed into a new aircraft, the spare parts business is also frequently retained by the Company. Future growth and profitability of the Test Systems business is dependent on developing and procuring new and follow-on business. The nature of our Test Systems business is such that it pursues large, often multi-year, projects. There can be significant periods of time between orders in this business which may result in large fluctuations of sales and profit levels and backlog from period to period. Test Systems segment customers include the USDOD, prime contractors to the USDOD, mass transit operators and prime contractors to mass transit operators.

Each of the markets that we serve presents opportunities that we expect will provide growth for the Company over the long-term. We continue to look for opportunities in all of our markets to capitalize on our core competencies to expand our existing business and to grow through strategic acquisitions.

Challenges which continue to face us include the ongoing COVID-19 pandemic and its continued impact on the aerospace industry, supply chain pressures including material availability and cost increases, labor availability and cost, inflationary pressures, and improving shareholder value through increasing profitability. Increasing profitability is dependent on many things, primarily sales growth, both acquired and organic, and the Company's ability to pass cost increases along to customers and control operating expenses and to identify means of creating improved productivity. Sales are driven by increased build rates for existing aircraft, market acceptance and economic success of new aircraft and our products, continued government funding of defense programs, the Company's ability to obtain production contracts for parts we currently supply or have been selected to design and develop for new aircraft platforms and continually identifying and winning new business for our Test Systems segment.

Reduced aircraft build rates driven by a weak economy, aircraft groundings, tight credit markets, reduced air passenger travel and an increasing supply of used aircraft on the market would likely result in reduced demand for our products, which will result in lower profits. Reduction of defense spending may result in fewer opportunities for us to compete, which could result in lower profits in the future. Many of our newer development programs are based on new and unproven technology and at the

same time we are challenged to develop the technology on a schedule that is consistent with specific programs. Delays in delivery schedules and incremental costs resulting from supply chain pressures can also result in lower profits. We will continue to address these challenges by working to improve operating efficiencies and focusing on executing on the growth opportunities currently in front of us.

Our ABL Revolving Credit Facility and Term Loan Facility each subject us to various financial and other affirmative and negative covenants with which we must comply on an ongoing or periodic basis. These include financial covenants pertaining to minimum trailing four quarter EBITDA requirements, minimum liquidity requirements and minimum fixed charge coverage ratio requirements, and excess cash flow repayment provisions. An unexpected decline in our revenues or operating income, including occurring as a result of events beyond our control, could cause us to violate our financial covenants. During 2023, given the ongoing challenges faced in our business as described herein, including as a result of the COVID-19 pandemic and its continued impact on the aerospace industry, and based upon our 2023 Outlook as described herein, our ability to satisfy the already tight financial covenants in our ABL Revolving Credit Facility and Term Loan Facility is expected to be challenging and is an item that our management team will be closely monitoring throughout the year. While the company expects to remain in compliance with the required financial covenants for the duration of the agreements, any unexpected negative impacts to our business, including as a result of additional supply chain pressures, the timing of customer orders and our ability to delivery schedules, or labor availability and cost pressures, could result in lower revenues and reduced financial profits, and, as a result thereof, our inability to satisfy the financial covenants in our ABL Revolving Credit Facility and Term Loan Facility during 2023.

See Part I, Item 1A, Risk Factors, for an additional discussion of risks associated with our potential inability to satisfy the financial and restrictive covenants set forth in the ABL Revolving Credit Facility and Term Loan Facility.

In September 2021, the Company entered into an agreement with the U.S. Department of Transportation (“USDOT”) under the Aviation Manufacturing Jobs Protection Program (“AMJP”) for a grant of up to \$14.7 million. The Company received \$7.4 million under the grant in 2021, \$5.2 million in the first quarter of 2022 and \$2.1 million in the third quarter of 2022. The grant benefit was recognized over the six-month performance period as a reduction to cost of products sold in proportion to the compensation expense that the award is intended to defray. During the years ended December 31, 2022 and 2021, the Company recognized \$6.0 million and \$8.7 million of the award, respectively.

The COVID-19 pandemic caused a significant impact on our sales and net income for fiscal 2022, 2021 and 2020. The pandemic adversely impacted customer demand for all market channels, with commercial transport (both OEM and aftermarket channels) being the most adversely impacted due to the pandemic's impact on air travel worldwide. As a result, the Company executed restructuring activities in the form of workforce reduction to better align capacity with expected demand. Restructuring charges in severance expense totaling \$0.6 million, associated primarily with the Aerospace segment, were recorded in the year ended December 31, 2021, compared with \$4.9 million recorded in the year ended December 31, 2020.

We are also monitoring the ongoing conflict between Russia and Ukraine and the related export controls and financial and economic sanctions imposed on certain industry sectors, including the aviation sector, and parties in Russia by the U.S., the U.K., the European Union and others. Although the conflict has not resulted in a direct material adverse impact on our business to date, the implications of the Russia and Ukraine conflict in the short-term and long-term are difficult to predict at this time. Factors such as increased energy costs, the availability of certain raw materials for aircraft manufacturers, embargoes on flights from Russian airlines, sanctions on Russian companies, and the stability of Ukrainian customers could impact the global economy and aviation sector.

DIVESTITURES

On February 13, 2019, the Company completed a divestiture of its semiconductor test business within the Test Systems segment. The total proceeds of the divestiture included two elements of contingent purchase consideration (“earnout”). In the fourth quarter of 2021, the Company agreed to an earnout payment of \$10.7 million for the calendar 2020 earnout, which was recorded in 2021 as a separate line item below operating loss and was received by the Company in early January 2022. In March 2022, the Company agreed with the earnout calculation for the calendar 2021 earnout in the amount of \$11.3 million. The Company recorded the gain and received the payment in the first quarter of 2022. In February 2023, the Company was notified by the buyer that they have calculated \$3.4 million as being payable for the calendar 2022 earnout. The Company is in the process of reviewing the calculation and expects to record the additional gain on sale, and receive the payment, in the first quarter of 2023. We are not eligible for any further earnout payments related to this divestiture. See further information in Note 21 in Item 8, Financial Statements and Supplementary Data, of this report.

On October 6, 2021, the Company sold one of its Aerospace buildings for \$9.2 million. Net cash proceeds were approximately \$8.8 million and a gain on sale of approximately \$5.0 million was recorded. The operation has been integrated into another facility.

MARKETS

Commercial Transport Market

The commercial transport market is our largest end market with sales driven by new aircraft production and aftermarket airline retrofit programs. In the commercial transport market, while many of our key long-term fundamentals remain intact, we continue to see near-term market pressure due to effects of the COVID-19 pandemic and certain supply chain challenges. Despite increases in sales in 2022 compared to the prior year, we expect 2023 will remain challenging for our commercial transport products with improvement expected to continue throughout 2023 driven by the planned increased production rate of the 737 MAX and an expectation of improved activity with our airline customers. Aircraft build rates are expected to improve modestly during 2023 from current levels as production of the 737 MAX and A-320 picks up, and the aftermarket is expected to strengthen over the course of the year as aircraft utilization and load factors increase. On the other hand, wide-body production rates and usage are expected to remain depressed throughout 2023 and possibly for several years due to low international travel demand caused by the COVID-19 pandemic, though we are seeing signs of recovery in the widebody/long-haul market.

Sales to the commercial transport market include sales of lighting and safety systems, electrical power and seat motion systems, aircraft structures, avionics products and systems certification. Sales to this market totaled approximately \$314.6 million or 58.8% of our consolidated sales in 2022. As a result of the COVID-19 pandemic and its adverse impact on air travel worldwide, the commercial aerospace industry has been significantly disrupted, but has shown continued improvement during 2022.

Maintaining and growing sales to the commercial transport market will depend not only on market recovery from the impacts of the COVID-19 pandemic, but also on airlines' capital spending budgets for cabin upgrades as well as the purchase of new aircraft by global airlines. This spending by the airlines is impacted by their profits, cash flow and available financing as well as competitive pressures between the airlines to improve the travel experience for their passengers. We expect that new aircraft will be equipped with more passenger and aircraft connectivity and in-seat power than previous generation aircraft which drives demand for our avionics and power products. This market has historically experienced strong growth from airlines installing in-seat passenger power systems on their existing and newly delivered aircraft. Our ability to maintain and grow sales to this market depends on our ability to maintain our technological advantages over our competitors and maintain our relationships with major in-flight entertainment suppliers and global airlines.

Military Aerospace Market

Sales to the military aerospace market include sales of lighting and safety products, avionics products, electrical power and seat motion products and structures products. Sales to this market totaled approximately 10.2% of our consolidated sales and amounted to \$54.5 million in 2022.

The military market is dependent on governmental funding which can change from year to year. Risks are that overall spending may be reduced in the future, specific programs may be eliminated or that we fail to win new business through the competitive bid process. Astronics does not have significant reliance on any one program such that cancellation of a particular program will cause material financial loss. We believe that we will continue to have opportunities similar to past years with respect to this market.

General Aviation Market

The general aviation market has also been impacted by the pandemic with new aircraft build rates significantly lower than pre-pandemic levels. Most of our sales in this market are line-fit products driven by aircraft build rates although there are some aftermarket sales as well. We expect improvement in 2023 as build rates are expected to increase.

Sales to the general aviation market include sales of lighting and safety products, avionics products, and electrical power and seat motion products. Sales to this market totaled approximately 11.9% of our consolidated sales in 2022 and amounted to \$63.4 million.

Sales to the general aviation market are driven by our ship set content on new aircraft and build rates of new aircraft. General aviation OEM build rates are impacted by global wealth creation and corporate profitability. We continue to see opportunities on new aircraft currently in the design phase to employ our lighting and safety, electrical power and avionics technologies in this market. There is risk involved in the development of products for any new aircraft including the risk that the aircraft will not ultimately be produced or that it will be produced in lower quantities than originally expected and thus impacting our return on our engineering and development efforts.

Test Systems Products

Sales by our Test Systems segment accounted for approximately 13.8% of our consolidated sales in 2022 and amounted to \$73.7 million. This segment designs, develops, manufactures and maintains automated test systems that support the aerospace and defense, communications and mass transit industries as well as training and simulation devices for both commercial and military applications. Sales to the aerospace and defense market were \$49.3 million in 2022. Sales to the mass transit market were \$13.5 million and sales to other markets were \$10.9 million in 2022.

Sales to the military market are subject to fluctuations resulting from changes in governmental spending, elimination of certain programs, or failure to win new business through the competitive bid process. Consistent with the Aerospace segment, the Test Systems segment does not significantly rely on any one program such that cancellation of a particular program will cause material financial loss, and we believe that we will continue to have opportunities similar to past years regarding this market.

CRITICAL ACCOUNTING ESTIMATES

Our financial statements and accompanying notes are prepared in accordance with U.S. generally accepted accounting principles. The preparation of the Company's financial statements requires management to make estimates, assumptions and judgments that affect the amounts reported. These estimates, assumptions and judgments are affected by management's application of accounting policies, which are discussed in the Notes to Consolidated Financial Statements, Note 1 in Item 8, Financial Statements and Supplementary Data, of this report. The critical accounting policies have been reviewed with the Audit Committee of our Board of Directors.

Revenue Recognition

Astronics recognizes revenue when it transfers control of a promised good or service to a customer in an amount that reflects the consideration it expects to receive in exchange for the good or service. Our performance obligations are satisfied and control is transferred either at a point-in-time or over-time. The majority of our revenue is recognized at a point-in-time when control is transferred, which is generally evidenced by the shipment or delivery of the product to the customer, a transfer of title, a transfer of the significant risks and rewards of ownership, and customer acceptance. For certain contracts under which we produce products with no alternative use and for which we have an enforceable right to recover costs incurred plus a reasonable profit margin for work completed to date and for certain other contracts under which we create or enhance a customer-owned asset while performing repair and overhaul services, control is transferred to the customer overtime. The Company recognizes revenue using an over time recognition model for these types of contracts.

We utilize the cost-to-cost method as a measure of progress for performance obligations that are satisfied over time as we believe this input method best represents the transfer of control to the customer. Under the cost-to-cost method, the extent of progress toward completion is measured based on the proportion of costs incurred to date to the total estimated costs at completion of the performance obligation. These projections require management to make numerous assumptions and estimates relating to items such as the complexity of design and related development costs, performance of subcontractors, availability and cost of materials, labor productivity and cost, overhead, capital costs, and manufacturing efficiency. We review our cost estimates on a periodic basis, or when circumstances change and warrant a modification to a previous estimate. Cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends and other economic projections.

See Note 2 to the consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report for a further description of revenue recognition under ASC 606.

Reviews for Impairment of Goodwill

Our goodwill is the result of the excess of purchase price over net assets acquired from acquisitions. As of December 31, 2022 and 2021, we had approximately \$58.2 million and \$58.3 million of goodwill, respectively.

We identify our reporting units by assessing whether the components of our operating segments constitute businesses for which discrete financial information is available and segment management regularly reviews the operating results of those components. The Test Systems operating segment is its own reporting unit while the other reporting units are one level below our Aerospace operating segment.

The Company tests goodwill at the reporting unit level on an annual basis or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.

We use the discounted cash flow method to estimate the fair value of each of our reporting units. The discounted cash flow method incorporates various assumptions, the most significant being projected sales growth rates, operating profit margins and

cash flows, the terminal growth rate and the discount rate. Management projects sales growth rates, operating margins and cash flows based on each reporting unit's current business, expected developments and operational strategies. If the carrying value of the reporting unit exceeds its fair value, goodwill is considered impaired and the impairment loss is recorded for the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying value of goodwill.

The Company's four reporting units remaining with goodwill as of the first day of our fourth quarter were subject to the annual goodwill impairment test. Based on our quantitative assessments of our reporting units, we concluded that goodwill was not impaired in 2022 or 2021.

As a result of the qualitative factors related to the COVID-19 pandemic that surfaced during the first quarter of 2020, we performed interim quantitative assessments for the eight reporting units which had goodwill as of March 28, 2020, and an additional quantitative assessment for our PECO reporting unit as of June 27, 2020 driven by reductions from previously forecasted aircraft build rates. Based on our quantitative assessments, the Company recorded goodwill impairment charges associated with four Aerospace reporting units, totaling \$86.3 million in the December 31, 2020 Consolidated Statements of Operations. No additional goodwill impairment charges were incurred as a result of the annual goodwill impairment test in 2020.

CONSOLIDATED RESULTS OF OPERATIONS, PERFORMANCE AND OUTLOOK

(In thousands, except percentages, employees and per share data)	2022	2021
RESULTS OF OPERATIONS:		
Sales	\$ 534,894	\$ 444,908
Gross Margin	13.4 %	14.7 %
SG&A Expenses as a Percentage of Sales	19.0 %	22.3 %
Net Gain on Sale of Facility	\$ —	\$ 5,014
Loss from Operations	\$ (30,044)	\$ (28,674)
Operating Margin	(5.6)%	(6.4)%
Net Gain on Sale of Businesses	\$ 11,284	\$ 10,677
Other Expense, Net of Other Income	\$ 1,611	\$ 2,159
Interest Expense, Net	\$ 9,422	\$ 6,804
Effective Tax Rate	(20.0)%	5.1 %
Net Loss	\$ (35,747)	\$ (25,578)
Net Loss Margin	(6.7)%	(5.7)%
Diluted Loss Per Share	\$ (1.11)	\$ (0.82)
Weighted Average Shares Outstanding – Diluted	32,164	31,061
OTHER YEAR-END DATA:		
Number of Employees	2,400	2,100

A discussion by segment can be found at "Segment Results of Operations and Outlook" in this MD&A.

CONSOLIDATED OVERVIEW OF OPERATIONS

2022 Compared With 2021

Consolidated sales were up \$90.0 million to \$534.9 million compared to the prior year. Aerospace sales were up \$96.0 million. Test System sales decreased \$6.0 million. The increase in sales validates both the recovery we are seeing in our commercial aerospace market as well as the progress being made with our supply chain. Although challenges remain, our supply chain continues to improve, which is necessary for us to meet our goals for the year.

Consolidated cost of products sold were up \$83.8 million to \$463.4 million in 2022 from \$379.5 million in the prior year. The increase was primarily due to higher volume as the global aerospace industry continues its recovery from the COVID-19 pandemic coupled with increased costs associated with material and labor inflation. The current year period benefited from \$6.0 million recognized as an offset to cost of products sold related to the AMJP award, compared to a benefit from the grant of \$8.7 million in the prior year. Research and development expenses increased \$5.0 million due to higher innovation spend. Margins remained under pressure in the quarter because of inflation and supply chain workarounds. We are passing on increased costs

where we can although it will take time to roll through sales. We are expecting improvement in pricing as well as reduction in certain input costs as we advance through 2023.

Selling, general and administrative (“SG&A”) expenses were \$101.6 million compared with \$99.1 million for the prior year period primarily due to increased wages and benefits. The current-year period reflects \$3.1 million related to the settlement of a litigation claim, a customer accommodation dispute, and a lease termination settlement. The prior-year period also benefited from a \$2.2 million non-cash reduction of the fair value of a contingent consideration liability. During the prior year period, the Company also recorded an \$8.4 million reserve related to its ongoing patent litigation dispute.

On October 6, 2021, the Company sold one of its Aerospace buildings for \$9.2 million. Net cash proceeds were approximately \$8.8 million and a gain on sale of approximately \$5.0 million was recorded. The operation has been integrated into another facility.

The Company recorded gains of \$11.3 million and \$10.7 million in 2022 and 2021, respectively, as additional gain on the sale of the Company’s former semiconductor business resulting from the contingent earnout payments for the 2021 and 2020 calendar year. In February 2023, the Company was notified by the buyer that they have calculated \$3.4 million as being payable for the calendar 2022 earnout. The Company is in the process of reviewing the calculation and expects to record the additional gain on the sale, and receive the payment, in the first quarter of 2023. We are not eligible for any further earnout payments related to this divested business.

Consolidated net loss was \$35.7 million, or \$(1.11) per diluted share, compared with net loss of \$25.6 million, or \$(0.82) per diluted share in the prior year.

Income Taxes

Our effective tax rates for 2022 and 2021 were (20.0)% and 5.1%, respectively. In the past, research and development costs were deducted as incurred. However, beginning with the 2022 tax year, these costs are required to be capitalized for tax purposes and amortized over 5 years. While this would typically result in the creation of an associated deferred tax asset, due to our cumulative three-year pre-tax loss, a valuation allowance was applied against the deferred tax asset. In addition to state income taxes, the following items had the most significant impact on the difference between our statutory U.S. federal income tax rate (21% in 2022 and 2021) and our effective tax rate:

2022:

- Recognition of approximately \$13.2 million of valuation allowance against federal deferred tax assets. See Note 11 of the consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report for additional information.
- Recognition of approximately \$2.6 million of 2022 U.S. R&D tax credits.

2021:

- Recognition of approximately \$6.8 million of valuation allowance against federal deferred tax assets. See Note 11 of the consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report for additional information.
- Recognition of approximately \$2.6 million of 2021 U.S. R&D tax credits which were offset by the federal valuation allowance recognized during the year.

2021 Compared With 2020

For a comparison of our results of operations for the years ended December 31, 2021 and 2020, see Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on March 4, 2022.

COVID-19 Impacts on Our Business

On March 11, 2020, the World Health Organization classified the COVID-19 outbreak as a pandemic. The spread of the COVID-19 pandemic disrupted businesses on a global scale, led to significant volatility in financial markets and affected the aviation and industrial industries. The impacts of the pandemic have placed labor and supply chain pressures on our business and we have been impacted by customer demand variability. Although we saw stable and growing backlog throughout 2022 in our aerospace business, disruptions are ongoing and continue to adversely challenge our commercial transport market. While we remain bullish about the aerospace business, we believe the recovery to pre-pandemic activity, particularly in the widebody market, will take longer than originally anticipated at the outset of the pandemic. As economic activity continues to recover, we

will continue to monitor the situation, assessing further possible implications on our operations, supply chain, liquidity, cash flow and customer orders.

See Part I, Item 1A, Risk Factors, for an additional discussion of risk related to supply chain disruptions.

2023 Outlook

Bookings in 2022 of \$690.6 million demonstrates continued strong demand for our products and further substantiates our expectations for another 20% increase in sales in 2023. We are forecasting revenue of \$640 million to \$680 million for 2023. The midpoint of this range would represent growth of 23% for the year, slightly higher than the 20% growth achieved in 2022. We are encouraged by our fourth quarter revenue performance, our record backlog, and continued strong demand which is beginning to benefit from a recovery in the widebody/long-haul market. The first quarter is expected to be our lightest with revenue in the range of \$140 million to \$150 million. We expect subsequent quarterly revenue to be in the range of \$160 million to \$185 million, increasing throughout the year.

Our ability to meet forecast for 2023 will depend on the cooperation of our supply chain, which we perceive is slowly improving. Challenges certainly remain, but our supply base is getting more predictable and the ratio of positive surprises relative to negative surprises is improving. We have record backlog going into 2023, and believe our supply chain will support our expected revenue range.

At December 31, 2022, our consolidated backlog was \$571.4 million. At December 31, 2021, our backlog was \$415.7 million. Backlog in the Aerospace segment was \$477.7 million at December 31, 2022, of which \$402.4 million is expected to be recognized as revenue in 2023. Backlog in the Test Systems segment was \$93.7 million at December 31, 2022. The Test Systems segment expects to recognize \$49.0 million of backlog as revenue in 2023.

Cash taxes related to 2022 are expected to be in the range of \$6 million to \$8 million. Cash taxes related to the 2023 calendar year activity are expected to be in the range of \$12 million to \$14 million.

Capital equipment spending in 2023 is expected to be in the range of \$17 million to \$20 million, up from \$7.7 million in 2022, due to investments in customer programs.

SEGMENT RESULTS OF OPERATIONS AND OUTLOOK

Operating loss, as presented below, is sales less cost of products sold and other operating expenses, excluding interest expense, other corporate expenses and other non-operating sales and expenses. Cost of products sold and other operating expenses are directly identifiable to the respective segment. Operating loss is reconciled to loss before income taxes in Note 20 of Item 8, Financial Statements and Supplementary Data, of this report.

We do not have material off-balance sheet arrangements that have or are reasonably likely to have a material future effect on our results of operations or financial condition.

AEROSPACE SEGMENT

(In thousands, except percentages)

	2022	2021
Sales	\$ 461,196	\$ 365,238
Operating Loss	\$ (1,883)	\$ (8,614)
Operating Margin	(0.4)%	(2.4)%

	2022	2021
Total Assets	\$ 481,416	\$ 458,334
Backlog	\$ 477,660	\$ 334,659

Sales by Market	2022	2021
Commercial Transport	\$ 314,564	\$ 201,990
Military	54,534	70,312
General Aviation	63,395	56,673
Other	28,703	36,263
Total	\$ 461,196	\$ 365,238

Sales by Product Line	2022	2021
Electrical Power & Motion	\$ 187,446	\$ 141,746
Lighting & Safety	124,347	103,749
Avionics	97,234	64,901
Systems Certification	17,222	13,050
Structures	6,244	5,529
Other	28,703	36,263
Total	\$ 461,196	\$ 365,238

2022 Compared With 2021

Aerospace segment sales increased \$96.0 million, or 26.3%, to \$461.2 million. Commercial transport sales increased 55.7%, or \$112.6 million, and drove the improvement. Sales to this market were \$314.6 million compared with \$202.0 million in 2021. Improving domestic airline travel is driving higher fleet utilization, higher airline spending and increased narrowbody production rates which are driving demand for Astronics' products.

General Aviation sales increased \$6.7 million, or 11.9%, to \$63.4 million due in part to higher demand in the business jet market for antenna systems. The Company expects strong demand in the business jet industry to drive higher OEM production rates in the near future, resulting in further increases in demand for its products.

Military aerospace sales decreased \$15.8 million, or 22.4%, to \$54.5 million. The prior-year period benefited from incremental non-recurring engineering revenue associated with development programs and higher sales of lighting and safety and avionics products.

Other revenue decreased \$7.6 million to \$28.7 million driven by decreased contract manufacturing programs.

Electrical Power & Motion sales increased \$45.7 million compared with the prior-year period. Additionally, Avionics sales increased by \$32.3 million and Lighting & Safety sales increased by \$20.6 million.

Aerospace segment operating loss was \$1.9 million compared with operating loss of \$8.6 million last year. Lower operating loss was driven by higher volume primarily in the commercial transport market and \$5.2 million higher research and development expenses, but was partially offset by increased material and labor costs. Operating loss in the current year included \$6.0 million offset to cost of products sold from the Aviation Manufacturing Jobs Protection ("AMJP") Program grant and \$2.6 million of expense related to settlements of a litigation claim and a customer accommodation claim. The prior year period included \$8.7 million of AMJP benefit and a \$5.0 million gain on the sale of a facility. During the prior year period, the Company also recorded an \$8.4 million reserve related to its ongoing patent litigation dispute.

2021 Compared With 2020

For a comparison of Aerospace segment results for the years ended December 31, 2021 and 2020, see Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on March 4, 2022.

2023 Outlook for Aerospace

Aerospace bookings in 2022 were \$604.2 million, for a book-to-bill ratio of 1.31:1. The Aerospace segment's backlog at December 31, 2022 was \$477.7 million, compared to \$334.7 million at December 31, 2021. Approximately \$402.4 million of the December 31, 2022 backlog is expected to be recognized as revenue over the next twelve months.

TEST SYSTEMS SEGMENT

(In thousands, except percentages)

	2022	2021
Sales	\$ 73,698	\$ 79,670
Operating Loss	\$ (8,118)	\$ (3,765)
Operating Margin	(11.0)%	(4.7)%

	2022	2021
Total Assets	\$ 111,513	\$ 105,335
Backlog	\$ 93,696	\$ 81,033

2022 Compared With 2021

Test Systems segment sales were \$73.7 million, down \$6.0 million compared with the prior year driven by lower revenue on defense and mass transit programs.

Test Systems operating loss was \$8.1 million, or 11.0% of sales, compared with an operating loss of \$3.8 million, or 4.7% of sales, in 2021. The higher operating loss was primarily attributable to mix and underabsorption of fixed costs due to volume and investments in staffing in preparation for the expected contract award from the U.S. Army. As previously disclosed, Astronics Test Systems was selected as the down select winner for the development of its Radio Test Set referred to as TS-4549/T. The Test Systems segment has been investing in significant new development programs which are expected to result in more profitable business in the near future.

2021 Compared With 2020

For a comparison of Test Systems segment results for the years ended December 31, 2021 and 2020, see Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on March 4, 2022.

2023 Outlook for Test Systems

Bookings for the Test Systems segment in 2022 were \$86.4 million, for a book-to-bill ratio of 1.17:1 for the year. Backlog in the Test Systems segment was \$93.7 million at December 31, 2022, compared to \$81.0 million at December 31, 2021. The Test Systems segment expects to recognize \$49.0 million of backlog as revenue in 2023.

In 2022, as mentioned above, our Test Systems business was down-selected by the U.S. Army as the winner of the TS-4549/T radio test competition. A directed sole-source procurement is underway to finalize the terms of a contract, a process that is expected to be completed in the third quarter. Preliminarily, the Company expects the program to generate sales of \$200 million over the next seven years.

CONTRACTUAL OBLIGATIONS AND OTHER COMMITMENTS

For further information on our contractual obligations and other commitments as of December 31, 2022 and estimated timing thereof, see the notes referenced below, in Item 8, Financial Statements and Supplementary Data, of this report.

Long-term Debt and Interest Payments — Refer to Note 8, Long-Term Debt, in this report. The Company completed a financing transaction totaling \$205 million subsequent to the year ending December 31, 2022, which refinanced its previous revolving credit facility that was scheduled to mature in November 2023. The new financing consists of a \$90 million asset-based Term Loan Facility and a \$115 million asset-based revolving credit facility. The maturity date of the Term Loan Facility is the earlier of the stated maturity date of the ABL Revolving Credit Facility or January 19, 2027, provided the ABL Revolving Credit Facility is extended beyond that date. The Term Loan Facility has an interest rate of SOFR plus 8.75% and is collateralized primarily by real estate, fixed assets and intellectual property. Amortization of the term loan principal will begin in April 2023 with a monthly amortization rate of 0.292% of the outstanding term loan principal balance for the period April 1, 2023 through June 1, 2023, increasing to 0.542% per month for the period July 1, 2023 through September 1, 2023, then increasing to 0.833% monthly thereafter. During 2023, scheduled principal payments of \$4.5 million are due under the Term Loan Facility. The Term Loan Facility requires a commitment fee of \$4.5 million, \$1.8 million of which was paid on the closing date, \$1.8 million of which will be paid on June 19, 2023 and \$0.9 million of which will be paid on the date that the financial statements and compliance certificate for the fiscal quarter of the Company ending on or about March 31, 2024 are required to be delivered under the Term Loan Facility. The revolving credit facility has a scheduled maturity of January 19, 2026, an interest rate of SOFR plus 2.25% to 2.75% and is collateralized primarily by inventory and accounts receivable. The revolving credit facility requires a quarterly commitment fee under the revolving credit agreement in an amount equal to 0.25% or 0.375% based on the Company's average excess availability. Future interest payments under the two credit facilities of approximately \$52.5 million have been estimated using the applicable interest rate of each debt facility based on expected future borrowings and scheduled term loan repayments. Actual future ABL borrowings and rates may differ from those used to estimate the amounts discussed above.

Purchase Obligations — Purchase obligations are comprised of the Company's commitments for goods and services in the normal course of business and amount to approximately \$155.8 million payable over the next twelve months.

Supplemental Retirement Plan and Post Retirement Obligations — Anticipated payments related with the Company's defined benefit plans are detailed in Note 13, Retirement Plans and Related Post Retirement Benefits in Item 8, Financial Statements and Supplementary Data, of this report.

Lease Obligations — Refer to Note 10, Leases in Item 8, Financial Statements and Supplementary Data, of this report for details on obligations and timing of expected future lease payments, including a five-year maturity schedule. These amounts exclude annual operating lease payments of approximately \$1.7 million per year through 2033, which represents legal binding lease payments for leases signed, but not yet commenced.

Legal Reserves — Refer to Note 19, Legal Proceeding in Item 8, Financial Statements and Supplementary Data, of this report for management's estimate of damages to be paid related to our ongoing litigation with Lufthansa Technik and timing thereof.

LIQUIDITY AND CAPITAL RESOURCES

(In thousands)	2022	2021
CASH FLOW DATA:		
Net Cash Flows from:		
Operating Activities	\$ (28,312)	\$ (5,530)
Investing Activities	\$ 14,386	\$ 3,179
Financing Activities	\$ (1,412)	\$ (7,505)
YEAR-END FINANCIAL POSITION:		
Working Capital (1)	\$ 213,682	\$ 221,248
Indebtedness	\$ 164,000	\$ 163,000
OTHER YEAR-END DATA:		
Capital Expenditures	\$ 7,675	\$ 6,034

(1) Working capital is calculated as the difference between Current Assets and Current Liabilities.

Our cash flow from operations and available borrowing capacity provide us with the financial resources needed to run our operations and reinvest in our business.

Our ability to maintain sufficient liquidity is highly dependent upon achieving expected operating results. Failure to achieve expected operating results could have a material adverse effect on our liquidity, our ability to obtain financing or access our existing financing, and our operations in the future.

Operating Activities

Cash used for operating activities totaled \$28.3 million in 2022, as compared with \$5.5 million cash used for operating activities in 2021. Cash flow from operating activities decreased compared with the 2021 primarily related to increases in net operating assets, primarily accounts receivable and inventory, more than offsetting cash received from income tax refunds and the AMJP program. Accounts receivable has increased with a higher volume of sales while inventory balances have increased to fulfill customer demand in upcoming quarters coupled with increased lead times on certain key components required to be purchased further in advance. Non-cash items in 2022 and 2021 include the \$11.3 million and \$10.7 million earnout from the sale of the semiconductor business, respectively. Additional non-cash items in 2021 include the \$5.0 million net gain on the sale of facilities within the Aerospace segment, as well as the \$8.4 million incremental reserve for estimated impacts of the intellectual property dispute with Lufthansa Technik.

Our cash flows from operations are primarily dependent on our net income (loss) adjusted for non-cash expenses and income and the timing of collections of receivables, inventory levels and payments to suppliers and employees. Sales and operating results of our Aerospace segment are influenced by the impact of the COVID-19 pandemic on the aerospace industry, in particular, build rates of new aircraft, which are subject to general economic conditions, airline passenger travel and spending for government and military programs. Our Test Systems segment sales depends in part on capital expenditures of the aerospace and defense industry which, in turn, depend on current and future demand for those products. A reduction in demand for our customers' products would adversely affect our operating results and cash flows.

The Company generated positive cash flows from operations in the fourth quarter of 2022, and expects to continue to do so for the full year ending December 31, 2023.

Investing Activities

Cash provided by investing activities in 2022 was \$14.4 million. Investing cash flows in 2022 were positively impacted by the receipt of \$10.7 million and \$11.3 million related to the calendar 2020 and 2021 earnouts, respectively, from the sale of the semiconductor business, offset by \$7.7 million in capital expenditures.

Cash provided by investing activities in 2021 was \$3.2 million, primarily the result of \$9.2 million in proceeds from the sale of assets within the Aerospace segment, offset by purchases of property, plant and equipment ("PP&E") of \$6.0 million.

Our expectation for 2023 is that we will invest between \$17 million and \$20 million for PP&E. Future requirements for PP&E depend on numerous factors, including expansion of existing product lines and introduction of new products. Management believes that our cash flow from operations and current borrowing arrangements will provide for these capital expenditures. We expect to continue to evaluate acquisition opportunities in the future.

Financing Activities

Cash used for financing activities totaled \$1.4 million for 2022, as compared with cash used for financing activities of \$7.5 million for 2021. The Company made net repayments towards our senior credit facility of \$1.0 million in 2022 compared with net repayments of \$10.0 million in 2021, coupled with \$2.4 million in costs associated with amending and refinancing our credit facility in 2022.

The Company's long-term debt at December 31, 2022 and 2021 consisted of borrowings under its Fifth Amended and Restated Credit Agreement (the "Agreement"). On March 1, 2022, the Company executed an amendment to the Agreement, which reduced the revolving credit line from \$375 million to \$225 million and extended the maturity date of the loans under the facility from February 16, 2023 to May 30, 2023. On August 9, 2022, the Company executed a further amendment to the Agreement, which reduced the revolving credit line from \$225 million to \$190 million until September 12, 2022 with further reductions to \$180 million effective September 12, 2022 and \$170 million effective October 11, 2022. The amendment extended the maturity date of the loans under the facility from May 30, 2023 to August 31, 2023. On October 21, 2022, the Company executed an additional amendment to the Agreement, under which the lenders waived enforcement of their rights against the Company arising from the Company's failure to comply with the maximum net leverage ratio and minimum liquidity covenants, each as of September 30, 2022. The amendment increased the revolving credit line to \$180 million as of October 21, 2022, with a reduction to \$170 million effective November 21, 2022. Another amendment to the Agreement was executed on November 14, 2022 (the "Amended Facility"), which extended the maturity date of the loans under the facility from August 31, 2023 to November 30, 2023. Under the Amended Facility, the revolving credit line was set at \$180 million, with a reduction to \$170 million effective December 21, 2022. The amendment required the Company to maintain minimum liquidity, defined as unrestricted cash plus the unused revolving credit commitments (\$10 million as of November 30, 2022 and December 31, 2022). The Amended Facility required the Company to comply with a minimum Adjusted EBITDA covenant on a trailing twelve month basis. The amendment eliminated the net leverage ratio covenant for the remaining term of the agreement. Each amendment executed in 2022 required payment of a consent fee of 5 to 10 basis points of the commitment for each consenting lender.

At December 31, 2022, there was \$164.0 million outstanding on the Amended Facility and there remained \$6.0 million available subject to the minimum liquidity covenant discussed above. The credit facility allocated up to \$20 million of the \$170 million revolving credit line for the issuance of letters of credit. Interest on the debt outstanding at December 31, 2022 was payable on the unpaid principal amount of the facility at a rate equal to the Secured Overnight Financing Rate ("SOFR", which is required to be at least 1.00%), plus 5.50% with an increase to a rate equal to SOFR (which is required to be at least 1.00%), plus 8.50% effective January 17, 2023. The Company also was required to pay a commitment fee to the lenders in an amount equal to 0.40% on the undrawn portion of the Amended Facility.

The Company amended its existing revolving credit facility on January 19, 2023 by entering into the Sixth Amended and Restated Credit Agreement (the "ABL Revolving Credit Facility"). The ABL Revolving Credit Facility set the maximum aggregate amount that the Company can borrow under the revolving credit line at \$115 million, with borrowings subject to a borrowing base determined primarily by certain domestic inventory and accounts receivable. The maturity date of borrowings under the ABL Revolving Credit Facility is January 19, 2026. Under the terms of the ABL Revolving Credit Facility, the Company will now pay interest on the unpaid principal amount of the facility at a rate equal to SOFR (which is required to be at least 1.00%) plus 2.25% to 2.75%. The Company will pay a quarterly commitment fee under the ABL Revolving Credit Facility in an amount equal to 0.25% or 0.375% based on the Company's average excess availability. Under the provisions of the ABL Revolving Credit Facility, the Company has a cash dominion arrangement with the lead banking institution whereby eligible daily cash receipts are contractually utilized to pay down outstanding borrowings. Eligible cash receipts that have not yet been applied to outstanding debt balance will be classified as restricted cash in the accompanying consolidated balance sheets.

The Company also entered into a \$90 million asset-based Term Loan Facility on January 19, 2023. The Term Loan Facility is secured primarily by fixed assets, real estate and intellectual property. The maturity date of the Term Loan Facility is the earlier of the stated maturity date of the ABL Revolving Credit Facility or January 19, 2027, provided the ABL Revolving Credit Facility is extended beyond that date. The Company will pay interest under the Term Loan Facility at a rate equal to SOFR (which is required to be at least 2.50%) plus 8.75%. The Company will pay a commitment fee under the Term Loan Facility of 5% of the total aggregate commitment, or \$4.5 million, \$1.8 million which was paid on the closing date, \$1.8 million of which will be paid on June 19, 2023 and \$0.9 million of which will be paid on the date that the financial statements and compliance certificate for the fiscal quarter of the Company ending on or about March 31, 2024 are required to be delivered under the Term Loan Facility.

Amortization of the principal under the Term Loan Facility will begin in April with a monthly amortization rate of 0.292% of the outstanding term loan principal balance for the period April 1, 2023 through June 1, 2023, increasing to 0.542% per month

for the period July 1, 2023 through September 1, 2023 then increasing to 0.833% thereafter. Total scheduled principal payments of \$4.5 million are payable in 2023 and as such, have been classified as current in the accompanying consolidated balance sheet as of December 31, 2022. The weighted-average interest rate on current maturities of long-debt is 13.60%.

Pursuant to the ABL Revolving Credit Facility and the Term Loan Facility, the Company is required to comply with a minimum trailing four quarter EBITDA of \$14.7 million for the Company's first quarter of 2023, \$23.3 million in the second quarter, \$39.2 million in the third quarter, \$51.7 million in the fourth quarter, \$57.6 million in the first quarter of 2024, \$65.2 million in the second quarter of 2024 and \$70 million thereafter. In addition, mandatory prepayment of a portion of excess cash flow, as defined by the Term Loan Facility, is payable towards the principle amount outstanding at the end of 2023. Any voluntary prepayments made are subject to a prepayment fee, as defined by the Term Loan Facility. The Company is also required to maintain minimum liquidity of \$20 million through the date of delivery of the compliance certificate for the quarter ended March 31, 2024, and \$10 million thereafter. Beginning with the first quarter of 2024, the Company is subject to a minimum fixed charge coverage ratio of 1.10 to 1.00. Further, the Company is subject to excess cash flow repayment provisions, restrictions on additional indebtedness, share repurchases and dividend payments, and a limitation on capital expenditures.

Upon execution of the amendment to its ABL Revolving Credit Facility and the Term Loan Facility on January 19, 2023, the Company incurred an additional \$6.1 million in debt issuance costs, allocated between the ABL Revolving Credit Facility and the Term Loan Facility. Deferred debt issuance costs associated with the ABL Revolving Credit Facility will be recorded within other assets and those associated with the Term Loan Facility will be recorded as a reduction of the carrying value of the debt on the Consolidated Balance Sheets.

Certain of the Company's subsidiaries are borrowers or guarantors under the ABL Revolving Credit Facility and the Term Loan Facility.

In the event of voluntary or involuntary bankruptcy of the Company or any subsidiary, all unpaid principal and other amounts owing under the credit facilities automatically become due and payable. Other events of default, such as failure to make payments as they become due and breach of financial and other covenants, change of control, cross default under other material debt agreements, and a going concern qualification for any reason other than loan maturity date give the agent the option to declare all such amounts immediately due and payable.

The Company expects its sales growth and reductions in working capital will provide sufficient cash flows to fund operations. However, the Company may also evaluate various actions and alternatives to enhance its profitability and cash generation from operating activities, which could include manufacturing efficiency initiatives, cost-reduction measures, working with vendors and suppliers to reduce lead times and expedite shipment of critical components, and working with customers to expedite receivable collections.

Our ability to maintain sufficient liquidity and comply with financial debt covenants is highly dependent upon achieving expected operating results. Failure to achieve expected operating results could have a material adverse effect on our liquidity, our ability to obtain financing or access our existing financing, and our operations in the future and could allow our debt holders to demand payment of all outstanding amounts. Refer to Item 1A, Risk Factors, for further discussion.

Refer to Note 8 of our consolidated financial statements in Item 8, Financial Statement and Supplementary Data, of this report for additional information regarding our credit facility.

DIVIDENDS

Management believes that it should retain the capital generated from operating activities for investment in advancing technologies, acquisitions and debt retirement. Accordingly, there are no plans to institute a cash dividend program. Further, we are precluded from payment of dividends under our credit facilities.

RELATED-PARTY TRANSACTIONS

Information regarding certain relationships and related transactions is incorporated herein by reference to the information included in the Company's 2023 Proxy Statement which will be filed with the Commission within 120 days after the end of the Company's 2022 fiscal year.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 of the consolidated financial statements in Item 8, Financial Statements and Supplementary Data, of this report

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company has limited exposure to fluctuation in foreign currency exchange rates to U.S. dollar, primarily in Canadian dollars and Euros currency. Approximately 91% of the Company's consolidated sales are transacted in U.S. dollars. Net assets held in or measured in Canadian dollars amounted to \$8.8 million at December 31, 2022. A 10% change in the value of the U.S. dollar versus the Canadian dollar would have had a \$0.2 million impact to 2022 net loss. Net assets held in or measured in Euros amounted to \$25.3 million at December 31, 2022. A 10% change in the value of the U.S. dollar versus the Euros would have had a \$0.1 million impact to 2022 net loss.

Risk due to fluctuation in interest rates is a function of the Company's floating rate debt obligations, which total approximately \$164.0 million at December 31, 2022. A change of 1% in interest rates of all variable rate debt would impact annual net loss by approximately \$1.6 million, before income taxes.

As disclosed elsewhere in this report, the future impacts of the Russia and Ukraine conflict and the COVID-19 pandemic and their residual effects, including economic uncertainty, inflationary environment and disruption within the global supply chain, labor markets and aerospace industry, on our business remain uncertain. As we cannot anticipate the ultimate duration or scope of the Russia-Ukraine war and the COVID-19 pandemic, the ultimate financial impact to our results cannot be reasonably estimated, but could be material.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Astronics Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Astronics Corporation (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive loss, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at 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 U.S. generally accepted accounting principles.

We also have 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 issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated March 10, 2023 expressed an unqualified opinion thereon.

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 Matters

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

Valuation of Goodwill

Description of the Matter

As of December 31, 2022, the Company's goodwill balance was \$58.2 million. As discussed in Notes 1 and 7 of the consolidated financial statements, the Company tests goodwill for impairment at the reporting unit level on an annual basis or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. For each reporting unit, the Company performed a quantitative test using the discounted cash flow method to estimate fair value. The discounted cash flow method incorporates various assumptions, the most significant being projected sales growth rates and the weighted-average cost of capital. If the carrying value of the reporting unit exceeds its fair value, goodwill impairment is measured as the amount by which the reporting unit's carrying value exceeds its fair value, not to exceed the carrying value of goodwill.

Auditing management's assumptions was especially challenging due to the estimation required in determining the fair value of certain of the Company's reporting units with goodwill. The fair value estimates for certain reporting units were sensitive to the significant assumptions of the sales growth rate and the weighted-average cost of capital. These assumptions are affected by expectations about future market and economic conditions, particularly those in the aerospace industry.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's goodwill impairment testing process. This included the determination of the underlying significant assumptions described above, and the completeness and accuracy of the impairment analysis.

To test the estimated fair value of the Company's reporting units, we performed audit procedures with the assistance of our valuation professionals that included, among others, assessing the methodology used, testing the significant assumptions discussed above and testing the underlying data used in the impairment analysis. We compared the significant assumptions used by management to current industry and economic trends, historical trends of the Company, and other relevant factors. We assessed the historical accuracy of management's estimates and performed sensitivity analyses of significant assumptions to evaluate the changes in the fair value of the reporting units that would result from changes in the assumptions. We also involved our valuation professionals to assist in our evaluation of the weighted-average cost of capital used in the fair value estimates. In addition, we tested the reconciliation of the fair value of the Company's reporting units to the market capitalization of the Company as of the annual impairment testing date.

Revenue Recognition

Description of the Matter

For the year ended December 31, 2022, the Company's sales totaled \$534.9 million. As discussed in Note 2 to the consolidated financial statements, some of the Company's contracts with customers contain multiple performance obligations. The majority of the Company's revenue from contracts with customers is recognized at a point in time when the customer obtains control of the product, which is generally upon delivery and acceptance by the customer. For contracts with customers in which the Company satisfies its promise to the customer to provide a service or a product that has no alternative use to the Company and the Company has enforceable rights to payment for progress completed to date inclusive of profit, the Company recognizes revenue over time as it satisfies the performance obligation.

Auditing management's evaluation of contracts with customers was especially challenging due to the judgment required to analyze the terms and conditions of the Company's various customer contracts given that such terms and conditions are nonstandard. This included the identification and determination of the performance obligations and assessment of whether a product has alternative use.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Company's revenue recognition process. We tested controls over management's review of the terms and conditions of contracts with customers which included an analysis of the distinct performance obligations and a review of the conclusion as to whether revenue from such performance obligations should be recognized over time or at a point in time.

We performed procedures to test the identification and determination of the performance obligations and the timing of revenue recognition which included, among others, reading a sample of executed contracts and purchase orders to understand the contract and performing an independent assessment of the identification of distinct performance obligations and whether a product has alternative use. We tested the completeness and accuracy of the Company's contract summary documentation, specifically related to the identification and determination of distinct performance obligations and the timing of revenue recognition.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1992.
Buffalo, New York
March 10, 2023

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Astronics Corporation

Opinion on Internal Control Over Financial Reporting

We have audited Astronics Corporation's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Astronics Corporation (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive loss, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) and our report dated March 10, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Buffalo, New York
March 10, 2023

ASTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)	Year Ended December 31,		
	2022	2021	2020
Sales	\$ 534,894	\$ 444,908	\$ 502,587
Cost of Products Sold	463,354	379,545	405,744
Gross Profit	71,540	65,363	96,843
Selling, General and Administrative Expenses	101,584	99,051	110,528
Net Gain on Sale of Facility	—	5,014	—
Impairment Loss	—	—	87,016
Loss from Operations	(30,044)	(28,674)	(100,701)
Net Gain on Sale of Businesses	11,284	10,677	—
Other Expense, Net of Other Income	1,611	2,159	4,968
Interest Expense, Net of Interest Income	9,422	6,804	6,741
Loss Before Income Taxes	(29,793)	(26,960)	(112,410)
Provision for (Benefit from) Income Taxes	5,954	(1,382)	3,371
Net Loss	\$ (35,747)	\$ (25,578)	\$ (115,781)
Basic Loss Per Share	\$ (1.11)	\$ (0.82)	\$ (3.76)
Diluted Loss Per Share	\$ (1.11)	\$ (0.82)	\$ (3.76)

See notes to consolidated financial statements.

ASTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Net Loss	\$ (35,747)	\$ (25,578)	\$ (115,781)
Other Comprehensive Income (Loss):			
Foreign Currency Translation Adjustments	(1,928)	(939)	2,574
Retirement Liability Adjustment – Net of Tax	6,897	2,894	(3,396)
Other Comprehensive Income (Loss)	4,969	1,955	(822)
Comprehensive Loss	\$ (30,778)	\$ (23,623)	\$ (116,603)

See notes to consolidated financial statements.

ASTRONICS CORPORATION
CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share data)	December 31,	
	2022	2021
ASSETS		
Current Assets:		
Cash and Cash Equivalents	\$ 13,778	\$ 29,757
Accounts Receivable, Net of Allowance for Estimated Credit Losses	147,790	107,439
Inventories	187,983	157,576
Prepaid Expenses and Other Current Assets	15,743	45,089
Total Current Assets	365,294	339,861
Property, Plant and Equipment, Net of Accumulated Depreciation	90,658	95,236
Operating Right-of-Use Assets	13,028	16,169
Other Assets	8,605	5,270
Intangible Assets, Net of Accumulated Amortization	79,277	94,320
Goodwill	58,169	58,282
Total Assets	\$ 615,031	\$ 609,138
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Current Maturities of Long-term Debt	\$ 4,500	\$ —
Accounts Payable	64,193	34,860
Accrued Payroll and Employee Benefits	15,588	19,607
Accrued Income Taxes	6,410	2,621
Current Operating Lease Liabilities	4,441	6,778
Other Accrued Expenses	23,913	27,391
Customer Advanced Payments and Deferred Revenue	32,567	27,356
Total Current Liabilities	151,612	118,613
Long-term Debt	159,500	163,000
Supplemental Retirement Plan and Other Liabilities for Pension Benefits	26,604	31,199
Long-term Operating Lease Liabilities	9,942	12,018
Other Liabilities	25,583	26,283
Deferred Income Taxes	1,870	1,421
Total Liabilities	375,111	352,534
Shareholders' Equity:		
Common Stock, \$.01 par value, Authorized 40,000,000 Shares 29,121,924 Shares Issued and 25,967,233 Outstanding at December 31, 2022 28,910,605 Shares Issued and 25,102,545 Outstanding at December 31, 2021	291	289
Convertible Class B Stock, \$.01 par value, Authorized 15,000,000 Shares 6,314,430 Shares Issued and Outstanding at December 31, 2022 6,375,392 Shares Issued and Outstanding at December 31, 2021	63	64
Additional Paid-in Capital	98,630	92,037
Accumulated Other Comprehensive Loss	(9,526)	(14,495)
Retained Earnings	240,360	287,225
Treasury Stock, 3,154,691 Shares at December 31, 2022, 3,808,060 Shares at December 31, 2021	(89,898)	(108,516)
Total Shareholders' Equity	239,920	256,604
Total Liabilities and Shareholders' Equity	\$ 615,031	\$ 609,138

See notes to consolidated financial statements.

ASTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

Cash Flows from Operating Activities	Year Ended December 31,		
	2022	2021	2020
Net Loss	\$ (35,747)	\$ (25,578)	\$ (115,781)
Adjustments to Reconcile Net Loss to Cash Flows from Operating Activities:			
Non-cash Items:			
Depreciation and Amortization	27,777	29,005	31,854
Provision for Losses on Inventory and Receivables	3,415	3,942	6,079
Equity-based Compensation Expense	6,497	6,460	5,184
Deferred Tax Expense (Benefit)	19	(441)	15,553
Operating Lease Non-cash Expense	6,028	5,198	4,500
Net Gain on Sales of Assets	—	(5,083)	—
Contingent Consideration Liability Fair Value Adjustment	—	(2,200)	—
Non-cash 401K Contribution	4,512	4,199	—
Net Gain on Sale of Businesses, Before Taxes	(11,284)	(10,677)	—
Impairment Loss	—	—	87,016
Accrued Litigation Claim	500	8,374	—
Equity Investment Other Than Temporary Impairment	—	—	3,493
Restructuring Activities	—	267	1,173
Deferral of Federal Payroll Taxes	—	—	5,877
Other	3,086	3,912	2,157
Cash Flows from Changes in Operating Assets and Liabilities:			
Accounts Receivable	(41,646)	(14,832)	53,928
Inventories	(34,058)	(5,150)	(13,614)
Prepaid Expenses and Other Current Assets	261	20	(45)
Accounts Payable	27,843	8,610	(9,930)
Accrued Expenses	787	(5,037)	(17,667)
Income Taxes Payable/Receivable	16,134	156	(10,440)
Customer Advanced Payments and Deferred Revenue	5,264	(235)	(7,043)
Operating Lease Liabilities	(7,295)	(6,036)	(4,556)
Supplemental Retirement Plan and Other Liabilities	(405)	(404)	(403)
Cash Flows from Operating Activities	(28,312)	(5,530)	37,335
Cash Flows from Investing Activities			
Proceeds from Sale of Businesses and Assets	22,061	9,213	—
Capital Expenditures	(7,675)	(6,034)	(7,459)
Other Investing Activities	—	—	1,662
Cash Flows from Investing Activities	\$ 14,386	\$ 3,179	\$ (5,797)

ASTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS, CONTINUED

(In thousands)

	Year Ended December 31,		
	2022	2021	2020
Cash Flows from Financing Activities			
Proceeds from Long-term Debt	\$ 125,825	\$ 20,000	\$ 155,000
Principal Payments on Long-term Debt	(124,825)	(30,000)	(170,228)
Purchase of Outstanding Shares for Treasury	—	—	(7,732)
Stock Award and Employee Stock Purchase Plan (“ESPP”) activity	97	3,396	666
Finance Lease Principal Payments	(93)	(901)	(1,922)
Financing-related Costs	(2,416)	—	(360)
Cash Flows From Financing Activities	(1,412)	(7,505)	(24,576)
Effect of Exchange Rates on Cash	(641)	(799)	1,544
(Decrease) Increase in Cash and Cash Equivalents	(15,979)	(10,655)	8,506
Cash and Cash Equivalents at Beginning of Year	29,757	40,412	31,906
Cash and Cash Equivalents at End of Year	<u>\$ 13,778</u>	<u>\$ 29,757</u>	<u>\$ 40,412</u>
Supplemental Disclosure of Cash Flow Information			
Interest Paid	\$ 7,605	\$ 5,951	\$ 5,829
Income Taxes Refunded, Net of Payments	\$ (9,978)	\$ (1,250)	\$ (1,536)
Non-Cash Investing Activities:			
Capital Expenditures in Accounts Payable	\$ 490	\$ —	\$ —

See notes to consolidated financial statements.

ASTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Common Stock			
Beginning of Year	\$ 289	\$ 278	\$ 269
Net Exercise of Stock Options, including ESPP	—	5	1
Net Issuance of Common Stock for Restricted Stock Units ("RSU's")	1	1	—
Class B Stock Converted to Common Stock	1	5	8
End of Year	<u>\$ 291</u>	<u>\$ 289</u>	<u>\$ 278</u>
Convertible Class B Stock			
Beginning of Year	\$ 64	\$ 69	\$ 76
Net Exercise of Stock Options	—	—	1
Class B Stock Converted to Common Stock	(1)	(5)	(8)
End of Year	<u>\$ 63</u>	<u>\$ 64</u>	<u>\$ 69</u>
Additional Paid in Capital			
Beginning of Year	\$ 92,037	\$ 82,187	\$ 76,340
Net Exercise of Stock Options, including ESPP, and Equity-based Compensation Expense	6,897	10,029	5,847
Tax Withholding Related to Issuance of RSU's	(304)	(179)	—
End of Year	<u>\$ 98,630</u>	<u>\$ 92,037</u>	<u>\$ 82,187</u>
Accumulated Comprehensive Loss			
Beginning of Year	\$ (14,495)	\$ (16,450)	\$ (15,628)
Foreign Currency Translation Adjustments	(1,928)	(939)	2,574
Retirement Liability Adjustment – Net of Taxes	6,897	2,894	(3,396)
End of Year	<u>\$ (9,526)</u>	<u>\$ (14,495)</u>	<u>\$ (16,450)</u>
Retained Earnings			
Beginning of Year	\$ 287,225	\$ 312,803	\$ 428,584
Net Loss	(35,747)	(25,578)	(115,781)
Reissuance of Treasury Shares for 401K Contribution	(11,118)	—	—
End of Year	<u>\$ 240,360</u>	<u>\$ 287,225</u>	<u>\$ 312,803</u>
Treasury Stock			
Beginning of Year	\$ (108,516)	\$ (108,516)	\$ (100,784)
Purchase of Shares	—	—	(7,732)
Shares Issued to Fund 401K Obligation	18,618	—	—
End of Year	<u>\$ (89,898)</u>	<u>\$ (108,516)</u>	<u>\$ (108,516)</u>
Total Shareholders' Equity	<u>\$ 239,920</u>	<u>\$ 256,604</u>	<u>\$ 270,371</u>

See notes to consolidated financial statements.

ASTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY, CONTINUED

(Share data, in thousands)	Year Ended December 31,		
	2022	2021	2020
Common Stock			
Beginning of Year	28,911	27,825	26,874
Net Issuance of Common Stock for RSU's	106	70	45
Net Issuance from Exercise of Stock Options, including ESPP	20	485	48
Class B Stock Converted to Common Stock	85	531	858
End of Year	<u>29,122</u>	<u>28,911</u>	<u>27,825</u>
Convertible Class B Stock			
Beginning of Year	6,375	6,877	7,650
Net Issuance of Restricted Stock	—	4	—
Net Issuance from Exercise of Stock Options	24	25	85
Class B Stock Converted to Common Stock	(85)	(531)	(858)
End of Year	<u>6,314</u>	<u>6,375</u>	<u>6,877</u>
Treasury Stock			
Beginning of Year	3,808	3,808	3,526
Purchase of Shares	—	—	282
Shares Issued to Fund 401K Obligation	(653)	—	—
End of Year	<u>3,155</u>	<u>3,808</u>	<u>3,808</u>

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 — SUMMARY OF SIGNIFICANT ACCOUNTING PRINCIPLES AND PRACTICES

Description of the Business

Astronics Corporation (“Astronics” or the “Company”) is a leading provider of advanced technologies to the global aerospace, defense and electronics industries. Our products and services include advanced, high-performance electrical power generation, distribution and seat motion systems, lighting and safety systems, avionics products, systems and certification, aircraft structures and automated test systems.

We have principal operations in the United States (“U.S.”), Canada, France and England, as well as engineering offices in the Ukraine and India.

The Company has two reportable segments, Aerospace and Test Systems. The Aerospace segment designs and manufactures products for the global aerospace and defense industry. Our Test Systems segment designs, develops, manufactures and maintains automated test systems that support the aerospace and defense, communications and mass transit industries as well as training and simulation devices for both commercial and military applications.

See Notes 21 and 22 for details of our acquisition and divestiture activities in 2022, 2021 and 2020.

Impact of the COVID-19 Pandemic

On March 11, 2020, the World Health Organization classified the COVID-19 outbreak as a pandemic. The spread of the COVID-19 pandemic disrupted businesses on a global scale, led to significant volatility in financial markets and affected the aviation and industrial industries. The impacts of the pandemic have placed labor and supply chain pressures on our business and we have been impacted by customer demand variability. Although we saw stable and growing backlog during 2022 in our aerospace business, COVID-19 related disruptions are ongoing and continue to adversely challenge our commercial transport market. While we remain bullish about the aerospace business, we believe the recovery to pre-pandemic activity, particularly in the widebody market, will take longer than originally anticipated at the outset of the pandemic. As economic activity continues to recover, we will continue to monitor the situation, assessing further possible implications on our operations, supply chain, liquidity, cash flow and customer orders.

In September 2021 the Company was awarded a grant of up to \$14.7 million from the U.S. Department of Transportation under the Aviation Manufacturing Jobs Protection Program (“AMJP”). The Company received \$7.4 million under the grant in 2021, \$5.2 million in the first quarter of 2022 and \$2.1 million in the third quarter of 2022. The grant benefit was recognized ratably over the six-month performance period as a reduction to cost of products sold in proportion to the compensation expense that the award is intended to defray. During the years ended December 31, 2022 and 2021, the Company recognized \$6.0 million and \$8.7 million of the award, respectively.

Additionally, the Company qualified for government subsidies from the Canadian and French governments as a result of the COVID-19 pandemic’s impact on our foreign operations. The Canadian and French subsidies are income-based grants intended to reimburse the Company for certain employee wages. The grants are recognized as income over the periods in which the Company recognizes as expenses the costs the grants are intended to defray. The amount recognized during 2022 was immaterial.

The following table presents the COVID-19 related government assistance, including AMJP, recorded during the years ended December 31, 2022, 2021 and 2020:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Reduction in Cost of Products Sold	\$ 6,062	\$ 10,682	\$ 2,383
Reduction in Selling, General and Administrative Expenses	11	228	278
Total	\$ 6,073	\$ 10,910	\$ 2,661

Restructuring Activities

The COVID-19 pandemic has significantly impacted the global economy, and particularly the aerospace industry, resulting in reduced expectations of the Company’s anticipated future operating results. As a result, the Company executed restructuring activities in the form of workforce reduction, primarily in the second quarter of 2020, to align capacity with expected demand.

Additional restructuring activities occurred during 2021 to align the workforce to expected activities and to consolidate certain facilities.

For more information regarding these restructuring plans see Note 22.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated.

Acquisitions are accounted for under the acquisition method and, accordingly, the operating results for the acquired companies are included in the Consolidated Statements of Operations from the respective dates of acquisition.

Cost of Products Sold, Research and Development and Selling, General and Administrative Expenses

Cost of products sold includes the costs to manufacture products such as direct materials and labor and manufacturing overhead as well as all engineering and developmental costs. The Company is engaged in a variety of research and development activities directed to the substantial improvement or new application of the Company's existing technologies. Research and development costs are expensed as incurred and include salaries, benefits, consulting, material costs and depreciation. Research and development expenses amounted to \$48.3 million in 2022, \$43.3 million in 2021 and \$40.2 million in 2020. These costs are included in Cost of products sold. SG&A expenses include costs primarily related to our sales, marketing and administrative departments. Interest expense is shown net of interest income. Interest income was insignificant for the years ended December 31, 2022, 2021 and 2020.

Shipping and Handling

Shipping and handling costs are included in Costs of products sold.

Equity-Based Compensation

The Company accounts for its stock options following Accounting Standards Codification ("ASC") Topic 718, *Compensation – Stock Compensation* ("ASC Topic 718"). ASC Topic 718 requires all equity-based payments to employees, including grants of employee stock options and restricted stock units ("RSU's"), to be recognized in the statement of earnings based on the grant date fair value of the award. For awards with graded vesting, the Company uses a straight-line method of attributing the value of stock-based compensation expense, subject to minimum levels of expense, based on vesting. The Company accounts for forfeitures as they occur.

Under ASC Topic 718, stock compensation expense recognized during the period is based on the value of the portion of share-based payment awards that is ultimately expected to vest during the period. Equity-based compensation expense is included in SG&A expenses.

Cash and Cash Equivalents

All highly liquid instruments with a maturity of three months or less at the time of purchase are considered cash equivalents.

Accounts Receivable and Allowance for Estimated Credit Losses

Accounts receivable are composed of trade and contract receivables recorded at either the invoiced amount or costs in excess of billings, are expected to be collected within one year, and do not bear interest. The Company records a valuation allowance to account for estimated credit losses. The estimate for credit losses is based on the Company's assessment of the collectability of customer accounts. The Company regularly reviews the allowance by considering factors such as the age of the receivable balances, historical experience, credit quality, current economic conditions, and reasonable and supportable forecasts of future economic conditions that may affect a customer's ability to pay. Balances are written off when determined to be uncollectible.

The Company's exposure to credit losses may increase if its customers are adversely affected by global economic recessions, disruption associated with the current COVID-19 pandemic, industry conditions, or other customer-specific factors. Although the Company has historically not experienced significant credit losses, it is possible that there could be a material adverse impact from potential adjustments of the carrying amount of trade receivables and contract assets as airlines and other aerospace companies' cash flows are impacted by the COVID-19 pandemic.

Inventories

We record our inventories at the lower of cost or net realizable value. We determine the cost basis of our inventory on a first-in, first-out or weighted average basis using a standard cost methodology that approximates actual cost. The Company records reserves to provide for excess, slow moving or obsolete inventory. In determining the appropriate reserve, the Company considers the age of inventory on hand, the overall inventory levels in relation to forecasted demands as well as reserving for specifically identified inventory that the Company believes is no longer salable or whose value has diminished.

Cloud Computing Arrangements

The Company incurs costs to implement cloud computing arrangements that are hosted by third party vendors. Implementation costs associated with cloud computing arrangements are capitalized when incurred during the application development phase. Amortization is calculated on a straight-line basis over the contractual term of the cloud computing arrangement. Capitalized amounts related to such arrangements are recorded within other current assets and other non-current assets in the consolidated balance sheets and were insignificant as of December 31, 2022 and December 31, 2021.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost less accumulated depreciation. Depreciation of property, plant and equipment (“PP&E”) is computed using the straight-line method for financial reporting purposes and using accelerated methods for income tax purposes. Estimated useful lives of the assets are as follows: buildings, 25-40 years; and machinery and equipment, 4-10 years. Leased buildings and associated leasehold improvements are amortized over the shorter of the terms of the lease or the estimated useful lives of the assets, with the amortization of such assets included within depreciation expense.

The cost of properties sold or otherwise disposed of and the accumulated depreciation thereon are eliminated from the accounts and the resulting gain or loss, as well as maintenance and repair expenses, is reflected within operating income. Replacements and improvements are capitalized.

Depreciation expense was approximately \$12.0 million, \$12.7 million and \$13.3 million in 2022, 2021 and 2020, respectively.

Deferred Financing Costs

The Company incurs debt issuance costs in connection with amending or entering into new credit facilities. These costs are amortized as an adjustment to interest expense over term of the credit facility on a straight-line basis, which approximates the effective interest method. The unamortized balance of deferred financing costs was \$3.2 million at December 31, 2022 and \$0.4 million at December 31, 2021, recorded within Other Assets on the Consolidated Balance Sheets.

On January 19, 2023, the Company completed a financing transaction, which refinanced its previous revolving credit facility which was scheduled to mature in November 2023. The new financing consists of a \$90 million asset-based term loan (the “Term Loan Facility”) and a \$115 million asset-based revolving credit facility (the “ABL Revolving Credit Facility”). In 2022, the Company incurred \$3.6 million in debt issuance costs associated with amending its existing credit facility and entering into a new credit facility. These costs are classified within Other Assets on the Consolidated Balance Sheets. The Company incurred an additional \$6.1 million in debt issuance costs upon execution of the Restated Agreement and the Term Loan Facility on January 19, 2023. Deferred debt issuance costs associated with revolving credit facilities will be recorded within other assets and those associated with term loan facilities will be recorded as a reduction of the carrying value of the debt on the Consolidated Balance Sheets.

Long-Lived Assets

Long-lived assets to be held and used are initially recorded at cost. The carrying value of these assets is evaluated for recoverability whenever adverse effects or changes in circumstances indicate that the carrying amount may not be recoverable. Impairments are recognized if future undiscounted cash flows from operations are not expected to be sufficient to recover long-lived assets. The carrying amounts are then reduced to fair value, which is typically determined by using a discounted cash flow model.

Assets held for sale are to be reported at lower of its carrying amount or fair value less cost to sell. Judgment is required in estimating the sales price of assets held for sale and the time required to sell the assets. These estimates are based upon available market data and operating cash flows of the assets held for sale. During the fourth quarter of 2021, we sold a facility resulting in a gain of \$5.0 million. Refer to Note 21.

Goodwill

The Company tests goodwill at the reporting unit level on an annual basis or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.

We may elect to perform a qualitative assessment that considers economic, industry and company-specific factors for all or selected reporting units. If, after completing the assessment, it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we proceed to a quantitative test. We may also elect to perform a quantitative test instead of a qualitative test for any or all of our reporting units.

Quantitative testing requires a comparison of the fair value of each reporting unit to its carrying value. We use the discounted cash flow method to estimate the fair value of our reporting units. The discounted cash flow method incorporates various assumptions, the most significant being projected sales growth rates, operating margins and cash flows, the terminal growth rate and the weighted average cost of capital. If the carrying value of the reporting unit exceeds its fair value, the shortfall up to the carrying value of the goodwill represents the amount of goodwill impairment.

The 2022 and 2021 assessments indicated no impairment to the carrying value of goodwill in any of the Company's reporting units and no impairment charges were recognized. See Note 7 for further information regarding the goodwill impairment charge in 2020.

Intangible Assets

The estimated fair values of acquired intangibles are generally determined based upon future economic benefits such as earnings and cash flows. Acquired identifiable intangible assets are recorded at fair value and are amortized over their estimated useful lives. Acquired intangible assets with an indefinite life are not amortized, but are reviewed for impairment at least annually or more frequently whenever events or changes in circumstances indicate that the carrying amounts of those assets are below their estimated fair values. Impairment is tested under ASC Topic 350, *Intangibles - Goodwill and Other*, as amended by Accounting Standards Update ("ASU") 2012-2.

Financial Instruments

The Company's financial instruments consist primarily of cash and cash equivalents, accounts receivable, accounts payable and long-term debt. The Company performs periodic credit evaluations of its customers' financial condition and generally does not require collateral. The Company does not hold or issue financial instruments for trading purposes. Due to their short-term nature, the carrying values of cash and equivalents, accounts receivable and accounts payable approximate fair value. The carrying value of the Company's variable rate long-term debt instruments also approximates fair value due to the variable rate feature of these instruments.

From time to time, the Company makes long-term, strategic equity investments in companies to promote business and strategic objectives. These investments are classified within Other Assets in the Consolidated Balance Sheets. For investments requiring equity method accounting, we recognize our share of the investee's earnings or losses within Other Expense, Net of Other Income in the Consolidated Statements of Operations. Such amounts were immaterial in 2022, 2021 and 2020. For investments not requiring equity method accounting, if the investment has no readily determinable fair value, we have elected the practicability exception of ASU 2016-01, under which the investment is measured at cost, less impairment, plus or minus observable price changes from orderly transactions of an identical or similar investment of the same issuer.

In 2020, the Company determined there were indicators of impairment over one of its investments as a result of the investee's deteriorating operating performance and limited access to capital. We determined that the fair value of this investment was de minimis and a full impairment charge of \$3.5 million was recorded within Other Expense, Net of Other Income in the accompanying Consolidated Statement Operations for the year ended December 31, 2020.

Deferred Tax Asset Valuation Allowance

As a result of the on-going COVID-19 pandemic, the Company generated a significant tax loss for the year ended December 31, 2020, which was carried back under the CARES Act to recover previously paid income taxes. The Company records a valuation allowance against the deferred tax assets if and to the extent it is more likely than not that the Company will not recover the deferred tax assets. In evaluating the need for a valuation allowance, the Company weighs all relevant positive and negative evidence, and considers among other factors, historical financial performance, projected future taxable income, scheduled reversals of deferred tax liabilities, the overall business environment, and tax planning strategies. Losses in recent periods and cumulative pre-tax losses in the three years period ending with the current year, combined with the significant uncertainty brought about by the COVID-19 pandemic, is collectively considered significant negative evidence under ASC 740 when assessing whether an entity can use projected income as a basis for concluding that deferred tax assets are realizable on a

more-likely than not basis. For purposes of assessing the recoverability of deferred tax assets, the Company determined that it could not include future projected earnings in the analysis due to recent history of losses and therefore had insufficient objective positive evidence that the Company will generate sufficient future taxable income to overcome the negative evidence of cumulative losses. Accordingly, during the years ended December 31, 2022, 2021, and 2020 the Company determined that a portion of its deferred tax assets are not expected to be realizable in the future. As a result, the Company recorded a provision for valuation allowances against its U.S. federal deferred tax assets of approximately \$11.9 million, \$6.0 million, and \$23.3 million during the years ended December 31, 2022, 2021 and 2020 respectively. In addition, during the year ended December 31, 2022 and 2021, the Company recorded a valuation allowance against certain foreign deferred tax assets of approximately \$0.4 million and \$1.3 million, respectively.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities and the reported amounts of sales and expenses during the reporting periods in the financial statements and accompanying notes. Actual results could differ from those estimates.

Foreign Currency Translation

The Company accounts for its foreign currency translation in accordance with ASC Topic 830, *Foreign Currency Translation*. The aggregate transaction gains and losses included in operations were insignificant in 2022, 2021, and 2020.

Dividends

The Company has not paid any cash dividends in the three-year period ended December 31, 2022.

Loss Contingencies

Loss contingencies may from time to time arise from situations such as claims and other legal actions. Loss contingencies are recorded as liabilities when it is probable that a liability has been incurred and the amount of the loss is reasonably estimable. In all other instances, legal fees are expensed as incurred. Disclosure is required when there is a reasonable possibility that the ultimate loss will exceed the recorded provision. Contingent liabilities are often resolved over long time periods. In recording liabilities for probable losses, management is required to make estimates and judgments regarding the amount or range of the probable loss. Management continually assesses the adequacy of estimated loss contingencies and, if necessary, adjusts the amounts recorded as better information becomes known.

Acquisitions

The Company accounts for its acquisitions under ASC Topic 805, *Business Combinations and Reorganizations* (“ASC Topic 805”). ASC Topic 805 provides guidance on how the acquirer recognizes and measures the consideration transferred, identifiable assets acquired, liabilities assumed, non-controlling interests, and goodwill acquired in a business combination. ASC Topic 805 also expands required disclosures surrounding the nature and financial effects of business combinations.

Newly Adopted and Recent Accounting Pronouncements

We consider the applicability and impact of all ASUs. ASUs not listed above were assessed and determined to be either not applicable, or had and are expected to have minimal impact on our financial statements and related disclosures.

NOTE 2 — REVENUE

Revenue is recognized when, or as, the Company transfers control of promised products or services to a customer in an amount that reflects the consideration the Company expects to be entitled in exchange for transferring those products or services. Sales shown on the Company's Consolidated Statements of Operations are from contracts with customers.

Payment terms and conditions vary by contract, although terms generally include a requirement of payment within a range from 30 to 90 days after the performance obligation has been satisfied; or in certain cases, up-front deposits. In circumstances where the timing of revenue recognition differs from the timing of invoicing, the Company has determined that the Company's contracts generally do not include a significant financing component. Taxes collected from customers, which are subsequently remitted to governmental authorities, are excluded from sales.

The Company recognizes an asset for the incremental, material costs of obtaining a contract with a customer if the Company expects the benefit of those costs to be longer than one year and the costs are expected to be recovered. These incremental costs

include, but are not limited to, sales commissions incurred to obtain a contract with a customer. As of December 31, 2022 and 2021, the Company did not have material incremental costs on any open contracts with an original expected duration of greater than one year.

The Company recognizes an asset for certain, material costs to fulfill a contract if it is determined that the costs relate directly to a contract or an anticipated contract that can be specifically identified, generate or enhance resources that will be used in satisfying performance obligations in the future, and are expected to be recovered. Such costs are amortized on a systematic basis that is consistent with the transfer to the customer of the goods to which the asset relates. Start-up costs are expensed as incurred. Capitalized fulfillment costs are included in Inventories in the accompanying Consolidated Balance Sheets. Should future orders not materialize or it is determined the costs are no longer probable of recovery, the capitalized costs are written off. As of December 31, 2022, the Company has capitalized \$2.5 million of costs. As of December 31, 2021, the Company did not have material capitalized fulfillment costs.

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account. The majority of our contracts have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts which are, therefore, not distinct. Thus, the contract's transaction price is the revenue recognized when or as that performance obligation is satisfied. Promised goods or services that are immaterial in the context of the contract are not separately assessed as performance obligations.

Some of our contracts have multiple performance obligations, most commonly due to the contract covering multiple phases of the product lifecycle (development, production, maintenance and support). For contracts with multiple performance obligations, the contract's transaction price is allocated to each performance obligation using our best estimate of the standalone selling price of each distinct good or service in the contract. The primary method used to estimate standalone selling price is the expected cost plus margin approach, under which expected costs are forecast to satisfy a performance obligation and then an appropriate margin is added for that distinct good or service. Shipping and handling activities that occur after the customer has obtained control of the good are considered fulfillment activities, not performance obligations.

Some of our contracts offer price discounts or free units after a specified volume has been purchased. The Company evaluates these options to determine whether they provide a material right to the customer, representing a separate performance obligation. If the option provides a material right to the customer, revenue is allocated to these rights and recognized when those future goods or services are transferred, or when the option expires.

Contract modifications are routine in the performance of our contracts. Contracts are often modified to account for changes in contract specifications or requirements. In most instances, contract modifications are for goods or services that are distinct, and, therefore, are accounted for as new contracts. The effect of modifications has been reflected when identifying the satisfied and unsatisfied performance obligations, determining the transaction price and allocating the transaction price.

The majority of the Company's revenue from contracts with customers is recognized at a point in time, when the customer obtains control of the promised product, which is generally upon delivery and acceptance by the customer. These contracts may provide credits or incentives, which may be accounted for as variable consideration. Variable consideration is estimated at the most likely amount to predict the consideration to which the Company will be entitled, and only to the extent it is probable that a subsequent change in estimate will not result in a significant revenue reversal when estimating the amount of revenue to recognize. Variable consideration is treated as a change to the sales transaction price and based on an assessment of all information (i.e., historical, current and forecasted) that is reasonably available to the Company, and estimated at contract inception and updated at the end of each reporting period as additional information becomes available. Most of our contracts do not contain rights to return product; where this right does exist, it is evaluated as possible variable consideration.

For contracts that are subject to the requirement to accrue anticipated losses, the Company recognizes the entire anticipated loss in the period that the loss becomes probable.

For contracts with customers in which the Company promises to provide a product to the customer that has no alternative use to the Company and the Company has enforceable rights to payment for progress completed to date inclusive of profit, the Company satisfies the performance obligation and recognizes revenue over time, using costs incurred to date relative to total estimated costs at completion to measure progress toward satisfying our performance obligations. Incurred cost represents work performed, which corresponds with, and thereby best depicts, the transfer of control to the customer. Contract costs include labor, material and overhead.

The Company also recognizes revenue from service contracts (including service-type warranties) over time. The Company recognizes revenue over time during the term of the agreement as the customer is simultaneously receiving and consuming the benefits provided throughout the Company's performance. The Company typically recognizes revenue on a straight-line basis throughout the contract period.

On December 31, 2022, we had \$571.4 million of remaining performance obligations, which we refer to as total backlog. We expect to recognize approximately \$451.4 million of our remaining performance obligations as revenue in 2023.

Costs in excess of billings includes unbilled amounts resulting from revenues under contracts with customers that are satisfied over time and when the cost-to-cost measurement method of revenue recognition is utilized and revenue recognized exceeds the amount billed to the customer, and right to payment is not just subject to the passage of time. Amounts may not exceed their net realizable value. Costs in excess of billings are classified as current assets, within Accounts Receivable, Net of Allowance for Estimated Credit Losses on our Consolidated Balance Sheets.

Billings in excess of cost includes billings in excess of revenue recognized as well as other elements of deferred revenue, which includes advanced payments, up-front payments, and progress billing payments. Billings in excess of cost are reported in our Consolidated Balance Sheets classified as current liabilities, within Customer Advance Payments and Deferred Revenue, and non-current liabilities, within Other Liabilities. To determine the revenue recognized in the period from the beginning balance of billings in excess of cost, the contract liability as of the beginning of the period is recognized as revenue on a contract-by-contract basis when the Company satisfies the performance obligation related to the individual contract. Once the beginning contract liability balance for an individual contract has been fully recognized as revenue, any additional payments received in the period are recognized as revenue once the related costs have been incurred.

We recognized \$14.8 million and \$18.2 million during the year ended December 31, 2022 and 2021, respectively, in revenues that were included in the contract liability balance at the beginning of the period.

The Company's contract assets and contract liabilities consist of costs and profits in excess of billings and billings in excess of cost and profits, respectively. The following table presents the beginning and ending balances of contract assets and contract liabilities:

(In thousands)	Contract Assets		Contract Liabilities	
Beginning Balance, January 1, 2022	\$	25,941	\$	28,495
Ending Balance, December 31, 2022	\$	27,349	\$	33,209

The increase in contract assets reflects the net impact of new revenue recognized in excess of billings exceeding billing of previously unbilled revenue during the period. The increase in contract liabilities reflects the net impact of additional customer advances or deferred revenues recorded in excess of revenue recognized.

The following table presents our revenue disaggregated by Market Segments as of December 31 as follows:

(In thousands)	2022	2021	2020
Aerospace Segment			
Commercial Transport	\$ 314,564	\$ 201,990	\$ 262,636
Military	54,534	70,312	67,944
General Aviation	63,395	56,673	60,437
Other	28,703	36,263	26,971
Aerospace Total	461,196	365,238	417,988
Test Systems Segment			
Semiconductor	—	—	3,483
Aerospace & Defense	73,698	79,670	81,116
Test Systems Total	73,698	79,670	84,599
Total	\$ 534,894	\$ 444,908	\$ 502,587

The following table presents our revenue disaggregated by Product Lines as of December 31 as follows:

(In thousands)	2022	2021	2020
Aerospace Segment			
Electrical Power & Motion	\$ 187,446	\$ 141,746	\$ 179,245
Lighting & Safety	124,347	103,749	118,928
Avionics	97,234	64,901	76,113
Systems Certification	17,222	13,050	6,899
Structures	6,244	5,529	9,832
Other	28,703	36,263	26,971
Aerospace Total	461,196	365,238	417,988
Test Systems	73,698	79,670	84,599
Total	\$ 534,894	\$ 444,908	\$ 502,587

NOTE 3 — ACCOUNTS RECEIVABLE

Accounts receivable at December 31 consists of:

(In thousands)	2022	2021
Trade Accounts Receivable	\$ 123,071	\$ 84,681
Unbilled Recoverable Costs and Accrued Profits	27,349	25,941
Total Receivables, Gross	150,420	110,622
Less Allowance for Estimated Credit Losses	(2,630)	(3,183)
Total Receivables, Net	\$ 147,790	\$ 107,439

The following table provides a rollforward of the allowance for estimated credit losses that is deducted from accounts receivable to present the net amount expected to be collected at December 31:

(In thousands)	2022	2021
Balance at December 31, 2020		\$ 3,218
Bad Debt Expense, Net of Recoveries		90
Write-off Charges Against the Allowance and Other Adjustments		(125)
Balance at December 31, 2021		3,183
Bad Debt Expense, Net of Recoveries		565
Write-off Charges Against the Allowance and Other Adjustments		(1,118)
Balance at December 31, 2022		\$ 2,630

NOTE 4 — INVENTORIES

Inventories at December 31 are as follows:

(In thousands)	2022	2021
Finished Goods	\$ 30,703	\$ 28,579
Work in Progress	29,895	22,954
Raw Material	127,385	106,043
Total Inventories	\$ 187,983	\$ 157,576

At December 31, 2022, the Company's reserve for inventory valuation was \$36.8 million, or 16.4% of gross inventory. At December 31, 2021, the Company's reserve for inventory valuation was \$33.8 million, or 17.7% of gross inventory.

NOTE 5 — PROPERTY, PLANT AND EQUIPMENT

Property, Plant and Equipment at December 31 are as follows:

(In thousands)

	2022	2021
Land	\$ 8,578	\$ 8,632
Building and Improvements	73,744	70,566
Machinery and Equipment	123,071	121,960
Construction in Progress	6,415	5,680
Total Property, Plant and Equipment, Gross	211,808	206,838
Less Accumulated Depreciation	121,150	111,602
Total Property, Plant and Equipment, Net	\$ 90,658	\$ 95,236

NOTE 6 — INTANGIBLE ASSETS

The following table summarizes acquired intangible assets at December 31 as follows:

(In thousands)	Weighted Average Life	2022		2021	
		Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Patents	11 years	\$ 2,146	\$ 2,066	\$ 2,146	\$ 1,979
Non-compete Agreement	4 years	11,082	11,052	11,082	10,592
Trade Names	10 years	11,402	9,350	11,447	8,518
Completed and Unpatented Technology	9 years	47,855	34,877	47,932	30,441
Customer Relationships	15 years	142,133	77,996	142,276	69,033
Total Intangible Assets	12 years	\$ 214,618	\$ 135,341	\$ 214,883	\$ 120,563

Amortization is computed on the straight line method for financial reporting purposes. Amortization expense for intangibles was \$4.9 million, \$15.4 million and \$17.1 million for 2022, 2021 and 2020, respectively.

Based upon acquired intangible assets at December 31, 2022, amortization expense for each of the next five years is estimated to be:

(In thousands)

2023	\$ 13,878
2024	\$ 12,856
2025	\$ 10,935
2026	\$ 9,533
2027	\$ 7,825

NOTE 7 — GOODWILL

The following table summarizes the changes in the carrying amount of goodwill at December 31 as follows:

(In thousands)	Aerospace	Test Systems	Total
Balance at December 31, 2020	\$ 36,648	\$ 21,634	\$ 58,282
Foreign Currency Translations and Other	—	—	—
Balance at December 31, 2021	36,648	21,634	58,282
Foreign Currency Translations and Other	(114)	1	(113)
Balance at December 31, 2022	<u>\$ 36,534</u>	<u>\$ 21,635</u>	<u>\$ 58,169</u>
Goodwill, Gross	\$ 157,235	\$ 21,635	\$ 178,870
Accumulated Impairment Losses	(120,701)	—	(120,701)
Goodwill, Net	<u>\$ 36,534</u>	<u>\$ 21,635</u>	<u>\$ 58,169</u>

The Company's four reporting units with goodwill as of the first day of our fourth quarters of 2022 and 2021 were subject to the annual goodwill impairment test. Based on our quantitative assessments of our reporting units performed during our annual goodwill impairment tests, the Company concluded that no impairment to the carrying value of goodwill in any of the Company's reporting units was indicated and no impairment charges were recognized in 2022 and 2021.

Beginning in the first quarter of 2020, the COVID-19 pandemic negatively impacted the global economy and aerospace industry. Management considered these qualitative factors and the impact to each reporting unit's revenue and earnings, and determined that it was more likely than not that the fair value of several reporting units was less than its carrying value. Therefore, we performed a quantitative test for all eight reporting units with goodwill as of March 28, 2020.

We determined that the estimated fair value of four of the eight reporting units with goodwill significantly exceeded their respective carrying values and did not result in a goodwill impairment for these four reporting units as of March 28, 2020.

For the remaining four reporting units with goodwill, we determined that the estimated fair value was less than their respective carrying values. We recognized full impairments of the goodwill of our Astronics Connectivity Systems and Certification ("ACSC"), PGA and Custom Control Concepts ("CCC") reporting units, and a partial impairment of the goodwill of our PECO reporting unit as of March 28, 2020.

During the second quarter of 2020, further commercial aircraft order reductions, delays and cancellations at a major customer of our PECO reporting unit resulted in revisions to PECO's forecast. We therefore performed a quantitative test for the PECO reporting unit as of June 27, 2020. As a result of this quantitative test, we determined that the estimated fair value was less than the respective carrying value as of June 27, 2020.

As a result of our interim goodwill impairment tests, we recorded non-cash goodwill impairment charges in the Aerospace segment of approximately \$6.3 million within the Impairment Loss line of the December 31, 2020 Consolidated Statement of Operations.

NOTE 8 — LONG-TERM DEBT

The Company's long-term debt at December 31, 2022 and 2021 consisted of borrowings under its Fifth Amended and Restated Credit Agreement (the "Agreement"). On March 1, 2022, the Company executed an amendment to the Agreement, which reduced the revolving credit line from \$375 million to \$225 million and extended the maturity date of the loans under the facility from February 16, 2023 to May 30, 2023. On August 9, 2022, the Company executed a further amendment to the Agreement, which reduced the revolving credit line from \$225 million to \$190 million until September 12, 2022 with further reductions to \$180 million effective September 12, 2022 and \$170 million effective October 11, 2022. The amendment extended the maturity date of the loans under the facility from May 30, 2023 to August 31, 2023. On October 21, 2022, the Company executed an additional amendment to the Agreement, under which the lenders waived enforcement of their rights against the Company arising from the Company's failure to comply with the maximum net leverage ratio and minimum liquidity covenants, each as of September 30, 2022. The amendment increased the revolving credit line to \$180 million as of October 21, 2022, with a reduction to \$170 million effective November 21, 2022. Another amendment to the Agreement was executed on November 14, 2022 (the "Amended Facility"), which extended the maturity date of the loans under the facility from August 31, 2023 to November 30, 2023. Under the Amended Facility, the revolving credit line was set at \$180 million, with a reduction to \$170 million effective December 21, 2022. The amendment required the Company to maintain minimum liquidity, defined as unrestricted cash plus the unused revolving credit commitments (\$10 million as of November 30, 2022 and December 31, 2022). The Amended Facility required the Company to comply with a minimum Adjusted EBITDA covenant on a trailing twelve month basis. The amendment eliminated the net leverage ratio covenant for the remaining term of the agreement. Each amendment executed in 2022 required payment of a consent fee of 5 to 10 basis points of the commitment for each consenting lender.

At December 31, 2022, there was \$164.0 million outstanding on the Amended Facility and there remained \$6.0 million available subject to the minimum liquidity covenant discussed above. The credit facility allocated up to \$20 million of the \$170 million revolving credit line for the issuance of letters of credit. Interest on the debt outstanding at December 31, 2022 was payable on the unpaid principal amount of the facility at a rate equal to the Secured Overnight Financing Rate ("SOFR", which is required to be at least 1.00%), plus 5.50% with an increase to a rate equal to SOFR (which is required to be at least .00%), plus 8.50% effective January 17, 2023. The Company also was required to pay a commitment fee to the lenders in an amount equal to 0.40% on the undrawn portion of the Amended Facility.

The Company amended its existing revolving credit facility on January 19, 2023 by entering into the Sixth Amended and Restated Credit Agreement (the "ABL Revolving Credit Facility"). The ABL Revolving Credit Facility set the maximum aggregate amount that the Company can borrow under the revolving credit line at \$115 million, with borrowings subject to a borrowing base determined primarily by certain domestic inventory and accounts receivable. The maturity date of borrowings under the ABL Revolving Credit Facility is January 19, 2026. Under the terms of the ABL Revolving Credit Facility, the Company will now pay interest on the unpaid principal amount of the facility at a rate equal to SOFR (which is required to be at least 1.00%) plus 2.25% to 2.75%. The Company will pay a quarterly commitment fee under the ABL Revolving Credit Facility in an amount equal to 0.25% or 0.375% based on the Company's average excess availability. Under the provisions of the ABL Revolving Credit Facility, the Company has a cash dominion arrangement with the lead banking institution whereby eligible daily cash receipts are contractually utilized to pay down outstanding borrowings. Eligible cash receipts that have not yet been applied to outstanding debt balance will be classified as restricted cash in the accompanying consolidated balance sheets.

The Company also entered into a \$90 million asset-based Term Loan Facility on January 19, 2023. The Term Loan Facility is secured primarily by fixed assets, real estate and intellectual property. The maturity date of the Term Loan Facility is the earlier of the stated maturity date of the ABL Revolving Credit Facility or January 19, 2027, provided the ABL Revolving Credit Facility is extended beyond that date. The Company will pay interest under the Term Loan Facility at a rate equal to SOFR (which is required to be at least 2.50%) plus 8.75%. The Company will pay a commitment fee under the Term Loan Facility of 5% of the total aggregate commitment, or \$4.5 million, \$1.8 million which was paid on the closing date, \$1.8 million of which will be paid on June 19, 2023 and \$0.9 million of which will be paid on the date that the financial statements and compliance certificate for the fiscal quarter of the Company ending on or about March 31, 2024 are required to be delivered under the Term Loan Facility.

Amortization of the principal under the Term Loan Facility will begin in April with a monthly amortization rate of 0.292% of the outstanding term loan principal balance for the period April 1, 2023 through June 1, 2023, increasing to 0.542% per month for the period July 1, 2023 through September 1, 2023 then increasing to 0.833% thereafter. Total scheduled principal payments of \$4.5 million are payable in 2023 and as such, have been classified as current in the accompanying consolidated balance sheet as of December 31, 2022. The weighted-average interest rate on current maturities of long-debt is 13.60%.

Pursuant to the ABL Revolving Credit Facility and the Term Loan Facility, the Company is required to comply with a minimum trailing four quarter EBITDA of \$14.7 million for the Company's first quarter of 2023, \$23.3 million in the second quarter, \$39.2 million in the third quarter, \$51.7 million in the fourth quarter, \$57.6 million in the first quarter of 2024, \$65.2 million in the second quarter of 2024 and \$70 million thereafter. In addition, mandatory prepayment of a portion of excess cash flow, as defined by the Term Loan Facility, is payable towards the principle amount outstanding at the end of 2023. Any voluntary prepayments made are subject to a prepayment fee, as defined by the Term Loan Facility. The Company is also required to maintain minimum liquidity of \$20 million through the date of delivery of the compliance certificate for the quarter ended March 31, 2024, and \$10 million thereafter. Beginning with the first quarter of 2024, the Company is subject to a minimum fixed charge coverage ratio of 1.10 to 1.00. Further, the Company is subject to excess cash flow repayment provisions, restrictions on additional indebtedness, share repurchases and dividend payments, and a limitation on capital expenditures.

Upon execution of the amendment to its ABL Revolving Credit Facility and the Term Loan Facility on January 19, 2023, the Company incurred an additional \$6.1 million in debt issuance costs, allocated between the ABL Revolving Credit Facility and the Term Loan Facility. Deferred debt issuance costs associated with the ABL Revolving Credit Facility will be recorded within other assets and those associated with the Term Loan Facility will be recorded as a reduction of the carrying value of the debt on the Consolidated Balance Sheets.

Certain of the Company's subsidiaries are borrowers or guarantors under the ABL Revolving Credit Facility and the Term Loan Facility.

In the event of voluntary or involuntary bankruptcy of the Company or any subsidiary, all unpaid principal and other amounts owing under the credit facilities automatically become due and payable. Other events of default, such as failure to make payments as they become due and breach of financial and other covenants, change of control, cross default under other material debt agreements, and a going concern qualification for any reason other than loan maturity date give the agent the option to declare all such amounts immediately due and payable.

The Company expects its sales growth and reductions in working capital will provide sufficient cash flows to fund operations. However, the Company may also evaluate various actions and alternatives to enhance its profitability and cash generation from operating activities, which could include manufacturing efficiency initiatives, cost-reduction measures, working with vendors and suppliers to reduce lead times and expedite shipment of critical components, and working with customers to expedite receivable collections.

Our ability to maintain sufficient liquidity and comply with financial debt covenants is highly dependent upon achieving expected operating results. Failure to achieve expected operating results could have a material adverse effect on our liquidity, our ability to obtain financing or access our existing financing, and our operations in the future and could allow our debt holders to demand payment of all outstanding amounts. Refer to Item 1A, Risk Factors, for further discussion.

NOTE 9 — WARRANTY

In the ordinary course of business, the Company warrants its products against defects in design, materials and workmanship typically over periods ranging from twelve to sixty months. The Company determines warranty reserves needed by product line based on experience and current facts and circumstances. Activity in the warranty accrual, which is included in other accrued expenses on the Consolidated Balance Sheets, is summarized as follows:

(In thousands)	2022	2021	2020
Balance at Beginning of the Year	\$ 8,183	\$ 7,018	\$ 7,660
Warranties Issued	3,407	6,083	1,725
Reassessed Warranty Exposure	(65)	(1,474)	(1,029)
Warranties Settled	(3,516)	(3,444)	(1,338)
Balance at End of the Year	<u>\$ 8,009</u>	<u>\$ 8,183</u>	<u>\$ 7,018</u>

NOTE 10 — LEASES

The Company has operating and finance leases for leased office and manufacturing facilities and equipment leases. We have concluded that when an agreement grants us the right to substantially all of the economic benefits associated with an identified asset, and we are able to direct the use of that asset throughout the term of the agreement, we have a lease. We lease certain office equipment under finance leases, and we lease certain production facilities, office equipment and vehicles under operating

leases. Some of our leases include options to extend or terminate the leases and these options have been included in the relevant lease term to the extent that they are reasonably certain to be exercised.

If the lease arrangement also contains non-lease components, the Company elected the practical expedient not to separate any combined lease and non-lease components for all lease contracts. For our real estate leases, the remaining fixed minimum rental payments used in the calculation of the new lease liability, include fixed payments and variable payments (if the variable payments are based on an index), over the remaining lease term. Variable lease payments based on indices have been included in the related right-of-use assets and lease liabilities on our Consolidated Balance Sheets, while variable lease payments based on usage of the underlying asset have been excluded, as they do not represent present rights or obligations. Variable lease components for leases relate primarily to common area maintenance charges and other separately billed lessor services, sales and real estate taxes. Variable lease costs are expensed in the period they are incurred. We have also elected to adopt the practical expedient under ASC 842 to not separate lease and non-lease components in contracts where the base lease payment contains both. In this situation, these lease agreements are accounted for as a single lease component for all classes of underlying assets. While we do have real estate leases with options to purchase the facility at a market value at the date of exercise, these are not included in the calculation of the lease liability, as these options are not expected to be exercised.

Any new additional operating and financing lease liabilities and corresponding right-of-use (“ROU”) assets are based on the present value of the remaining minimum rental payments. The Company's operating lease liability increased approximately \$3.0 million as a result of acquiring ROU assets from new leases entered into during the year ended December 31, 2022. In determining the incremental borrowing rate, we have considered borrowing data for secured debt obtained from our lending institution.

The following is a summary of the Company's ROU assets and liabilities at December 31:

(In thousands)

	2022	2021
Operating Leases:		
Operating Right-of-Use Assets, Gross	\$ 29,466	\$ 30,318
Less Accumulated Right-of-Use Asset Impairment	1,710	1,710
Less Accumulated Amortization	14,728	12,439
Operating Right-of-Use Assets, Net	<u>\$ 13,028</u>	<u>\$ 16,169</u>
Short-term Operating Lease Liabilities	\$ 4,441	\$ 6,778
Long-term Operating Lease Liabilities	9,942	12,018
Operating Lease Liabilities	<u>\$ 14,383</u>	<u>\$ 18,796</u>
Finance Leases:		
Finance Right-of-Use Assets, Gross	\$ 231	\$ 177
Less Accumulated Amortization	138	106
Finance Right-of-Use Assets, Net — Included in Other Assets	<u>\$ 93</u>	<u>\$ 71</u>
Short-term Finance Lease Liabilities — Included in Other Accrued Expenses	\$ 29	\$ 72
Long-term Finance Lease Liabilities — Included in Other Liabilities	67	—
Finance Lease Liabilities	<u>\$ 96</u>	<u>\$ 72</u>

The following is a summary of the Company's total lease costs as of December 31:

(In thousands)	2022	2021
Finance Lease Cost:		
Amortization of ROU Assets	\$ 94	\$ 573
Interest on Lease Liabilities	4	78
Total Finance Lease Cost	98	651
Operating Lease Cost	6,627	5,881
Variable Lease Cost	1,757	1,546
Short-term Lease Cost (excluding month-to-month)	602	271
Less Sublease and Rental Income	(1,329)	(1,265)
Total Operating Lease Cost	7,657	6,433
Total Net Lease Cost	\$ 7,755	\$ 7,084

The following is a summary of cash paid for amounts included in the measurement of lease liabilities as of December 31:

(In thousands)	2022	2021
Operating Cash Flow for Finance Leases	\$ 4	\$ 78
Operating Cash Flow for Operating Leases	7,873	6,711
Financing Cash Flow for Finance Leases	93	901

As permitted by ASC 842, leases with expected durations of less than 12 months from inception (i.e. short-term leases) were excluded from the Company's calculation of its lease liability and ROU asset. Furthermore, as permitted by ASC 842, the Company elected to apply the package of practical expedients, which allows companies not to reassess: (a) whether its expired or existing contracts are or contain leases, (b) the lease classification for any expired or existing leases, and (c) initial direct costs for any existing leases.

The weighted-average remaining term for the Company's operating and financing leases are approximately 4 years and 3 years, respectively. The weighted-average discount rates for the Company's operating and financing leases are each approximately 3.6%.

The following is a summary of the Company's maturity of lease liabilities:

(In thousands)	Operating Leases	Financing Leases
2023	\$ 4,876	\$ 32
2024	3,879	32
2025	3,310	18
2026	1,216	14
2027	859	6
Thereafter	1,298	—
Total Lease Payments	15,438	102
Less: Interest	1,055	6
Total Lease Liability	\$ 14,383	\$ 96

These amounts exclude annual operating lease payments of approximately \$1.7 million per year through 2033, which represents legal binding lease payments for leases signed, but not yet commenced.

NOTE 11 — INCOME TAXES

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting and tax basis of assets and liabilities. Deferred tax assets are reduced, if deemed necessary, by a valuation allowance for the amount of tax benefits which are not more likely than not to be realized.

The provision for (benefit from) income taxes at December 31 consists of the following:

(In thousands)

	2022	2021	2020
Current			
U.S. Federal	\$ 5,338	\$ (1,713)	\$ (8,679)
State	(153)	(667)	(4,539)
Foreign	750	1,439	1,036
Current	<u>5,935</u>	<u>(941)</u>	<u>(12,182)</u>
Deferred			
U.S. Federal	113	(237)	17,044
State	(239)	(87)	(92)
Foreign	145	(117)	(1,399)
Deferred	<u>19</u>	<u>(441)</u>	<u>15,553</u>
Total	<u>\$ 5,954</u>	<u>\$ (1,382)</u>	<u>\$ 3,371</u>

The effective tax rates differ from the statutory federal income tax rate as follows:

	2022	2021	2020
Statutory Federal Income Tax Rate	21.0 %	21.0 %	21.0 %
Permanent Items			
Stock Compensation Expense	(2.2)%	(2.1)%	(0.3)%
Non Deductible Goodwill Impairment	— %	— %	(10.2)%
Contingent Consideration Liability Fair Value Adjustment	— %	1.7 %	— %
Other	(0.3)%	(0.7)%	— %
Foreign Tax Rate Differential	(2.8)%	(2.7)%	(1.0)%
State Income Tax, Net of Federal Income Tax Effect	1.0 %	2.2 %	3.3 %
Research and Development Tax Credits	7.7 %	12.8 %	2.2 %
Change in Valuation Allowance	(44.6)%	(29.8)%	(19.2)%
Net GILTI and FDII Tax Expense	1.8 %	— %	— %
Foreign Tax Credit for Dividend Withholding	(1.5)%	1.7 %	— %
Tax Rate Change on 2020 Federal Net Operating Loss Carryback	— %	0.9 %	1.3 %
Other	(0.1)%	0.1 %	(0.1)%
Effective Tax Rate	<u>(20.0)%</u>	<u>5.1 %</u>	<u>(3.0)%</u>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes as well as tax attributes.

Significant components of the Company's deferred tax assets and liabilities at December 31, are as follows:

(In thousands)	2022	2021
Deferred Tax Assets:		
Asset Reserves	\$ 17,680	\$ 17,462
Deferred Compensation	6,798	7,424
Section 163(j) - Interest Expense Limitation	—	891
State Investment and Research and Development Tax Credit Carryforwards, Net of Federal Tax	1,128	4,674
Customer Advanced Payments and Deferred Revenue	1,917	1,301
Net Operating Loss Carryforwards and Other	11,307	15,617
Goodwill and Intangible Assets	1,277	1,082
ASC 606 Revenue Recognition	197	1,817
Research & Development Costs	19,892	—
Lease Liabilities	3,201	4,178
Other	6,135	5,540
Total Gross Deferred Tax Assets	69,532	59,986
Valuation Allowance for Federal and State Deferred Tax Assets and Tax Credit Carryforwards, Net of Federal Tax	(57,369)	(43,519)
Deferred Tax Assets	12,163	16,467
Deferred Tax Liabilities:		
Depreciation	8,886	9,393
ASC 606 Revenue Recognition - Section 481(a) Adjustment	525	1,030
Lease Assets	2,905	3,539
Earnout Income Accrual	—	2,603
Other	1,005	1,050
Deferred Tax Liabilities	13,321	17,615
Net Deferred Tax Liabilities	\$ (1,158)	\$ (1,148)

The net deferred tax assets and liabilities presented in the Consolidated Balance Sheets are as follows at December 31:

(In thousands)	2022	2021
Other Assets — Long-term	\$ 712	\$ 273
Deferred Tax Liabilities — Long-term	(1,870)	(1,421)
Net Deferred Tax Liabilities	\$ (1,158)	\$ (1,148)

The Company records a valuation allowance against the deferred tax assets if and to the extent it is more likely than not that the Company will not recover the deferred tax assets. In evaluating the need for a valuation allowance, the Company weighs all relevant positive and negative evidence, and considers among other factors, historical financial performance, projected future taxable income, scheduled reversals of deferred tax liabilities, the overall business environment, and tax planning strategies. Losses in recent periods and cumulative pre-tax losses in the three year period ending with the current year, combined with the significant uncertainty brought about by the COVID-19 pandemic, is collectively considered significant negative evidence under ASC 740 when assessing whether an entity can use projected income as a basis for concluding that deferred tax assets are realizable on a more-likely than not basis. For purposes of assessing the recoverability of deferred tax assets, the Company determined that it could not include future projected earnings in the analysis due to the recent history of losses and therefore had insufficient objective positive evidence that the Company will generate sufficient future taxable income to overcome the negative evidence of cumulative losses. Accordingly, during the years ended December 31, 2022, 2021, and 2020, the Company determined that a portion of its deferred tax assets are not expected to be realizable in the future. As a result, the Company recorded a provision for valuation allowances against its U.S. federal deferred tax assets of approximately \$11.9 million, \$6.0 million, and \$23.3 million during the years ended December 31, 2022, 2021 and 2020, respectively. In addition, during the years ended December 31, 2022 and 2021, the Company recorded a valuation allowance against certain foreign deferred tax assets of approximately \$0.4 million and \$1.3 million, respectively.

Beginning January 1, 2022, the Tax Cuts and Jobs Act (TCJA) of 2017 eliminated the option to deduct research and development expenditures in the current year and now requires taxpayers to capitalize and amortize research and development costs pursuant to Internal Revenue Code (“IRC”) Section 174. The capitalized expenses are amortized over a 5-year period for domestic expenses and a 15-year period for foreign expenses. As a result of this provision of the TCJA, deferred tax assets related to capitalized research expenses increased by approximately \$19.9 million during the year ended December 31, 2022. Given the recent history of losses, the Company determined that it could not include future projected income as a source of taxable income to realize this deferred tax asset in the future. As a result, a valuation allowance has been recorded.

At December 31, 2022, gross federal net operating losses, amounted to approximately \$1 million. In the current year, the Company generated approximately \$51.5 million of taxable income, net of utilized net operating losses of approximately \$25.7 million. The remaining prior year carry forward net operating losses of approximately \$3.1 million can be carried forward and are subject to annual limitations under Internal Revenue Code Section 382. Of these net operating losses, \$2.7 million expire in 2038 and the remaining \$0.4 million will carryforward indefinitely. Given the recent history of losses, the Company determined that it could not include future projected income as a source of taxable income to realize this deferred tax asset in the future. As a result, a valuation allowance has been recorded.

At December 31, 2022, gross state net operating loss carryforwards amounted to approximately \$34.1 million. These state net operating loss carryforwards begin to expire at various dates from 2022 through 2042. Due to the uncertainty as to the Company’s ability to generate sufficient taxable income in certain states in the future along with the recent history of losses resulting in the Company excluding future projected income as a source of taxable income to realize certain of these state net operating losses in the future, a valuation allowance has been recorded.

At December 31, 2022, state income tax credit carryforwards amounted to approximately \$1.1 million and begin to expire at various dates from 2022 to 2037. Due to the uncertainty as to the Company’s ability to generate sufficient taxable income in certain states in the future along with the recent history of losses resulting in the Company excluding future projected income as a source of taxable income to realize certain of these state net operating losses in the future, a valuation allowance has been recorded.

At December 31, 2022, the Company has approximately \$0.2 million of foreign tax credits that it can carry forward through 2031. Given the recent history of losses, the Company determined that it could not include future projected income as a source of taxable income to realize this deferred tax asset in the future. As a result, a valuation allowance has been recorded.

During the year ended December 31, 2020, the Company determined that a revised state filing position could be taken which would reduce the taxable income apportioned for state income tax purposes and recorded a state income tax receivable of approximately \$3.0 million as a component of Prepaid Expenses and Other Current Assets. The Company has filed amended state income tax returns for tax years 2015 and 2016 and intends to file amended state income tax returns for tax years 2017 through 2019 in order to claim these refunds.

The Company has analyzed its filing positions in all of the federal and state jurisdictions where it is required to file income tax returns, as well as all open tax years in these jurisdictions. Should the Company need to accrue a liability for uncertain tax benefits, any interest associated with that liability would be recorded as interest expense. Penalties, if any, would be recorded as operating expenses. A reconciliation of the total amounts of unrecognized tax benefits, excluding interest and penalties, is as follows:

(in thousands)	2022	2021	2020
Balance at Beginning of the Year	\$ 1,412	\$ 1,890	\$ 2,565
Decreases as a Result of Tax Positions Taken in Prior Years	(969)	(478)	(775)
Increases as a Result of Tax Positions Taken in the Current Year	—	—	100
Balance at End of the Year	<u>\$ 443</u>	<u>\$ 1,412</u>	<u>\$ 1,890</u>

There are no material penalties or interest liabilities accrued as of December 31, 2022, 2021, or 2020, nor are any material penalties or interest costs included in expense for each of the years ended December 31, 2022, 2021 and 2020. The years under which we conducted our evaluation coincided with the tax years currently still subject to examination by major federal and state tax jurisdictions, those being 2019 through 2022 for federal purposes and 2017 through 2022 for state purposes.

Pretax income (loss) from the Company’s foreign subsidiaries amounted to approximately \$0.1 million, \$(3.3) million and \$(7.0) million for 2022, 2021 and 2020, respectively. The balance of pretax earnings or loss for each of those years were domestic.

Historically, we have asserted that the unremitted earnings of our foreign subsidiaries were indefinitely reinvested. However, as of December 31, 2022, we determined that we can no longer assert indefinite reinvestment on approximately \$3.4 million of the unremitted earnings of Luminescent Systems Canada Inc. As a result, we have recorded a deferred tax liability of approximately \$0.2 million at December 31, 2022, related to local country withholding taxes that are expected to be incurred upon ultimate repatriation of such earnings. All other foreign unremitted earnings, which total approximately \$11.3 million, continue to be indefinitely reinvested. We continue to be permanently reinvested in outside basis differences other than unremitted earnings as we have no plans to liquidate or sell any foreign subsidiaries. In addition, we have not provided deferred taxes on any outside basis differences of our domestic subsidiaries as we have the ability and intent to recover these basis differences in a tax-free manner. It is not practicable to determine the amount of unrecognized deferred tax related to these basis differences.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) was enacted in response to the economic uncertainty resulting from the COVID-19 pandemic. The CARES Act includes many measures to assist companies, including temporary changes to income and non-income based laws, some of which were enacted as part of the Tax Cuts and Jobs Act of 2017 (“TCJA”). Some of the key changes include eliminating the 80% of taxable income limitation by allowing corporate entities to fully utilize NOLs to offset taxable income in 2018, 2019 and 2020, allowing NOLs originating in 2018, 2019 and 2020 to be carried back five years, enhanced interest deductibility, and retroactively clarifying the immediate recovery of qualified improvement property costs rather than over a 39-year recovery period. As a result of the ongoing COVID-19 pandemic, the Company generated a significant tax loss for the year ended December 31, 2020, which was carried back under the CARES Act to recover previously paid income taxes. During the years ended December 31, 2021 and 2020, the Company recorded a tax benefit relating to the NOL carryback provisions and the technical correction for qualified improvement property provided for in the CARES Act of approximately \$0.3 million and \$1.5 million respectively. No tax benefit was recorded for the year ending December 31, 2022.

The Inflation Reduction Act of 2022 (IRA) was signed into law on August 16, 2022. Key provisions under the IRA include a 15% corporate alternative minimum tax imposed on certain large corporations and the extension and expansion of clean energy tax incentives. There were no impacts related to the IRA recorded for the year ending December 31, 2022.

NOTE 12 — PROFIT SHARING/401K PLAN

The Company offers eligible domestic full-time employees participation in certain profit sharing/401K plans. The plans provide for a discretionary annual company contribution. In addition, employees may contribute a portion of their salary to the plans which, under certain of the profit sharing/401K plans, is partially matched by the Company. In response to the impact of the COVID-19 pandemic, both the discretionary Company contribution and the match were temporarily suspended beginning in the second quarter of 2020. The discretionary Company contribution and, where applicable, the matching contribution, were reinstated in the fourth quarter of 2021. The plans may be amended or terminated at any time.

Total charges to income before income taxes for these plans were approximately \$4.7 million, \$4.3 million and \$3.3 million in 2022, 2021 and 2020, respectively. The Company has funded the 2021 and 2022 contributions to date with treasury stock in lieu of cash and will fund the remaining 2022 contribution with treasury stock in the first quarter of 2023.

NOTE 13 — RETIREMENT PLANS AND RELATED POST RETIREMENT BENEFITS

The Company has two non-qualified supplemental retirement defined benefit plans (“SERP” and “SERP II”) for certain current and retired executive officers. The accumulated benefit obligation of the plans as of December 31, 2022 and 2021 amounts to \$20.5 million and \$28.5 million, respectively.

The plans provide for benefits based upon average annual compensation and years of service and, in the case of SERP, there are offsets for social security and profit sharing benefits. It is the Company’s intent to fund the plans as plan benefits become payable, since no assets exist at December 31, 2022 or 2021 for either of the plans.

The Company accounts for the funded status (i.e., the difference between the fair value of plan assets and the projected benefit obligations) of its pension plans in accordance with the recognition and disclosure provisions of ASC Topic 715, *Compensation, Retirement Benefits*, which requires the Company to recognize the funded status in its balance sheet, with a corresponding adjustment to Accumulated Other Comprehensive Income (“AOCI”), net of tax. These amounts will be subsequently recognized as net periodic pension cost pursuant to the Company’s historical policy for amortizing such amounts. Further, actuarial gains and losses that arise in subsequent periods and are not recognized as net periodic pension cost in the same periods will be recognized as a component of AOCI. Those amounts will be subsequently recognized as a component of net periodic pension cost on the same basis as the amounts recognized in AOCI.

Unrecognized prior service costs of \$1.0 million (\$1.6 million net of \$0.6 million in taxes) and unrecognized actuarial losses of \$0.8 million (\$2.4 million net of \$1.6 million in taxes) are included in AOCI at December 31, 2022 and have not yet been recognized in net periodic pension cost.

The reconciliation of the beginning and ending balances of the projected benefit obligation of the plans for the years ended December 31 is as follows:

(In thousands)	2022	2021
Funded Status		
Projected Benefit Obligation		
Beginning of the Year — January 1	\$ 30,503	\$ 31,730
Service Cost	138	195
Interest Cost	834	764
Actuarial Gain	(4,917)	(1,838)
Benefits Paid	(348)	(348)
End of the Year — December 31	<u>\$ 26,210</u>	<u>\$ 30,503</u>

In 2022, the net actuarial gain of \$4.9 million is due principally to the increase of 225 basis points in the discount rate used to measure the benefit obligation as of December 31, 2022 compared to the prior year. The assumptions used to calculate the projected benefit obligation as of December 31 are as follows:

	2022	2021
Discount Rate	5.00%	2.75%
Future Average Compensation Increases	2.00% - 3.00%	2.00% - 3.00%

The plans are unfunded at December 31, 2022 and are recognized in the accompanying Consolidated Balance Sheets as a current accrued pension liability of \$0.3 million and a long-term accrued pension liability of \$25.9 million. This also is the expected future contribution to the plan, since the plan is unfunded.

The service cost component of net periodic benefit cost is included in SG&A expenses, and all other net periodic benefit costs components (such as interest cost, prior service cost amortization and actuarial gain/loss amortization) are reported outside of operating income, within Other Expense, Net of Other Income in the accompanying Consolidated Statements of Operations.

The following table summarizes the components of the net periodic cost for the years ended December 31:

(In thousands)	2022	2021	2020
Net Periodic Cost			
Service Cost — Benefits Earned During Period	\$ 138	\$ 195	\$ 223
Interest Cost	834	764	836
Amortization of Prior Service Cost	386	386	386
Amortization of Losses	949	1292	648
Net Periodic Cost	<u>\$ 2,307</u>	<u>\$ 2,637</u>	<u>\$ 2,093</u>

The assumptions used to determine the net periodic cost are as follows:

	2022	2021	2020
Discount Rate	2.75%	2.42%	3.17%
Future Average Compensation Increases	2.00% - 3.00%	2.00% - 3.00%	2.00%

The Company expects the benefits to be paid in the next year to be \$0.3 million, each of the next three years to be \$0.6 million, \$1.0 million in the year following, and \$10.5 million in the aggregate for the next five years after that. This also is the expected Company contribution to the plans.

Participants in SERP are entitled to paid medical, dental and long-term care insurance benefits upon retirement under the plan. The measurement date for determining the plan obligation and cost is December 31. The accumulated postretirement benefit obligation is \$0.8 million and \$1.1 million for the years ended December 31, 2022 and 2021, respectively. The plan is recognized in the accompanying Consolidated Balance Sheets as a current accrued pension liability of \$0.1 million and a long-

term accrued pension liability of \$0.7 million. The net periodic cost for the years ended December 31, 2022, 2021 and 2020 is immaterial.

The Company also has a defined benefit plan related to its subsidiary in France. The measurement date for determining the plan obligation and cost is December 31. The defined benefit plan has an overfunded asset of \$0.1 million and an unfunded liability of \$0.3 million for the years ended December 31, 2022 and 2021, respectively. The plan is recognized in the accompanying Consolidated Balance Sheets as a long-term asset and long-term liability, respectively. The net periodic cost for the years ended December 31, 2022, 2021 and 2020 is immaterial.

The Company is a participating employer in a trustee-managed multiemployer defined benefit pension plan for employees who participate in collective bargaining agreements. The plan generally provides retirement benefits to employees based on years of service to the Company. Contributions are based on the hours worked and are expensed on a current basis. The plan is 98.0% funded as of January 1, 2022. The Company's contributions to the plan were \$0.5 million in 2022, \$0.4 million in 2021 and \$0.5 million in 2020. These contributions represent less than 1% of total contributions to the plan.

NOTE 14 — SHAREHOLDERS' EQUITY

Share Buyback Program

The Company's Board of Directors from time to time authorizes the repurchase of common stock, which allows the Company to purchase shares of its common stock in accordance with applicable securities laws on the open market or through privately negotiated transactions. In the year ended December 31, 2020, the Company repurchased 282,000 shares, at an aggregate cost of \$7.7 million. The Company has the capacity under the currently authorized program to repurchase additional shares of its common stock with a maximum dollar value of \$41.5 million. The Company's Rule 10b5-1 plan associated with the program was terminated on February 3, 2020. Under its current credit agreement, and as described further in Note 8, the Company is restricted from further stock repurchases under this program.

Reserved Common Stock

At December 31, 2022, approximately 10.8 million shares of common stock were reserved for issuance upon conversion of the Class B stock, exercise of stock options, issuance of restricted stock and purchases under the Employee Stock Purchase Plan. Class B Stock is identical to Common Stock, except Class B Stock has ten votes per share, is automatically converted to Common Stock on a one-for-one basis when sold or transferred other than via gift, devise or bequest and cannot receive dividends unless an equal or greater amount of dividends is declared on Common Stock.

Comprehensive Loss and Accumulated Other Comprehensive Loss

Comprehensive income or loss consists of net income or loss and the after-tax impact of retirement liability adjustments. No income tax effect is recorded for currency translation adjustments.

The components of accumulated other comprehensive loss are as follows:

(In thousands)	2022	2021
Foreign Currency Translation Adjustments	\$ (7,335)	\$ (5,407)
Retirement Liability Adjustment – Before Tax	(4,473)	(11,370)
Tax Benefit	2,282	2,282
Retirement Liability Adjustment – After Tax	(2,191)	(9,088)
Accumulated Other Comprehensive Loss	<u>\$ (9,526)</u>	<u>\$ (14,495)</u>

The components of other comprehensive income (loss) are as follows:

(In thousands)	2022	2021	2020
Foreign Currency Translation Adjustments	\$ (1,928)	\$ (939)	\$ 2,574
Retirement Liability Adjustment	6,897	2,894	(3,396)
Other Comprehensive Income (Loss)	<u>\$ 4,969</u>	<u>\$ 1,955</u>	<u>\$ (822)</u>

In 2022, 2021 and 2020, no tax benefit was recognized as the Company had recorded a full valuation allowance.

NOTE 15 — LOSS PER SHARE

Loss per share computations are based upon the following table:

(In thousands, except per share data)

	2022	2021	2020
Net Loss	\$ (35,747)	\$ (25,578)	\$ (115,781)
Basic Earnings Weighted Average Shares	32,164	31,061	30,795
Net Effect of Dilutive Stock Options	—	—	—
Diluted Earnings Weighted Average Shares	32,164	31,061	30,795
Basic Loss Per Share	\$ (1.11)	\$ (0.82)	\$ (3.76)
Diluted Loss Per Share	\$ (1.11)	\$ (0.82)	\$ (3.76)

Stock options with exercise prices greater than the average market price of the underlying common shares are excluded from the computation of diluted earnings per share because they are out-of-the-money and the effect of their inclusion would be anti-dilutive. The number of common shares excluded from the computation was approximately 1.4 million for the year ended December 31, 2022, 1.2 million for the year ended December 31, 2021, and 0.8 million for the year ended December 31, 2020.

The Company has funded substantially all of its 2021 and 2022 401K contributions, and will fund the remaining 2022 401K contributions outstanding, with treasury stock in lieu of cash. The earnings per share computation for the years ended December 31, 2022 and 2021 are inclusive of approximately 0.1 million and 0.4 million in shares outstanding for the equivalent shares needed to fulfill the respective period's 401K obligation using the closing share price as of December 31, 2022 and 2021, respectively. Actual shares issued may differ based on the share price on the settlement date.

NOTE 16 — EQUITY COMPENSATION

The Company has equity compensation plans that authorize the issuance of restricted stock units or options for shares of Common Stock to directors, officers and key employees. Equity-based compensation is designed to reward long-term contributions to the Company and provide incentives for recipients to join and to remain with the Company. The exercise price of stock options, determined by a committee of the Board of Directors, is equal to the fair market value of the Common Stock on the grant date. Options become exercisable over periods not exceeding ten years, and must be exercised within 10 years from the grant date. The Company's practice has been to issue new shares upon the exercise of the options.

The Company established its Incentive Stock Option Plans for the purpose of attracting and retaining executive officers and key employees, and to align management's interest with those of the shareholders. At December 31, 2022, the Company had options outstanding for 521,973 shares under the plans.

The Company established the Directors Stock Option Plans for the purpose of attracting and retaining the services of experienced and knowledgeable outside directors, and to align their interest with those of the shareholders. At December 31, 2022, the Company had options outstanding for 63,149 shares under the plans.

During 2017, the Company established the Long Term Incentive Plan for the purpose of attracting and retaining directors, executive officers and key employees, and to align management's interest with those of the shareholders. The Long Term Incentive Plan contemplates the use of a mix of equity award types. For stock options, the exercise price is equal to the share price on the date of grant. Upon inception, the remaining options available for future grant under the 2011 Incentive Stock Option Plan and the Directors Stock Option Plans were rolled in the Long Term Incentive Plan, and no further grants may be made out of those plans. At December 31, 2022, the Company had stock options and RSU's outstanding that covered 1,369,810 shares under the Long Term Incentive Plan, and there were 1,226,057 shares available for future grant under this plan.

Stock compensation expense recognized during the period is based on the value of the portion of share-based payment awards that is ultimately expected to vest during the period. Vesting requirements vary for directors, officers and key employees. In general, options or RSU's granted to outside directors vest six months from the date of grant and options granted to officers and key employees straight line vest over a three- to five-year period from the date of grant. RSU's granted to officers and key employees generally cliff vest three years from the date of grant.

The following table provides compensation expense information based on the fair value of stock options and RSU's for the years ended December 31 as follows:

(In thousands)	2022	2021	2020
Equity-based Compensation Expense	\$ 6,497	\$ 6,460	\$ 5,184
Tax Benefit	(1,068)	(924)	(709)
Equity-based Compensation Expense, Net of Tax	\$ 5,429	\$ 5,536	\$ 4,475

Tax benefit excludes the impact of valuation allowances recorded against deferred tax assets.

Stock Options

No options were granted during the year ending December 31, 2020.

	2022	2021	2020
Weighted Average Fair Value of the Options Granted	\$ 5.97	\$ 7.05	\$ —

The weighted average fair value for these options was estimated at the date of grant using a Black-Scholes option pricing model with the following assumptions:

	2022	2021	2020
Risk-free Interest Rate	3.48% – 3.62%	0.45% - 1.52%	—%
Dividend Yield	—%	—%	—%
Volatility Factor	0.61	0.58	—
Expected Life in Years	5 – 9 years	5 - 10 years	—

To determine expected volatility, the Company uses historical volatility based on weekly closing prices of its Common Stock and considers currently available information to determine if future volatility is expected to differ over the expected terms of the options granted. The risk-free rate is based on the U.S. Treasury yield curve at the time of grant for the appropriate term of the options granted. Expected dividends are based on the Company's history and expectation of dividend payouts. The expected term of stock options is based on vesting schedules, expected exercise patterns and contractual terms.

A summary of the Company's stock option activity and related information for the year ended December 31 is as follows:

(Aggregate intrinsic value in thousands)	Options	2022 Weighted Average Exercise Price	Aggregate Intrinsic Value
Outstanding at January 1	1,263,658	\$ 21.64	\$ —
Options Granted	276,298	\$ 9.74	\$ —
Options Exercised	(51,138)	\$ 9.85	\$ —
Options Forfeited	(112,100)	\$ 13.33	\$ —
Outstanding at December 31	1,376,718	\$ 20.37	\$ —
Exercisable at December 31	687,682	\$ 27.35	\$ —

The aggregate intrinsic value in the preceding table represents the total pretax option holder's intrinsic value, based on the closing stock price of the Company's Common Stock which would have been received by the option holders had all option holders exercised their options as of that date. The closing stock price of the Company's Common Stock was \$10.30, \$12.00 and \$13.23 as of December 31, 2022, 2021 and 2020, respectively. As the stock price of \$10.30 was below the weighted average exercise price, intrinsic value is zero.

The weighted average fair value of options vested during 2022, 2021 and 2020 was \$2.89, \$14.58 and \$14.77, respectively. The total fair value of options that vested during the year amounted to \$2.4 million, \$1.2 million and \$1.4 million for the years ended December 31, 2022, 2021 and 2020, respectively. At December 31, 2022, total compensation costs related to non-vested option awards not yet recognized amounts to \$4.6 million and will be recognized over a weighted average period of approximately 3 years.

The following is a summary of weighted average exercise prices and contractual lives for outstanding and exercisable stock options as of December 31, 2022:

Exercise Price Range	Outstanding			Exercisable		
	Shares	Weighted Average Remaining Life in Years	Weighted Average Exercise Price	Shares	Weighted Average Remaining Life in Years	Weighted Average Exercise Price
\$3.19 – \$14.45	757,791	8.9	\$ 11.59	140,770	7.9	\$ 12.28
\$22.69 – \$35.82	609,800	4.5	\$ 30.91	537,785	4.1	\$ 30.97
\$45.89 – \$45.89	9,127	2.2	\$ 45.89	9,127	2.2	\$ 45.89
	<u>1,376,718</u>	6.9	\$ 20.37	<u>687,682</u>	4.9	\$ 27.35

Restricted Stock Units

The fair value of each RSU granted is equal to the fair market value of the Company's Common Stock on the date of grant. The RSU's granted to employees generally cliff vest three years from the date of grant, while RSU's granted to directors cliff vest six months from the date of grant. There were 314,264 RSU's granted in 2022 at a weighted-average price of \$13.56, of which 129,422 awards were vested and issued during 2022. Forfeitures during the year were 25,781. Included in total equity-based compensation expense for the year ended December 31, 2022 was \$3.5 million related to RSU's. At December 31, 2022, total compensation costs related to non-vested awards not yet recognized amounts to \$3.5 million and will be recognized over a weighted average period of approximately 2 years.

Employee Stock Purchase Plan

In addition to the stock options and RSU's discussed above, the Company has established the Employee Stock Purchase Plan to encourage employees to invest in Astronics Corporation. The plan provides employees the opportunity to invest up to the IRS annual maximum of approximately \$25,000 in Astronics common stock at a price equal to 85% of the fair market value of the Astronics common stock, determined each October 1. Employees are allowed to enroll annually. Employees indicate the number of shares they wish to obtain through the program and their intention to pay for the shares through payroll deductions over the annual cycle of October 1 through September 30. Employees can withdraw anytime during the annual cycle, and all money withheld from the employees' pay is returned. If an employee remains enrolled in the program, enough money will have been withheld from the employees' pay during the year to pay for all the shares that the employee opted for under the program. At December 31, 2022, employees had subscribed to purchase 473,666 shares at \$7.10 per share. The weighted average fair value of the options was approximately \$2.39, \$5.00 and \$3.43 for options granted during the year ended December 31, 2022, 2021 and 2020, respectively.

The fair value for the options granted under the Employee Stock Purchase Plan was estimated at the date of grant using a Black-Scholes option pricing model with the following assumptions:

	2022	2021	2020
Risk-free Interest Rate	4.01 %	0.09 %	0.12 %
Dividend Yield	— %	— %	— %
Volatility Factor	0.50	0.71	1.00
Expected Life in Years	1.0	1.0	1.0

NOTE 17 — FAIR VALUE

ASC Topic 820, *Fair Value Measurements and Disclosures*, ("ASC Topic 820") defines fair value, establishes a framework for measuring fair value and expands the related disclosure requirements. This statement applies under other accounting pronouncements that require or permit fair value measurements. The statement indicates, among other things, that a fair value measurement assumes that the transaction to sell an asset or transfer a liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability. ASC Topic 820 defines fair value based upon an exit price model. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and involves consideration of factors specific to the asset or liability.

ASC Topic 820 establishes a valuation hierarchy for disclosure of the inputs to valuation used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.

Level 3 inputs are unobservable inputs based on our own assumptions used to measure assets and liabilities at fair value.

On a Recurring Basis:

A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

On October 4, 2019, the Company acquired the stock of the primary operating subsidiaries as well as certain other assets from mass transit and defense market test solution provider, Diagnosys Test Systems Limited. The purchase consideration included an earnout estimated at a fair value of \$2.5 million at the time of acquisition. The terms of the Diagnosys acquisition allow for a potential earnout of up to an additional \$13.0 million over the three years post-acquisition based on achievement of new order levels of over \$72.0 million during that period. The fair value assigned to the earnout was determined using the real options method, which requires Level 3 inputs such as new order forecasts, discount rate, volatility factors, and other market variables to assess the probability of Diagnosys achieving certain order levels over the period. Based on actual and forecasted new orders, the fair value was zero as of December 31, 2021, with the contingent consideration liability fair value adjustment of \$2.2 million recorded within the Selling, General and Administrative line in the Consolidated Condensed Statements of Operations in the year ended December 31, 2021. No amounts have been paid or are payable related to this earnout.

There were no other financial assets or liabilities carried at fair value measured on a recurring basis at December 31, 2022 or 2021.

On a Non-recurring Basis:

In accordance with the provisions of ASC Topic 350, *Intangibles – Goodwill and Other*, the Company estimates the fair value of reporting units, utilizing unobservable Level 3 inputs. Level 3 inputs require significant management judgment due to the absence of quoted market prices or observable inputs for assets of a similar nature. The Company utilizes a discounted cash flow method to estimate the fair value of reporting units utilizing unobservable inputs. The fair value measurement of the reporting unit under the step-one analysis of the quantitative goodwill impairment test are classified as Level 3 inputs.

There were no impairment charges to goodwill in any of the Company's reporting units in 2022 or 2021.

As further discussed in Note 7, we performed interim quantitative assessments for the reporting units which had goodwill as of March 28, 2020. Based on our quantitative assessments, the Company recorded non-cash goodwill impairment charges associated with four Aerospace reporting units, totaling approximately \$86.3 million within the Impairment Loss line in the Consolidated Statements of Operations in the year ended December 31, 2020. The impairment loss was calculated as the difference between the fair value of the reporting unit (which was calculated using level 3 inputs) and the carrying value of the reporting unit.

Long-lived assets are evaluated for recoverability whenever adverse effects or changes in circumstances indicate that the carrying value may not be recoverable. The recoverability test consists of comparing the undiscounted projected cash flows of the asset or asset group (which are Level 3 inputs) with the asset or asset group's carrying amount. Should the carrying amount exceed undiscounted projected cash flows, an impairment loss would be recognized to the extent the carrying amount exceeds fair value. As of December 31, 2022 and 2021, the Company concluded that no indicators of impairment relating to long-lived assets existed.

In conjunction with the deteriorating economic conditions associated with the COVID-19 pandemic, we recorded an impairment charge to ROU assets of approximately \$0.7 million incurred in the Aerospace segment within the Impairment Loss line in the Consolidated Statements of Operations for the year ended December 31, 2020.

From time to time, the Company makes long-term, strategic equity investments in companies to promote business and strategic objectives. These investments are included in Other Assets on the Consolidated Balance Sheets. One of the investments incurred a full impairment charge which accounts for \$3.5 million recorded within the Other Expense, Net of Other Income line

in the accompanying Consolidated Statements of Operations for the year ended December 31, 2020. No such impairment was recorded in 2022 or 2021. These are Level 3 measurements as there were no observable price changes during the year.

Of the severance charges recorded, \$0.6 million and \$2.6 million in 2021 and 2020, respectively, qualify as one-time termination benefit arrangements and were initially measured at fair value using level 3 inputs.

Due to their short-term nature, the carrying value of cash and equivalents, accounts receivable and accounts payable approximate fair value. The carrying value of the Company's variable rate long-term debt instruments also approximates fair value due to the variable rate feature of these instruments.

NOTE 18 — SELECTED QUARTERLY FINANCIAL INFORMATION

The following table summarizes selected quarterly financial information for 2022 and 2021:

(Unaudited) (In thousands, except for per share data)	Quarter Ended	
	December 31,	December 31,
	2022	2021
Sales	\$ 158,153	\$ 116,052
Gross Profit (Sales Less Cost of Products Sold)	\$ 21,510	\$ 18,464
Net Gain on Sale of Facility	\$ —	\$ 5,014
Earnout on Previous Sale of Business	\$ —	\$ 10,677
Loss Before Income Taxes	\$ (7,208)	\$ (151)
Net (Loss) Income	\$ (6,779)	\$ 1,604
Basic (Loss) Earnings Per Share	\$ (0.21)	\$ 0.05
Diluted (Loss) Earnings Per Share	\$ (0.21)	\$ 0.05

A former customer filed a lawsuit alleging damages associated with defective product in 2019. Mediation of the matter was held in November 2022. The Company agreed to make a payment of \$2.0 million to settle the matter in the third quarter of 2022. The Company was indemnified by other parties for approximately \$1.5 million and recorded a gain as an offset to Selling, General and Administrative expense in the fourth quarter of 2022. The Company has also experienced material and labor inflation throughout 2022 which also impacts the comparability against the fourth quarter of 2021.

In the fourth quarter of 2021, a portion of the AMJP grant received of \$7.6 million was recognized as an offset to cost of products sold. This benefit was offset by a legal accrual recorded of \$8.4 million relating to an adverse ruling of an ongoing patent infringement case. In addition, the Company agreed to an earnout, shown above, with the buyer of the former semiconductor test business as more fully described in Note 21 and sold one of its Aerospace facilities, resulting in \$5.0 million gain on sale discussed in Note 22. In the fourth quarter of 2021, after completion of the tax returns for the year ended December 31, 2020, the Company recorded a current federal tax benefit of approximately \$1.7 million related to additional net operating loss and R&D tax credits that will be carried back to prior tax years in order to claim a refund.

NOTE 19 — LEGAL PROCEEDINGS

Lufthansa

On December 29, 2010, Lufthansa Technik AG ("Lufthansa") filed a Statement of Claim in the Regional State Court of Mannheim, Germany. Lufthansa's claim asserted that a subsidiary of the Company, AES, sold, marketed, and brought into use in Germany a power supply system that infringes upon a German patent held by Lufthansa. Lufthansa sought an order requiring AES to stop selling and marketing the allegedly infringing power supply system, a recall of allegedly infringing products sold to commercial customers in Germany since November 26, 2003, and compensation for damages related to direct sales of the allegedly infringing power supply system in Germany (referred to as "direct sales").

In February 2015, the Regional State Court of Mannheim, Germany held that the patent was infringed. The judgment did not require AES to recall products that are already installed in aircraft or had been sold to other end users.

The Company appealed to the Higher Regional Court of Karlsruhe. On November 15, 2016, the Higher Regional Court of Karlsruhe upheld the lower court's decision. The Company sought permission to appeal to the German Federal Supreme Court. By judgment of March 26, 2019, the German Federal Supreme Court dismissed AES's appeal. With this decision, the above mentioned proceedings are complete.

In July 2017, Lufthansa filed an action in the Regional State Court of Mannheim for payment of damages caused by AES's direct sales of the product into Germany. A first instance decision in this matter was handed down on December 6, 2019.

According to this ruling, Lufthansa was awarded damages in the amount of approximately \$2 million plus interest. Prior to 2019, the Company had accrued \$1.0 million related to this matter. As a result of the judgment on direct sales into Germany, the Company recognized an incremental reserve of \$3.5 million in its December 31, 2019 financial statements related to this matter. In 2020, AES made payment of \$4.7 million, inclusive of interest, in satisfaction of the first instance judgment. Both AES and Lufthansa have appealed this decision and the appeal is currently pending before the Higher Regional Court of Karlsruhe. An oral hearing has been scheduled by the appellate court for April 12, 2023. A decision is expected on the appeals of both parties in the second quarter of 2023. If the first instance judgment is later reversed on appeal, the Company could reclaim any amounts that were previously paid to Lufthansa that are in excess of the amount awarded by the appellate court, but there can be no assurances that we will be successful on such appeal. Further, if Lufthansa is successful on their appeal, additional damages may be awarded to them.

On December 29, 2017, Lufthansa filed another infringement action against AES in the Regional State Court of Mannheim claiming that sales by AES to its international customers have infringed Lufthansa's patent if AES's customers later shipped the products to Germany (referred to as "indirect sales"). This action, therefore, addresses sales other than those covered by the action filed on December 29, 2010, discussed above. No amount of claimed damages has been specified by Lufthansa.

A first instance decision in this matter was issued on December 6, 2019. The Court found that indirect sales (as defined above) by AES to international customers infringe the patent under the conditions specified in the judgment and that the sale of components of the EmPower system to Germany constitutes an indirect patent infringement. The Court rejected Lufthansa's claim that AES is also liable for damages for the sale of modified products. This means that AES is not liable for damages based on the sale of modified outlet units that removed the infringing feature. AES and Lufthansa both appealed this decision and the appeal is currently pending before the Higher Regional Court of Karlsruhe. An oral hearing is scheduled for June 14, 2023, with a decision expected approximately one month later. In its appeal, Lufthansa requested an additional finding that AES shall be held liable for all damages (in an unspecified amount) caused by AES's alleged incorrect accounting of its past sales.

If the December 6, 2019 decision of the Regional State Court of Mannheim is confirmed on appeal, AES would be responsible for payment of damages for indirect sales of patent-infringing EmPower in-seat power supply systems in the period from December 29, 2007 to May 22, 2018. AES modified the outlet units at the end of 2014 and substantially all of the modified outlet units sold from 2015 do not infringe the patent of Lufthansa. As a result, the period for which AES is liable for damages in connection with indirect sales into Germany substantially finished at the end of 2014.

After the accounting, Lufthansa is expected to enforce its claim for damages in separate court proceedings. These proceedings would most likely be tried before the Mannheim Court again, which makes it probable that the Mannheim court will determine the damages for the indirect sales on the basis of the same principles as in the direct sales proceedings (unless the latter ruling of the Mannheim court is reversed on appeal). Based on the information available and the determination of the damages in the direct sales claim discussed above, we estimated that the Company's total exposure related to these matters that was probable and that could be reasonably estimated at December 31, 2019 was approximately \$11.6 million plus approximately \$4.5 million of accrued interest, for a total of approximately \$16.1 million. Interest will accrue at a rate of 5% above the European Central Bank rate until final payment to Lufthansa. Approximately \$0.6 million was recorded within Selling, General and Administrative Expenses in the Company's Consolidated Statements of Operations in each of 2022, 2021 and 2020, respectively, for additional interest accrued during such periods.

In connection with the indirect sales claims, we currently believe it is unlikely that the appeals process will be completed and any damages and related interest will be paid before December 31, 2023. Therefore, the liability related to this matter, totaling \$17.8 million and \$17.3 million, is classified within Other Liabilities (non-current) in the Consolidated Balance Sheets at December 31, 2022 and 2021, respectively. This amount may be adjusted depending on the decision of the court on the direct sales damages appeal referred to previously.

In December 2017, Lufthansa filed patent infringement cases in the United Kingdom ("UK") and in France. The Lufthansa patent expired in May 2018. In those cases, Lufthansa accuses AES and certain of its customers of having manufactured, used, sold and offered for sale a power supply system, and offered and supplied parts for a power supply system that infringed upon a Lufthansa patent in those respective countries. In the normal course of its supply arrangements, AES has indemnified its customers from liability arising from such matters, and as such will bear responsibility for any monetary damages arising from such claims.

In the French matter, there was a hearing on the validity of the patent in October 2020. On December 4, 2020, the Court held the French patent invalid for all asserted claims. There can consequently be no finding of infringement on first instance. Lufthansa has appealed this judgment. The appeal hearing took place on December 8, 2022 and on February 24, 2023, the court

upheld the first instance judgment in favor of AES. As loss exposure is not probable and estimable at this time, the Company has not recorded any liability with respect to the French matter as of December 31, 2022 or 2021.

In the UK matter, a trial took place in June 2020 to address the issues of infringement and validity of the patent. On June 22, 2020, the Court held the UK patent valid and 3 out of 4 asserted claims infringed. In contrast to the decisions in Germany, the UK Court found that the modified components infringed a valid claim of the patent, and accordingly, the period for which AES or its customers would be liable for damages in connection with direct sales into the UK extends until the expiration of the patent in May 2018. AES appealed the ruling, and the appeal hearing took place on November 2, 2021. On January 14, 2022, the Court dismissed the appeal on all grounds. Lufthansa has yet to plead its case for monetary compensation, which would be determined at a separate trial, expected to be held in the latter half of 2023. The case for damages will require extensive data gathering and analysis which has not yet been completed. This analysis will include evaluating whether any units sold into the UK were subsequently shipped into Germany, where they would be subject to the indirect sales claim discussed above. If this is the case, damages may be assessed in either the UK, or in the indirect sales matter in Germany, but not in both matters.

Under English law, Lufthansa has the option of pursuing a claim in relation to the defendants' profits from their infringing activities or pursuing a claim in relation to Lufthansa's own lost profits. That election has not yet been made by Lufthansa and there is currently no date set for it to make this election. However, as we concluded a loss was probable and reasonably estimable based upon the information available to AES, we estimated damages of approximately \$6.2 million, plus accrued interest of approximately \$1.1 million, for AES and its indemnified customers. Interest will accrue until final payment to Lufthansa. Approximately \$7.3 million was reflected for this matter as a liability in the Consolidated Balance Sheet as of December 31, 2021, and was recorded within Selling, General & Administrative Expenses in the accompanying Consolidated Statement of Operations for the year then ended. This amount is subject to change as additional data is received and evaluated, and as additional information regarding the damages methodology is claimed by Lufthansa in advance of the damages trial. The damages trial is scheduled to be heard starting in October 2024, with payment likely due in late 2024 or early 2025. Therefore, the liability related to this matter, totaling \$7.0 million and \$7.3 million, is classified within Other Liabilities (non-current) in the Consolidated Balance Sheets at December 31, 2022 and 2021, respectively. The variance is due to currency fluctuation.

Separate from any such damages Lufthansa may seek in connection with the UK infringement decision discussed above, as a result of the first instance judgement in their favor, Lufthansa was entitled to reimbursement from AES of a proportion of its legal expenditures in the UK case. An interim reimbursement of approximately \$1.3 million was paid to Lufthansa in August 2020. The associated expense was recorded in the Consolidated Statements of Operations in the year ended December 31, 2020 within Selling, General & Administrative Expenses. As a result of the appeal decision, Lufthansa will be entitled to reimbursement from AES of a larger proportion of its first instance legal expenditures, as well as a portion of its legal expenditures associated with the appeal. We recorded an estimated liability of approximately \$1.1 million in our Consolidated Balance Sheet at December 31, 2021. The associated expense is recorded within Selling, General & Administrative Expenses in the Consolidated Statement of Operations for the year then ended. A payment of \$0.3 million was made in 2022. It is likely the remaining amount will be payable within the next twelve months, and as such, the liability of \$0.7 million has been classified as a current liability in the accompanying Consolidated Balance Sheets within Other Accrued Expenses at December 31, 2022.

Each of the German, France and UK claims are separate and distinct. Validity and infringement of the Lufthansa patent in each country is a matter for the courts in each of these countries, whose laws differ from each other. In addition, the principles of calculating damages in each jurisdiction differ substantially. Therefore, the Company has assessed each matter separately and cannot apply the same calculation methodology as in the German direct and indirect matters. However, it is reasonably possible that additional damages and interest could be incurred if the appellate court in France was to rule in favor of Lufthansa, or if damages in the UK matter are calculated on a different basis than our estimate or using information not currently available.

Other

On March 23, 2020, Teradyne, Inc. filed a complaint against the Company and its subsidiary, Astronics Test Systems ("ATS") (together, "the Defendants") in the United States District Court for the Central District of California alleging patent and copyright infringement, and certain other related claims. The Defendants moved to dismiss certain claims from the case. On November 6, 2020, the Court dismissed the Company from the case, and also dismissed a number of claims, though the patent and copyright infringement claims remain. The case proceeded to discovery. In addition, on December 21, 2020, ATS filed a petition for *inter partes* review ("IPR") with the US Patent Trial and Appeal Board ("PTAB"), seeking to invalidate the subject patent, and on July 21, 2021, the PTAB instituted IPR. ATS requested and, on August 26, 2021, the District Court granted, a stay of litigation during the IPR proceeding. Oral arguments on the IPR were held on April 21, 2022. The PTAB issued its decision on July 20, 2022, in which it invalidated all of Teradyne's patent claims. Teradyne will not appeal the decision. The stay of litigation was lifted with respect to the remaining claims in August 2022 and discovery has resumed. Trial is scheduled for December 5, 2023. No amounts have been accrued for this matter in the December 31, 2022 or 2021 financial statements, as loss exposure was neither probable nor estimable at such times.

In 2019, a former customer filed a lawsuit alleging damages associated with defective product. Mediation of the matter was held in November 2022. The Company agreed to make a payment of \$2.0 million to settle the matter in the third quarter of 2022. The Company was indemnified by other parties for approximately \$1.5 million and recorded a gain as an offset to Selling, General and Administrative expense in the fourth quarter of 2022.

Other than these proceedings, we are not party to any significant pending legal proceedings that management believes will result in a material adverse effect on our financial condition or results of operations.

NOTE 20 — SEGMENTS

Segment information and reconciliations to consolidated amounts for the years ended December 31 are as follows:

(In thousands)	2022	2021	2020
Sales:			
Aerospace	\$ 461,206	\$ 365,261	\$ 418,079
Less Inter-segment Sales	(10)	(23)	(91)
Total Aerospace Sales	461,196	365,238	417,988
Test Systems	73,717	80,027	85,589
Less Inter-segment Sales	(19)	(357)	(990)
Test Systems	73,698	79,670	84,599
Total Consolidated Sales	<u>\$ 534,894</u>	<u>\$ 444,908</u>	<u>\$ 502,587</u>
Operating Loss and Margins:			
Aerospace	\$ (1,883)	\$ (8,614)	\$ (89,833)
	(0.4)%	(2.4)%	(21.5)%
Test Systems	(8,118)	(3,765)	5,549
	(11.0)%	(4.7)%	6.6%
Total Operating Loss	<u>\$ (10,001)</u>	<u>\$ (12,379)</u>	<u>\$ (84,284)</u>
	(1.9)%	(2.8)%	(16.8)%
Additions to (Deductions from) Operating Profit:			
Net Gain on Sale of Businesses	\$ 11,284	\$ 10,677	\$ —
Interest Expense, Net of Interest Income	(9,422)	(6,804)	(6,741)
Corporate and Other Expenses, Net	(21,654)	(18,454)	(21,385)
Loss before Income Taxes	<u>\$ (29,793)</u>	<u>\$ (26,960)</u>	<u>\$ (112,410)</u>
Depreciation and Amortization:			
Aerospace	\$ 22,384	\$ 23,349	\$ 25,624
Test Systems	4,341	5,022	5,577
Corporate	1,052	634	653
Total Depreciation and Amortization	<u>\$ 27,777</u>	<u>\$ 29,005</u>	<u>\$ 31,854</u>
Assets:			
Aerospace	\$ 481,416	\$ 458,334	
Test Systems	111,513	105,335	
Corporate	22,102	45,469	
Total Assets	<u>\$ 615,031</u>	<u>\$ 609,138</u>	
Capital Expenditures:			
Aerospace	\$ 4,289	\$ 4,932	\$ 6,494
Test Systems	3,299	1,082	952
Corporate	87	20	13
Total Capital Expenditures	<u>\$ 7,675</u>	<u>\$ 6,034</u>	<u>\$ 7,459</u>

Operating loss is sales less cost of products sold and other operating expenses, excluding interest expense and other corporate expenses. Cost of products sold and other operating expenses are directly identifiable to the respective segment. Operating loss in the Aerospace segment in 2020 included goodwill impairment and restructuring charges, discussed in Note 7 and Note 22, respectively.

The following table summarizes the Company's sales into the following geographic regions for the years ended December 31:

(In thousands)	2022	2021	2020
United States	\$ 419,431	\$ 350,428	\$ 377,218
North America (excluding United States)	9,222	6,990	7,656
Asia	21,242	21,089	27,579
Europe	78,625	62,138	85,306
South America	3,629	1,082	1,788
Other	2,745	3,181	3,040
Total	\$ 534,894	\$ 444,908	\$ 502,587

The following table summarizes the Company's property, plant and equipment by country for the years ended December 31:

(In thousands)	2022	2021
United States	\$ 82,317	\$ 85,681
France	6,974	7,688
India	653	936
Canada	714	931
Total	\$ 90,658	\$ 95,236

Sales recorded by the Company's foreign operations were \$50.0 million, \$36.6 million and \$52.3 million in 2022, 2021 and 2020, respectively. Net loss was \$0.2 million, \$3.8 million and \$6.6 million in 2022, 2021 and 2020, respectively. Net assets held outside of the U.S. total \$36.6 million and \$40.5 million at December 31, 2022 and 2021, respectively. The exchange gain (loss) included in determining net (loss) income was insignificant in 2022, 2021 and 2020. Cumulative translation adjustments amounted to \$7.3 million and \$5.4 million at December 31, 2022 and 2021, respectively.

The Company had a significant concentration of business in 2022 and 2021 with The Boeing Company ("Boeing"), and had a significant concentration with Panasonic Aviation Corporation ("Panasonic") in 2020. Sales to Boeing and Panasonic are primarily in the Aerospace segment. The following is information relating to the activity with those customers:

	2022	2021	2020
Percent of Consolidated Sales			
Boeing	11.0%	10.0%	*
Panasonic	*	*	11.1%

(In thousands)	2022	2021
Accounts Receivable at December 31,		
Boeing	\$ 16,860	\$ 14,545
Panasonic	*	*

* Sales represented less than 10% of total consolidated sales in during the given period.

NOTE 21 — DIVESTITURE ACTIVITIES

Semiconductor Test Business

On February 13, 2019, the Company completed a divestiture of its semiconductor business within the Test Systems segment. The total proceeds of the divestiture included two elements of contingent earnouts. The "First Earnout" is calculated based on a multiple of all future sales of existing and certain future derivative products to existing and future customers in each annual period from 2019 through 2022. The First Earnout may not exceed \$35.0 million in total. The "Second Earnout" is calculated based on a multiple of future sales related to an existing product and program with an existing customer exceeding an annual threshold for each annual period from 2019 through 2022. The Second Earnout is not capped. For the Second Earnout, if the applicable sales in an annual period do not exceed the annual threshold, no amounts will be paid relative to such annual period;

the sales in such annual period do not carry over to the next annual period. Due to the degree of uncertainty associated with estimating the future sales levels of the divested business and its underlying programs, and the lack of reliable predictive market information, the Company has elected an accounting policy to recognize such earnout proceeds, if received, as additional gain on sale when such proceeds are realized or realizable. We consider the proceeds realizable when we have received communication from the purchaser of its calculation of the earnout and the parties reach agreement on the calculation. No amounts were payable to the Company under either earnout for the calendar 2019 earnout. The Company agreed to an earnout payment of \$10.7 million for the calendar 2020 earnout, which was recorded in the fourth quarter of 2021 as Other Income and was paid to the Company in early January 2022. In March 2022, the Company agreed with the earnout calculation for the calendar 2021 earnout in the amount of \$11.3 million. The Company recorded the gain and received the payment in the first quarter of 2022.

On February 14, 2023, the Company was notified by the purchaser that they have calculated \$3.4 million as being payable for the calendar 2022 earnout. We are in the process of reviewing the calculation, and expect to record the additional gain on the sale, and receive the payment, in the first quarter of 2023. We are not eligible for any further earnout payments related to this divestiture.

Other Disposal Activity

On October 6, 2021, as part of a planned consolidation effort, the Company sold one of its Aerospace buildings for \$9.2 million. Net cash proceeds were approximately \$8.8 million. A gain on sale of approximately \$5.0 million was recorded in the Consolidated Statements of Operations in Net Gain on Sale of Facility in the year ended December 31, 2021. The operation has been integrated into another facility.

In 2020, the Company sold certain facilities within the Aerospace segment for \$1.5 million in cash. The net gain on the sale was insignificant.

NOTE 22 — IMPAIRMENTS, RESTRUCTURING AND OTHER CHARGES

Goodwill Impairment

The 2022 and 2021 goodwill impairment tests resulted in no impairment to the carrying value of goodwill in any of the Company's reporting units and no impairment charges were recognized in 2022 or 2021. See Note 7 for discussion of the \$86.3 million of goodwill impairment charges in 2020, respectively, within the Aerospace segment. Such amounts are reported within the Impairment Loss line of the Consolidated Statements of Operations in the respective year.

Restructuring Activities

The Company incurred an impairment charge to ROU assets of approximately \$0.7 million during 2020 related to its AeroSat subsidiary, which had been restructured in 2019. Additional charges of \$0.2 million and \$0.4 million associated with restructuring at AeroSat were recorded during 2021 and 2020, respectively. All such charges were included in the Aerospace segment.

The COVID-19 pandemic has significantly impacted the global economy, and particularly the aerospace industry, resulting in reduced expectations of the Company's anticipated future operating results. As a result, the Company executed restructuring activities in the form of workforce reduction, primarily in the second quarter of 2020, to align capacity with expected demand. Accordingly, restructuring charges of \$4.9 million in severance expense associated primarily with the Aerospace segment were recorded in 2020. Additional restructuring charges of \$0.6 million occurred during 2021 to align the workforce to expected activities and to consolidate certain facilities. Severance expense during 2021 included \$0.3 million related with the Aerospace segment and \$0.3 million related with the Test Systems segment. Restructuring-related severance charges and other charges were insignificant in 2022. Any future restructuring actions will depend upon market conditions, customer actions and other factors.

The above restructuring and impairment charges are presented in the Consolidated Statements of Operations for the years ended December 31 as follows:

(In thousands)	2022	2021	2020
Cost of Products Sold	\$ —	\$ 221	\$ 280
Selling, General and Administrative Expenses	195	577	5,047
Impairment Loss	—	—	87,016
Total Restructuring and Impairment Charges	\$ 195	\$ 798	\$ 92,343

The following table reconciles the beginning and ending liability for restructuring charges:

(In thousands)	2022	2021	2020
Balance as of January 1	\$ 2,400	\$ 5,631	\$ 5,190
Restructuring Charges Recognized	195	798	5,327
Cash Paid	(2,595)	(4,029)	(4,886)
Balance as of December 31	\$ —	\$ 2,400	\$ 5,631

Financial Instrument Impairment

From time to time, the Company makes long-term, strategic equity investments in companies to promote business and strategic objectives. These investments are included in Other Assets on the Consolidated Balance Sheets. One of the investments became impaired in 2020 which resulted in an impairment charge of \$3.5 million recorded within the Other Expense, Net of Other Income line in the accompanying Consolidated Statements of Operations for the year ended December 31, 2020.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company carried out an evaluation, under the supervision and with the participation of Company management, including the 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 Exchange Act Rules 13a-15(e) and 15d-15(e). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures are effective as of the end of the period covered by this report, to ensure that information required to be disclosed in reports filed or submitted under the Exchange Act is made known to them on a timely basis, and that these disclosure controls and procedures are effective to ensure such information is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Management's Report on Internal Control over Financial Reporting

See the report appearing under Item 8, Financial Statements and Supplemental Data, Management's Report on Internal Control Over Financial Reporting.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

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 information regarding directors is contained under the captions “Proposal 1: Election of Directors” and “Security Ownership of Certain Beneficial Owners and Management” and is incorporated herein by reference to the Company’s 2023 definitive Proxy Statement to be filed within 120 days of the end of our fiscal year is incorporated herein by reference.

The Company has adopted a Code of Business Conduct and Ethics that applies to the Chief Executive Officer and Chief Financial Officer as well as other directors, officers and employees of the Company. This Code of Business Conduct and Ethics is available upon request without charge by contacting Astronics Corporation at (716) 805-1599. The Code of Business Conduct and Ethics is also available on the Investors section of the Company’s website at www.astronics.com.

The other information required by Item 10 is incorporated herein by reference from the Company’s 2023 definitive Proxy Statement to be filed within 120 days of the end of our fiscal year.

ITEM 11. EXECUTIVE COMPENSATION

The information contained under the caption “Executive Compensation”, “Summary Compensation Table” and “Compensation Committee Interlocks and Insider Participation” in the Company’s 2023 definitive Proxy Statement to be filed within 120 days of the end of our fiscal year is incorporated herein by reference.

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

The information contained under the captions “Security Ownership of Certain Beneficial Owners and Management” and “Equity Compensation Plan Information” in the Company’s 2023 definitive Proxy Statement to be filed within 120 days of the end of our fiscal year is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information contained under the captions “Certain Relationships and Related Party Transactions and Director Independence” and “Proposal 1: Election of Directors” in the Company’s 2023 definitive Proxy Statement to be filed within 120 days of the end of our fiscal year is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information contained under the caption “Audit and Non-Audit Fees” in the Company’s definitive Proxy Statement to be filed within 120 days of the end of our fiscal year is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

a. The documents filed as a part of this report are as follows:

1. *The following financial statements are included:*

- i. Consolidated Statements of Operations for the years ended December 31, 2022, 2021 and 2020
- ii. Consolidated Statements of Comprehensive (Loss) Income for the years ended December 31, 2022, 2021 and 2020
- iii. Consolidated Balance Sheets as of December 31, 2022 and 2021
- iv. Consolidated Statements of Cash Flows for the years ended December 31, 2022, 2021 and 2020
- v. Consolidated Statements of Shareholders' Equity for the years ended December 31, 2022, 2021 and 2020
- vi. Notes to Consolidated Financial Statements
- vii. Reports of Independent Registered Public Accounting Firm (PCAOB ID:42)
- viii. Management's Report on Internal Control Over Financial Reporting

2. *Financial Statement Schedule*

Schedule II. Valuation and Qualifying Accounts

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

3. *Exhibits*

Exhibit No.	Description
3 (a)	Restated Certificate of Incorporation, incorporated by reference to the registrant's 2013 Annual Report on Form 10-K, Exhibit 3(a), filed March 7, 2014 (File No. 000-07087).
(b)	By-Laws, as amended
(c)	Certificate of Amendment of the Certificate of Incorporation of Astronics Corporation, incorporated by reference to the registrant's Form 8-K, Exhibit 3.1, filed July 1, 2016 (File No. 000-07087).
4 (a)**	Description of Registrant's Securities, filed herewith.
10.1*	Restated Thrift and Profit Sharing Retirement Plan, incorporated by reference to the registrant's 2010 Annual Report on Form 10-K, Exhibit 10.1, filed March 3, 2011 (File No. 000-07087).
10.2*	Non-Qualified Supplemental Retirement Plan, incorporated by reference to the registrant's 2010 Annual Report on Form 10-K, Exhibit 10.5, filed March 3, 2011 (File No. 000-07087).
10.3*	Employment Termination Benefits Agreement dated December 16, 2003 between Astronics Corporation and Peter J. Gundermann, President and Chief Executive Officer of Astronics Corporation, incorporated by reference to the registrant's 2010 Annual Report on Form 10-K, Exhibit 10.6, filed March 3, 2011 (File No. 000-07087).
10.4*	Employment Termination Benefits Agreement dated December 16, 2003 between Astronics Corporation and David C. Burney, Vice President and Chief Financial Officer of Astronics Corporation, incorporated by reference to the registrant's 2010 Annual Report on Form 10-K, Exhibit 10.7, filed March 3, 2011 (File No. 000-07087).
10.5*	2005 Director Stock Option Plan, incorporated by reference to the registrant's 2010 Annual Report on Form 10-K, Exhibit 10.8, filed March 3, 2011 (File No. 000-07087).
10.6*	Supplemental Retirement Plan, Amended and Restated, March 6, 2012, incorporated by reference to the registrant's 2012 Annual Report on Form 10-K, Exhibit 10.10, filed February 22, 2013 (File No. 000-07087).
10.7*	First Amendment of the Employment Termination Benefits Agreement dated December 30, 2008 between Astronics Corporation and Peter J. Gundermann, President and Chief Executive Officer of Astronics, incorporated by reference to the registrant's 2008 Annual Report on Form 10-K, Exhibit 10.11, filed March 11, 2009 (File No. 000-07087).
10.8*	First Amendment of the Employment Termination Benefits Agreement dated December 30, 2008 between Astronics Corporation and David C. Burney, Vice President and Chief Financial Officer of Astronics Corporation, incorporated by reference to the registrant's 2008 Annual Report on Form 10-K, Exhibit 10.12, filed March 11, 2009 (File No. 000-07087).
10.9*	Employment Termination Benefits Agreement Dated February 18, 2005 between Astronics Corporation and Mark A. Peabody, Executive Vice President of Astronics Advanced Electronic Systems, Inc., incorporated by reference to the registrant's 2010 Annual Report on Form 10-K, Exhibit 10.13, filed March 3, 2011 (File No. 000-07087).
10.10*	First Amendment of the Employment Termination Benefits Agreement dated December 31, 2008 between Astronics Corporation and Mark A. Peabody, Executive Vice President of Astronics Advanced Electronic Systems, Inc., incorporated by reference to the registrant's 2010 Annual Report on Form 10-K, Exhibit 10.14, filed March 3, 2011 (File No. 000-07087).
10.11*	Form of Indemnification Agreement as executed by each of Astronics Corporation's Directors and Executive Officers, incorporated by reference to the registrant's 2010 Annual Report on Form 10-K, Exhibit 10.15, filed March 3, 2011 (File No. 000-07087).
10.12*	2011 Employee Stock Option Plan, incorporated by reference to the registrant's Form S-8, Exhibit 4.1 filed on August 4, 2011 (File No. 000-07087).
10.13*	Supplemental Retirement Plan II, incorporated by reference to the registrant's 2012 Annual Report on Form 10-K, Exhibit 10.18, filed February 22, 2013 (File No. 000-07087).
10.14	Fifth Amended and Restated Credit Agreement entered into by and among Astronics Corporation, HSBC Bank USA, National Association, HSBC Securities (USA) Inc. and Merrill Lynch, Pierce, Fenner & Smith Inc., and Suntrust Bank, incorporated by reference to Exhibit 10.1 on Form 8-K filed on February 21, 2018 (File No. 000-07087).

10.15	Amended and Restated Asset Purchase Agreement dated as of February 13, 2019 by and Among Astronics Test Systems, Inc., Astronics Corporation and Advantest Test Solutions, Inc., incorporated by reference to Exhibit 21.1 on Form 8-K filed on February 19, 2019 (File No. 000-07087).
10.16	Amendment No. 1 to the Fifth Amended and Restated Credit Agreement, incorporated by reference to Exhibit 10.1 on Form 8-K filed on May 4, 2020 (File No. 000-07087).
10.17*	Astronics Corporation Amended and Restated 2017 Long Term Incentive Plan, (incorporated by reference to Exhibit A to the Registrant's Definitive Proxy Statement on Schedule 14A, as filed with the SEC on April 13, 2021).
10.18*	Form of Stock Option Agreement (Named Executive Officers) under Amended and Restated 2017 Long Term Incentive Plan, filed herewith.
10.19*	Form of Performance Based Vesting RSU Agreement (Named Executive Officers) under Amended and Restated 2017 Long Term Incentive Plan, filed herewith.
10.20*	Form of Time-Based Vesting RSU Agreement (Directors) under Amended and Restated 2017 Long Term Incentive Plan, filed herewith.
10.21*	Form of Time-Based Vesting RSU Agreement (Key Employees) under Amended and Restated 2017 Long Term Incentive Plan, filed herewith.
10.22	Amendment No. 2 to the Fifth Amended and Restated Credit Agreement, incorporated by reference to Exhibit 10.1 on Form 8-K filed on March 2, 2022 (File No. 000-07087).
10.23	Amendment No. 3 to the Fifth Amended and Restated Credit Agreement, incorporated by reference to Exhibit 10.1 on Form 8-K filed on August 10, 2022 (File No. 000-07087).
10.24	Amendment No. 4 to the Fifth Amended and Restated Credit Agreement, incorporated by reference to Exhibit 10.1 on Form 8-K filed on October 24, 2022 (File No. 000-07087).
10.25	Amendment No. 5 to the Fifth Amended and Restated Credit Agreement, incorporated by reference to Exhibit 10.1 on Form 8-K filed on November 15, 2022 (File No. 000-07087).
10.26	Sixth Amended and Restated Credit Agreement entered into by and among Astronics Corporation, HSBC Bank USA, National Association, Wells Fargo Bank, N.A., incorporated by reference to Exhibit 10.1 on Form 8-K on January 19, 2023 (File No. 000-07087).
10.27	Credit Agreement dated as of January 19, 2023 by and among Astronics Corporation, Great Rock Capital Partners Management, LLC, incorporated by reference to Exhibit 10.2 on Form 8-K on January 19, 2023 (File No. 000-07087).
21**	Subsidiaries of the Registrant; filed herewith.
23**	Consent of Independent Registered Public Accounting Firm; filed herewith.
31.1**	Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002; filed herewith.
31.2**	Certification of Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002; filed herewith.
32**	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 Label Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document

* Identifies a management contract or compensatory plan or arrangement as required by Item 15(a) (3) of Form 10-K.

** Submitted electronically herewith

SCHEDULE II

Valuation and Qualifying Accounts

Year	Description	Balance at the Beginning of Period	Additions Charged to Cost and Expense	Write-Offs/Other	Balance at End of Period
<i>(In thousands)</i>					
2022	Allowance for Estimated Credit Losses	\$ 3,183	\$ 565	\$ (1,118)	\$ 2,630
	Reserve for Excess and Obsolete Inventories	\$ 33,775	\$ 2,850	\$ 192	\$ 36,817
	Deferred Tax Valuation Allowance	\$ 43,519	\$ 15,236	\$ (1,386)	\$ 57,369
2021	Allowance for Estimated Credit Losses	\$ 3,218	\$ 90	\$ (125)	\$ 3,183
	Reserve for Excess and Obsolete Inventories	\$ 33,410	\$ 3,852	\$ (3,487)	\$ 33,775
	Deferred Tax Valuation Allowance	\$ 37,168	\$ 7,100	\$ (749)	\$ 43,519
2020	Allowance for Estimated Credit Losses	\$ 3,559	\$ 1,913	\$ (2,254)	\$ 3,218
	Reserve for Excess and Obsolete Inventories	\$ 33,606	\$ 4,166	\$ (4,362)	\$ 33,410
	Deferred Tax Valuation Allowance	\$ 13,303	\$ 23,152	\$ 713	\$ 37,168

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, on March 10, 2023.

Astronics Corporation

By /s/ Peter J. Gundermann
Peter J. Gundermann President and Chief Executive Officer

By /s/ David C. Burney
David C. Burney, Executive Vice President, Chief Financial Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Peter J. Gundermann</u> Peter J. Gundermann	President and Chief Executive Officer (Principal Executive Officer)	March 10, 2023
<u>/s/ David C. Burney</u> David C. Burney	Executive Vice President, Chief Financial Officer (Principal Financial Officer)	March 10, 2023
<u>/s/ Nancy L. Hedges</u> Nancy L. Hedges	Corporate Controller and Principal Accounting Officer	March 10, 2023
<u>/s/ Robert T. Brady</u> Robert T. Brady	Director	March 10, 2023
<u>/s/ Linda O'Brien</u> Linda O'Brien	Director	March 10, 2023
<u>/s/ Jeffrey D. Frisby</u> Jeffrey D. Frisby	Director	March 10, 2023
<u>/s/ Peter J. Gundermann</u> Peter J. Gundermann	Director	March 10, 2023
<u>/s/ Warren C. Johnson</u> Warren C. Johnson	Director	March 10, 2023
<u>/s/ Robert S. Keane</u> Robert S. Keane	Director	March 10, 2023
<u>/s/ Neil Kim</u> Neil Kim	Director	March 10, 2023
<u>/s/ Mark J. Moran</u> Mark J. Moran	Director	March 10, 2023

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

Astronics Corporation (the "Corporation") has two classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: (1) Common Stock; and (2) Class B Common Stock. The following description of the Corporation's Common Stock and Class B Common Stock is a summary, does not purport to be complete and is subject to the provisions of the Corporation's certificate of incorporation, as amended (the "Certificate of Incorporation"), the Corporation's by-laws, as amended (the "By-laws") and the relevant provisions of the law of the State of New York.

Description of Capital Stock

Our authorized capital stock consists of 40,000,000 shares of Common Stock, par value \$.01 per share and 15,000,000 shares of Class B common stock, par value \$.01 per share ("Class B Stock").

The Common Stock and Class B Stock share equally in our earnings and are identical except with respect to rights on voting, dividends, transferability and convertibility. There are no redemption or sinking fund provisions applicable to the Common Stock or Class B Stock.

Voting Rights : Each share of Common Stock is entitled to one vote. Each share of Class B Stock is entitled to ten votes. The Common Stock and Class B Stock vote as a single class on all matters except the issuance of shares of Class B Stock or as required by law. Except in connection with share distributions, stock splits and stock dividends and anti-dilutive adjustments determined by the Board of Directors of the Corporation (the "Board") for options, stock subscriptions and warrants outstanding on the date of record for the share distribution, stock split or stock dividend, the Corporation may not affect the issuance of any shares of Class B Stock unless and until such issuance is authorized by the holders of a majority of the voting power of the shares of Common Stock and of Class B Stock entitled to vote, each voting separately as a class.

The By-laws, provide that all questions, the manner of deciding which is not specifically regulated by law, by the Certificate of Incorporation, or the By-Laws, are to be decided by vote of a majority of the shares present or represented at such meetings and voting on such questions. The By-laws also provide that directors of the Corporation are to be elected by a plurality of votes cast.

In addition, the Certificate of Incorporation and the By-laws provide that the affirmative vote of not less than 80% of the outstanding shares of the Corporation entitled to vote thereon is required: (a) to adopt any agreement for the merger or consolidation of the Corporation or any subsidiary with or into any other person, or the merger of any other person into the Corporation or any subsidiary, (b) to authorize any sale, lease, exchange, mortgage, pledge or disposition to any other person of all or substantially all of the property and assets of the Corporation or any subsidiary, or any part of such assets having a then fair market value of the total assets of the Corporation or such subsidiary, or (c) to authorize the issuance or transfer by the Corporation or any subsidiary of any voting securities of the Corporation in exchange for payment for the securities or property or assets (including cash) of any other person. The foregoing restrictions do not apply if prior to the consummation of the transaction, the Board approved the agreement pursuant to which the transaction would be consummated or if the Corporation or its

subsidiary is, at the time the transaction is agreed to, the beneficial owner of a majority, by vote, of the voting interest in the other party to the transaction (collectively, the "Change in Control Voting Provision").

Holders of the shares of Common Stock and Class B Stock do not have cumulative voting rights.

Dividends and Share Distributions: Holders of Common Stock and Class B Stock are entitled to receive dividends or other distributions in cash, stock or property of the Corporation as may be declared by the Board from time to time. In the case of cash dividends, no dividend may be paid on Class B Stock unless an equal or greater dividend is paid concurrently on Common Stock. Cash dividends may be paid on Common Stock in excess of dividends paid, or without paying dividends, on the Class B Stock. Common Stock and Class B Stock will be treated equally with respect to dividends payable in stock of the Corporation, including share distributions or stock splits or divisions of stock.

Transfer: Shares of Class B Stock may not be transferred as Class B Stock, except by gift, devise or bequest, by a transfer to the estate of a shareholder upon the death of such shareholder, or by a transfer of shares held in trust to the grantor of such trust or to any person to whom or for whose benefit the principal of such trust may be distributed. Any purported transfer of shares of Class B Stock, other than a transfer of the type described above, is null and void and of no effect and the purported transfer by a holder of Class B Stock will result in the immediate and automatic conversion of such shares of Class B Stock into shares of Common Stock on a one-for-one basis. Shares of Class B Stock must be registered in the name(s) of the beneficial owner(s) thereof and not in "street" or "nominee" names, except that certificates representing shares of Class B Stock issued as or in connection with a share distribution, stock split or stock dividend on the Corporation's then outstanding Common Stock or Class B Stock may be registered in the same name and manner as the certificates representing the shares of Common Stock or Class B Stock with respect to which the shares of Class B Stock are issued. Any shares of Class B Stock registered in "street" or "nominee" name may be transferred to the beneficial owner of such shares on the record date for such share distribution, stock split or stock dividend, upon proof satisfactory to the Corporation and the transfer agent that such person was in fact the beneficial owner of such shares on the record date for such share distribution, stock split or stock dividend.

Neither the Certificate of Incorporation nor the By-laws restrict the ability of a holder of Common Stock to transfer his, her or its shares of Common Stock.

Conversion: Each share of Class B Stock is convertible at the option of the holder at any time into Common Stock on a one-for-one basis. At any time when the Board and the holders of a majority of the outstanding shares of Class B Stock approve the conversion of all of the Class B Stock into Common Stock, then all of the outstanding shares of Class B Stock shall be converted into shares of Common Stock. The holders of the shares of Common Stock are not entitled to any conversion rights.

Liquidation Rights: In the event of any dissolution, liquidation or winding up of the affairs of the Corporation, whether voluntarily or involuntarily, after payment or provision for payment of the debts and other liability of the Corporation, the remaining assets and funds of the Corporation, if any, shall be divided among and paid ratably to the holders of Common Stock and the holders of Class B Stock.

Preemptive Rights: Neither the holders of the shares of Common Stock nor the holders of the shares of Class B Stock are entitled to any preemptive rights other than the conversion rights applicable to the shares of Class B Stock described above.

No Assessment: The issued and outstanding shares of Common Stock and Class B Stock are fully paid and non-assessable.

Anti-Takeover Provisions

Certain provisions of the Certificate of Incorporation and the By-laws as well as the New York Business Corporation Law may have the effect of encouraging persons considering unsolicited tender offers or unilateral takeover proposals for us to negotiate with the Board and could thereby have an effect of delaying, deferring or preventing a change in control. These provisions include the Change in Control Voting Provision (as described above) and the following:

Authorized But Unissued Shares of Common Stock: The authorized but unissued shares of Common Stock could be issued by the Board without shareholder approval in transactions that might prevent or render more difficult or costly the completion of a takeover transaction.

Advance Notice By-laws: Under the By-laws, written notice of any person to be nominated by any shareholder for election as a director must be received by our corporate secretary not less than 60 nor more than 90 days prior to the anniversary of the preceding year's annual meeting (or, if the date of the annual meeting is changed by more than 20 days from such anniversary date, within 10 days after the date the Corporation mails or otherwise gives notice of the date of such meeting), and with respect to an election to be held at a special meeting of shareholders called for that purpose, not later than the close of business on the 10th day following the date on which notice of the special meeting was first mailed to the shareholders of the Corporation.

Special Meetings: Special meetings of the shareholders may be called only (i) by the Board or (ii) by the President on (1) the written request of two-thirds (2/3) of the directors then serving on the Board or (2) the written request of the holders of not less than 80% of the outstanding shares of each class of capital stock of the Corporation entitled to vote generally in the election of directors as of the date on which such request is actually received by the Corporation (the subclause (ii)(2) being the "Shareholder Special Meeting Provision"). Such written request must state the purpose or purposes of the proposed special meeting. No business, other than that specified in the notice of any special meeting, shall be transacted at a special meeting unless all shareholders entitled to notice thereof consent to the transaction of such additional business.

Amending the Change in Control Voting Provision or the Shareholder Special Meeting Provision: Under the Certificate of Incorporation, neither the Change in Control Voting Provision nor the Shareholder Special Meeting Provision may be altered, amended or repealed in any respect unless such alteration, amendment or repeal is approved by an affirmative vote of holders of not less than 80% of the outstanding shares of the Corporation entitled to vote thereon. Under the By-laws, the shareholders of the Corporation may not alter, amend or repeal either the Change in Control Voting Provision or the Shareholder Special Meeting Provision as set forth in the By-laws in any respect unless such alteration, amendment or repeal is approved by an affirmative vote of holders of not less than 80% of the outstanding shares of the Corporation entitled to vote thereon.

Anti-Takeover Provisions under New York Law: The Corporation is subject to Section 912 of the New York Business Corporation Law. With specified exemptions, this statute prohibits a New York corporation listed on a national securities exchange from engaging in a business combination (as defined in Section

912(a)(5)) with an interested stockholder (generally, a person that, together with its affiliates and associates, owns 20 percent or more of the corporation's voting stock) for a period of five years after the date of the transaction in which the person became an interested stockholder.

ASTRONICS CORPORATION
 STOCK OPTION AGREEMENT
 (2017 LONG TERM INCENTIVE PLAN)

OPTION NO. __

DEFINED TERMS

As used in this Agreement, the following terms shall have the meaning indicated:

Optionor or Company:	Astronics Corporation
Optionee:	
Shares Optioned:	Common Stock
Number of Shares Optioned – Incentive:	
Number of Shares Optioned – Non-Qualified:	
Date of Grant:	
Agreement Date:	
Expiration Date:	[10 years from grant date]
Full Vesting Date:	[3 years from grant date]
Option Price Per Share:	

Option Vesting Schedule - Options covered by this Agreement straight line vest over three (3) years from the Date of Grant, and are exercisable by Optionee at any time to the extent the Options have vested, as follows:

<u>Date</u>	Incentive Stock Options <u>Number of Shares</u>	Non-Qualified Stock Options <u>Number of Shares</u>
[1 year from grant date]	---	[1/3 of award]
[2 years from grant date]	---	[1/3 of award]
[3 years from grant date]	---	[1/3 of award]

AGREEMENT, made and entered into as of the Agreement Date by and between Optionor and Optionee;

RECITALS

A. On May 31, 2017, at the annual meeting of shareholders of Optionor, the shareholders approved the 2017 Long Term Incentive Plan (“Plan”) and the Board of Directors of Optionor has authorized a Stock Option Committee of the Board of Directors (“Committee”) to grant to certain employees of Optionor options to purchase shares of the \$.01 par value Common Stock of the Optionor (“Shares”), in such amounts, at such prices, exercisable at such times and under such form of agreement as the Committee shall determine; and

B. The Committee, acting pursuant to the authority given to it, has approved this form of Stock Option Agreement (“Agreement”) and has determined that an option to purchase certain Shares shall be granted to Optionee.

NOW, THEREFORE, in consideration of the mutual promises and representations herein contained, it is agreed by and between the parties hereto as follows:

Section 1. Grant and Option Price. Optionor hereby grants to Optionee an option (“Option”) to purchase the Shares optioned at the Option Price shown on the cover page of this Agreement. The Option Price for the Shares equals the Fair Market Value of the Shares on the Date of Grant.

Section 2. Payment of Option Price. The Option Price shall be paid in full by Optionee (or by any other person entitled, pursuant to the terms hereof, to exercise the Option) to

Optionor at the time of and to the extent of the exercise of this Option and before delivery of the Shares purchased. The Option Price is payable either (a) in cash or by certified or bank check at the time the Option is exercised or (b) in the discretion of the Committee, upon such terms as the Committee shall approve, the Option Price may be paid: (i) by delivery to the Optionor of other Company Stock, duly endorsed for transfer to the Optionor, with a Fair Market Value on the date of delivery equal to the Option Price (or portion thereof) due for the number of Shares being acquired, or by means of attestation whereby the Optionee identifies for delivery specific shares of Company Stock that have an aggregate Fair Market Value on the date of attestation equal to the Option Price (or portion thereof) and receives a number of Shares equal to the difference between the number of Shares thereby purchased and the number of identified attestation shares of Company Stock; (ii) a “cashless” exercise program established with a broker; (iii) by reduction in the number of Shares otherwise deliverable upon exercise of the Option with a Fair Market Value equal to the aggregate Option Price at the time of exercise; (iv) any combination of the foregoing methods; or (v) in any other form of legal consideration that may be acceptable to the Committee.

Section 3. Investment Intent. Absent advice from legal counsel to the Optionor that the Shares are the subject of an effective registration statement filed with the Securities and Exchange Commission, Optionee shall exercise this Option and acquire the Shares for his own account for investment and not with a view of the resale or distribution thereof, and shall make such representations and undertakings to that effect as counsel for Optionor may then advise as necessary or desirable. The certification for the Shares issued pursuant to an exercise of this Option, if required by legal counsel to the Optionor, shall bear an appropriate legend regarding this intent.

Section 4. Exercise. Subject to the other provisions of this Agreement and the Plan, the Options covered by this Agreement straight line vest proportionately with time during the three (3) years subsequent to the Date of Grant and may be exercised only in full Share lots of the Shares Optioned, in accordance with the following provisions:

(a) Annual Installments. No Option shall be exercisable (i) before one (1) year after the Date of Grant, or (ii) after the Expiration Date (“Exercise Period”); provided, however, that in no event shall the Option be exercisable after the expiration of ten (10) years from the Date of Grant. Within the Exercise Period, unless the Committee establishes otherwise and except as provided in subsections (d), (e) and (f) of this Section 4, the Option will become exercisable by Optionee in annual installments of 33.33% per year on the first three (3) anniversaries of the Date of Grant. Any Option installment which first becomes exercisable on the third anniversary of the Date of Grant shall be exercisable on that Date. Each installment, once vested, shall be exercisable in whole at any time, or in part from time to time (in blocks of 25 Shares or any multiple thereof) during the Exercise Period.

(b) Method of Exercise. This Option shall be exercised only upon receipt by the Chief Financial Officer or Secretary of Optionor of written notification from Optionee of his exercise of the same.

(c) Nontransferable. No Option is transferable by Optionee, other than by will or the laws of descent and distribution, and the Option shall be exercisable, during Optionee’s lifetime and within the Exercise Period, only by him. The Committee may, in its sole discretion and on a case by case basis, permit an Optionee to transfer all or some of

the Optionee's Non-Qualified Options to (1) the Optionee's Immediate Family Members, or (2) a trust or trusts for the exclusive benefit of the Optionee's Immediate Family Members. Following any such transfer, the transferred Non-Qualified Options will continue to be subject to the same terms and conditions as were applicable immediately prior to the transfer. "Immediate Family Members" means an Optionee's spouse, children and grandchildren. In no event may an Option be transferred for consideration. Non-Qualified Stock Options may be transferred to an Optionee's former spouse in accordance with a property settlement that is part of an agreement or court order incident to a divorce.

(d) Death of Optionee. If Optionee dies while employed by the Company or one of its Subsidiaries and during the term of this Option, this Option may be exercised by any person who obtains the rights of Optionee by will or by operation of the laws of descent and distribution of the domicile of Optionee at the date of his death, but only to the extent of exercise installments which had vested as of the date of death, and only within a period of twenty four (24) months after the date of such death or until the Expiration Date, whichever occurs first.

(e) Termination of Employment.

(1) In the event of the termination of employment of the Optionee for any reason other than death, disability, retirement or for cause, the Option may be exercised by Optionee, but only to the extent of the exercise of installments which had vested as of the date of termination, and only within a period of ninety (90) days from the date of the termination of employment or until the Expiration Date, whichever occurs first. In the event of the termination of employment of Optionee

for cause, the Option, including any exercise installments which have vested, shall expire immediately. Cause means (i) the unauthorized use or disclosure of the confidential information or trade secrets of the Company or its Subsidiaries, (ii) conviction of, or a plea of “guilty” or “no contest” to, a felony under the laws of the United States or any state, (iii) negligence or misconduct in the performance of Optionee’s duties or (iv) material breach of Optionee’s obligations under any agreement or arrangement with the Company, a Subsidiary or any affiliate thereof (including under the terms of any loan made to the Optionee).

(2) If Optionee dies after termination of employment other than for cause and during the term of this Option, the Option may be exercised by any person who obtains the rights of Optionee by will or by operation of the laws of descent and distribution of the domicile of Optionee at the date of his death, but only to the extent of the exercise of installments which had vested as of the date of termination, and only within a period of twenty four (24) months after the date of such death or until the Expiration Date, whichever occurs first.

(f) Disability of Optionee. In the event an Optionee’s employment with the Company or one its Subsidiaries terminates on account of the Optionee becoming disabled (within the meaning of Code Section 22(e)(3), the Option may be exercised by Optionee, but only to the extent of the exercise of installments which had vested as of the date of such disability, and only within a period of twenty four (24) months from the date Optionee was disabled or until the Expiration Date, whichever occurs first.

(g) Retirement of Optionee. In the event Optionee's employment with the Company or one its Subsidiaries terminates on account of retirement, the Option may be exercised by Optionee, but only to the extent of the exercise of installments which had vested as of the date of such retirement, and may be exercised at any time thereafter until the Expiration Date. Retirement means the election of Optionee to retire from active employment with Optionor at the end of the month in which Optionee attains 59 years of age or thereafter. Retirement shall also mean a similar election by Optionee prior to age 59, provided that the sum of Optionee's age and years of service with the Company and its Subsidiaries equals at least 65 as of the date of Optionee's retirement.

Section 5. Regulatory Requirements. As a condition precedent to the exercise of this Option, either in whole or in part, Optionee shall comply with all regulations and requirements of any regulatory authority having control or supervision of the issuance of the common stock of Optionor and, in connection therewith, shall execute any documents Optionor, in its sole discretion, shall deem necessary or advisable.

Section 6. Adjustments for Changes.

(a) Shares Optioned and Option Price. Subject to any required action by shareholders of Optionor, in the event of any change in the Shares or in any shares of the outstanding common stock of Optionor by reason of a reorganization, re-capitalization, reclassification, stock or extraordinary cash dividend, stock split, reverse stock split or other similar transaction, the aggregate number and class of shares as to which the Plan relates, the Shares Optioned and the Option Price shall be appropriately adjusted by the

Committee as provided for in the Plan. The Committee's determination in this respect shall be final, binding and conclusive.

(b) Rights of Optionor. The grant of an option pursuant to the Plan shall not affect in any way the right or power of Optionor to make adjustments, reclassifications, reorganizations or changes of its capital or business structure, or to merge or to consolidate, or to dissolve, liquidate or sell, or transfer all or any part of its business or assets. The Board of Directors may make such adjustments, not only with regard to the Shares Optioned, but also with regard to the Option Price, and any such change, when so made by the Board of Directors, shall be automatically deemed incorporated in the provisions of this Agreement.

Section 7. Not Employment Agreement. The granting to Optionee of this Option to purchase Shares shall not constitute or be evidence of any agreement or understanding, express or implied, on the part of Optionor to employ Optionee for any specified period.

Section 8. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the respective heirs, legal representatives, successors and assigns of the parties hereto.

Section 9. Incentive and Non-Qualified Stock Option. It is intended that the Options granted hereunder are Incentive Stock Options and Non-Qualified Stock Options in the amounts and pursuant to the schedule shown on the cover page of this Agreement.

Section 10. Holding Periods. Without giving prior written notice to Optionor, addressed to the Chief Financial Officer or Secretary of Optionor, of his intent to dispose of such Shares within such periods, Optionee will not dispose of any Shares acquired pursuant to an

exercise of this Option until a date which is at least two (2) years from the date of Grant and at least one (1) year after the Date of exercise.

Section 11. Plan Controlling. This Agreement is entered into and delivered pursuant to the terms of the Plan, and shall be in all respects interpreted in accordance therewith. A copy of the Plan has been furnished to Optionee, receipt of which is acknowledged by the signing of this Agreement. The Plan is, by reference, incorporated in and made a part hereof, and if any inconsistency between this Agreement and the Plan exists, the Plan shall govern and control. Capitalized terms not otherwise defined in this Agreement will have the meaning set forth in the Plan.

Section 12. Pronouns. All pronouns and any variations thereof used herein shall be deemed to refer to the masculine, feminine, neuter, singular and plural, as the identity of the person or persons may require.

IN WITNESS WHEREOF, Optionor has caused this Agreement to be executed by its officers thereunto duly authorized, and its corporate seal to be hereunto affixed, and the Optionee has hereunto set his hand and seal as of the Agreement Date.

ASTRONICS CORPORATION

By
Optionor

By
Optionee

ASTRONICS CORPORATION 2017 LONG TERM INCENTIVE PLAN
PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT

THIS PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT (the “Agreement”), dated as of _____, 20__ (the “Grant Date”), is between Astronics Corporation, a New York corporation with a corporate office at 130 Commerce Way, East Aurora, New York 14052 (“Astronics” and, together with its Subsidiaries, the “Company”), and _____, an employee of the Company (the “Employee”).

WHEREAS, the Company wishes to provide the Employee with an incentive to continue in the service of the Company and to acquire a meaningful, significant and growing proprietary interest in Astronics by providing him or her with the opportunity to own Company Stock;

NOW, THEREFORE, in consideration of the promises and mutual agreements set forth in this Agreement, the Employee and the Company hereby agree as follows:

1. **Grant of RSUs.**

The Company hereby grants to the Employee an Award of Restricted Stock Units (“RSUs”). This Award represents the right to receive one share of Common Stock of Astronics (“Share”) for each RSU awarded under this Agreement, subject to the fulfillment of the vesting and performance requirements and other terms and conditions set forth in this Agreement, the attached Appendix A, and the Astronics Corporation Amended and Restated 2017 Long Term Incentive Plan (“Plan”), which is incorporated into and made a part of this Agreement by reference.

Unless otherwise defined in this Agreement, the terms used in this Agreement have the meanings given them in the Plan.

2. **Earned Shares; Termination of Employment.**

(a) **Earned Shares.** The number of RSUs granted under this Agreement (the “Target Number of RSUs”) represents a number of Shares that may be earned, based upon satisfaction of the performance criteria as set forth in Appendix A (“Performance Criteria”) at Target Level Performance as set forth in Appendix A (“Target Level Performance”). The actual number of RSUs earned may be greater or less than the Target Number of RSUs, and will be determined based on the Company’s actual performance level achieved in accordance with Appendix A. Each earned RSU represents the right to receive one share of Common Stock of Astronics on the applicable settlement date. Unless and until the RSUs have been earned, the Employee will have no right to payment of any such RSUs.

(b) **Effect of Termination of Employment.**

(i) **In General.** Except as otherwise set forth in this Agreement, if the Employee’s employment with the Company terminates for any reason before the end of the Performance Period, the Employee will forfeit all RSUs subject to this Agreement.

(ii) Retirement. If the Employee voluntarily terminates employment with the Company on or after the date the Employee attains age 65, the Employee will vest in the RSUs subject to this Agreement. Any vested RSUs will remain outstanding and continue to be eligible to be earned under Section 2(a) based upon achievement of the Performance Criteria for the Performance Period as set forth in Appendix A.

(iii) Death or Disability. If the Employee's employment with the Company terminates on account of the Employee's death or Disability, the Employee will vest in the Target Number of RSUs, regardless of the actual level of performance achieved for the Performance Period.

(iv) Voluntary Termination; Termination Without Cause. If the Employee voluntarily terminates employment with the Company other than on account of Retirement under Section 2(b)(ii), or the Employee is terminated by the Company without Cause, the Employee will forfeit any RSUs under this Agreement.

(v) Cause. If the Employee is terminated by the Company for Cause, all of the Employee's unpaid RSUs, whether vested or unvested or earned or unearned, will be forfeited and the Employee will have no further rights to payment or settlement of the RSUs under this Agreement.

3. **Settlement**

Subject to Section 2, as soon as practicable, but no later than 90 days, following the end of the Performance Period, the Company will issue to the Employee (or to his or her beneficiary or estate, as the case may be) on the applicable settlement date, one whole Share for each earned RSU not previously forfeited or terminated. Notwithstanding the previous sentence, if the Employee's employment with the Company terminates on account of death or Disability under Section 2(b)(iii) before the end of the Performance Period, the Company will issue to the Employee (or to his or her beneficiary or estate, as the case may be), one whole Share for each of the Targeted Number of RSUs as soon as practicable, but no later than 60 days, after the date the Employee's employment terminates. Issuance of the Shares will be subject to Sections 4 and 7 below.

4. **Tax Withholding**

As a condition of this Award, the Employee agrees to pay or make arrangements for the payment to the Company of the amount of any and all federal, state and local income and employment taxes that the Company determines it is required by law to withhold with respect to the RSUs. Payment will be due on the date the Company is required to withhold such taxes. Unless the Committee determines otherwise in its sole discretion, notwithstanding Section 7(b) the Company will satisfy the withholding requirement in accordance with Section 17 of the Plan by withholding from delivery to the Employee Shares having a value equal to the amount of tax required to be withheld.

5. **Dividend Equivalents**

No dividend equivalents will be issued to the Employee with respect to the RSUs granted under this Award.

6. **Rights as Shareholder**

Neither the Employee nor any transferee has any rights as a shareholder with respect to any Shares covered by or relating to this Award until the date the Employee or transferee becomes the holder of record of the Shares.

7. **Additional Conditions to Issuance of Stock.**

(a) **Compliance with Laws and Regulations.** The Company is not obligated to issue or deliver any certificates evidencing Shares under this Award unless and until the Company is advised by its counsel that the issuance and delivery of the certificates is in compliance with all applicable laws, regulations of governmental authority and the requirements of the securities exchange or automated quotation system on which Shares are listed.

(b) **Restrictions on Transferability.**

The Employee acknowledges and agrees that the Shares issued on settlement of any earned RSUs are subject to a holding period requirement whereby the Employee (or the Employee's beneficiary or estate, as the case may be) may not sell or otherwise dispose of the Shares until six months following the date of issuance of the Shares in settlement of the RSUs. The stock certificates evidencing the Shares issued in settlement of the RSUs may include one or more legends that set forth such restrictions on transferability as may apply to the Shares under this Agreement and the Plan. Alternatively, such restrictions may be enforced through such other methods as may be determined by the Company in its sole discretion, including by restrictions on electronic transfers from accounts.

8. **Electronic Delivery.**

The Company may, in its sole discretion, decide to deliver any documents related to RSUs awarded under the Plan or any future awards under the Plan by electronic means or request the Employee's consent to participate in the Plan by electronic means. The Employee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

9. **Agreement Severable.**

If any provision in this Agreement is held to be invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

10. **Governing Law.**

Except to the extent preempted by an applicable federal law, the Plan and this Agreement will be construed and administered in accordance with the laws of the State of New York, without reference to the principles of conflicts of laws thereunder.

11. **Non-Transferability of RSU.**

This Award may not be transferred in any manner other than by will or by the laws of descent or distribution. Any purported transfer in violation of the preceding sentence will be void and of no effect.

12. **Binding Effect.**

This Agreement is binding upon, and inures to the benefit of, the respective successors, assigns, heirs, executors, administrators and guardians of the parties covered by the Agreement.

13. **Tax Consequences.**

The Employee acknowledges that this Award will have tax consequences to the Employee and that any and all such tax consequences are the sole responsibility of the Employee. The Employee should consult a tax adviser before accepting this Award or disposing of any Shares.

14. **Risks.**

The Employee is advised that the value of the RSUs and the Shares acquired under the RSUs will fluctuate as the trading price of the Shares fluctuates. The Employee exclusively accepts all risks associated with a decline in the market price of the Shares and all other risks associated with the holding of Shares. No amount will be paid to, or in respect of, the Employee to compensate for a downward fluctuation in the price of the Shares, nor will any other form of benefit be conferred upon, or in respect of, the Employee for such purpose.

15. **Effect of Agreement.**

The Employee acknowledges that a copy of the Plan has been made available to him or her and represents that he or she is familiar with its terms and provisions (and has had an opportunity to obtain advice regarding this Award), and accepts this Award and agrees to be bound by its contractual terms as set forth in this Agreement and in the Plan. The Employee agrees to accept as binding, conclusive and final all decisions and interpretations of the Committee regarding any questions relating to this Award. The Employee understands that the Plan is discretionary in nature and may be amended, suspended or terminated by the Company at any time in accordance with its terms. In the event of a conflict between the terms and provisions of the Plan and the terms and provisions of this Agreement, the terms and provisions of the Plan will prevail. Modifications to this Agreement may be made only in a written agreement executed by a duly authorized officer of the Company. The Employee agrees at all times to abide by, and acknowledges that this Award is subject to, all applicable policies of the Company, including the Company's insider trading policies and any recoupment or clawback policy, as may exist from time to time.

16. **No Right to Employment.**

Nothing in this Agreement or the Plan confers upon the Employee any right to continued employment with the Company for any period of time, nor does it interfere in any way with the Employee's right or the Company's right to terminate the employment relationship at any time, for any reason, with or without cause.

17. **Section 409A.**

All RSUs granted under this Agreement are intended to comply with or to be exempt from Section 409A of the Internal Revenue Code of 1986 (the "Code") and will be construed accordingly. However, the Company will not be liable to the Employee or any beneficiary with respect to any adverse tax consequences arising under Section 409A or other provision of the Code. All terms of this Agreement that are undefined or ambiguous must be interpreted in a manner that is consistent with Code Section 409A if necessary to comply with Code Section 409A.

18. **Notices.**

Any notice required to be delivered to the Company under this Agreement shall be in writing and addressed to General Counsel of the Company at the Company's principal corporate offices. Any notice required to be delivered to the Employee under this Agreement shall be in writing and addressed to the Employee at the Employee's address as shown in the records of the Company. Either party may designate another address in writing (or by such other method approved by the Company) from time to time.

19. **Counterparts.**

This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together will constitute one and the same instrument. Counterpart signature pages to this Agreement transmitted by facsimile transmission, by electronic mail in portable document format (.pdf), or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, will have the same effect as physical delivery of the paper document bearing an original signature.

20. **Data Privacy.**

It is a condition of participation in the Plan and acceptance of this Award that the Employee acknowledges and explicitly consents to the collection, use, processing and transfer of personal data as described in this paragraph. The Company holds certain personal information about the Employee, including, but not limited to, the Employee's name, home address and telephone number, date of birth, social security number or other employee tax identification number, salary, nationality, job title, and any awards granted, cancelled, purchased, vested, unvested or outstanding in the Employee's favor, for the purpose of managing and administering the Employee's Award under the Plan and this Agreement ("Personal Data"). The Employee understands that the Company will transfer Personal Data to any third parties assisting the Company in the implementation, administration and management of the Employee's RSUs. These recipients may be located in the United State or elsewhere. The Employee authorizes them to receive, possess, use, retain and transfer the Personal Data, in electronic or other form, for the purposes of implementing, administering and managing the Employee's RSUs. The Employee may, at any time, review Personal Data, require any necessary amendments to it or withdraw the consent herein in writing by contacting the Company; however, withdrawing the consent may affect the Employee's ability to participate in the Plan and receive Shares upon vesting in the RSUs.

ASTRONICS CORPORATION

By: _____
(Signature)

Name: _____
Title: _____

EMPLOYEE:

By:

(Signature)

Name: _____

APPENDIX A

RSU GRANT: PERFORMANCE GOALS AND PAYOUT PERCENTAGE

Target Number of RSUs: _____

Earned RSUs:

The actual number of RSUs earned and payable will be based on achievement of the following Performance Criteria for the Performance Period, and may range from [75% of target] to [115% of target] RSUs, as follows:

If the Company's mathematical average annual Adjusted EBITDA for the Performance Period is greater than 15% of the Company's mathematical average annual revenue for the Performance Period, then 115% of the Target Number of RSUs will be earned.

If the Company's mathematical average annual Adjusted EBITDA for the Performance Period is less than 15%, but at least equal to 10%, of the Company's mathematical average annual revenue for the Performance Period, then 100% of the Target Number of RSUs will be earned.

If the Company's mathematical average annual Adjusted EBITDA for the Performance Period is less than 10% of the Company's mathematical average annual revenue for the Performance Period, then 75% of the Target Number of RSUs will be earned.

Performance Period:

[THREE YEAR PERIOD]

Vesting Date:

[THREE YEARS FROM GRANT DATE]

For purposes of this Appendix A, "Adjusted EBITDA" means the Company's earnings before interest, taxes, depreciation, and amortization, adjusted by the Committee in its sole discretion for any extraordinary, unusual or nonrecurring events, including but not limited to, insurance proceeds, legal settlements, impairments, or unique investments in R&D projects.

If an adjustment to the Company's EBITDA is made by the Committee, then, for purposes of determining whether the Performance Criteria has been satisfied, the Committee will give due consideration to whether a corresponding adjustment should be made to the Company's revenue.

Example:

Year 1 Adjusted EBITDA is 8%.

Year 2 Adjusted EBITDA is 15%.

Year 3 Adjusted EBITDA is 15%.

Mathematical average annual Adjusted EBITDA for the Performance Period is $38 \div 3 = 12.66\%$.

Therefore, 100% of Target Number of RSUs is earned.

ASTRONICS CORPORATION 2017 LONG TERM INCENTIVE PLAN
TIME-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT

(DIRECTOR)

THIS TIME-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT (the “Agreement”), dated as of _____, 20__ (the “Grant Date”), is between Astronics Corporation, a New York corporation with a corporate office at 130 Commerce Way, East Aurora, New York 14052 (“Astronics” and, together with its Subsidiaries, the “Company”), and _____, a non-employee director of the Company (the “Director”).

WHEREAS, the Company wishes to provide the Director with an incentive to continue in the service of the Company and to acquire a meaningful, significant and growing proprietary interest in Astronics by providing him or her with the opportunity to own Company Stock;

NOW, THEREFORE, in consideration of the promises and mutual agreements set forth in this Agreement, the Director and the Company hereby agree as follows:

1. **Grant of RSUs.**

The Company hereby grants to the Director an Award of _____ Restricted Stock Units (“RSUs”). This Award represents the right to receive one share of Common Stock of Astronics (“Share”) for each RSU awarded under this Agreement, subject to the fulfillment of the vesting requirements and other terms and conditions set forth in this Agreement and the Amended and Restated Astronics Corporation 2017 Long Term Incentive Plan (“Plan”), which is incorporated into and made a part of this Agreement by reference.

Unless otherwise defined in this Agreement, the terms used in this Agreement have the meanings given them in the Plan.

2. **Vesting.**

(a) **In General.** The Director will vest in the RSUs subject to this Agreement in accordance with the following schedule:

Vesting Date	Vested Percentage
[SIX MONTHS FROM GRANT DATE]	100%

Except as otherwise set forth in this Agreement, if the Director’s service as a director of the Company terminates for any reason before reaching an applicable vesting date, any unvested RSUs will be automatically forfeited.

(b) **Retirement.** If the Director’s service as a director of the Company terminates on or after the date the Director attains age 60 for reasons other than death, Disability

or termination by the Company for Cause (“Retirement”), the Director will vest in 100% of the RSUs awarded under this Agreement.

(c) **Death or Disability.** If the Director’s service as a director of the Company terminates on account of the Director’s death or Disability, the Director will vest in 100% of the RSUs awarded under this Agreement.

(d) **Voluntary Termination.** If the Director’s service as a director of the Company is voluntarily terminated by the Director for any reason other than on account of Retirement under Section 2(b), then the Director will forfeit any unvested RSUs under this Agreement.

(e) **Cause.** If the Director is terminated by the Company for Cause, all of the Director’s unpaid RSUs, both vested and unvested, will be forfeited and the Director will have no further rights to payment or settlement of the RSUs under this Agreement.

3. **Settlement.**

As soon as practicable, but no later than 60 days, following [VESTING DATE], the Company will issue to the Director (or to his or her beneficiary or estate, as the case may be) one whole Share for each vested RSU. Notwithstanding the previous sentence, if the Director’s service as a director of the Company terminates before [VESTING DATE], the Company will issue to the Director (or to his or her beneficiary or estate, as the case may be), one whole Share for each vested RSU, if any, as soon as practicable, but no later than 60 days, after the date the Director’s service as a director of the Company ceases.

4. **Tax Withholding.**

As a condition of this Award, the Director agrees to pay or make arrangements for the payment to the Company of the amount of any and all federal, state and local income and employment taxes that the Company determines it is required by law to withhold with respect to the RSUs. Payment will be due on the date the Company is required to withhold such taxes. Unless the Committee determines otherwise in its sole discretion, notwithstanding Section 7(b) the Company will satisfy the withholding requirement in accordance with Section 18 of the Plan by withholding from delivery to the Director, Shares having a value equal to the amount of tax required to be withheld.

5. **Dividend Equivalents.**

No dividend equivalents will be issued to the Director with respect to the RSUs granted under this Award.

6. **Rights as Shareholder.**

Neither the Director nor any transferee has any rights as a shareholder with respect to any Shares covered by or relating to this Award until the date the Director or transferee becomes the holder of record of the Shares.

7. **Additional Conditions to Issuance of Stock.**

(a) **Compliance with Laws and Regulations.** The Company is not obligated to issue or deliver any certificates evidencing Shares under this Award unless and until the Company is advised by its counsel that the issuance and delivery of the certificates is in compliance with all applicable laws, regulations of governmental authority and the requirements of the securities exchange or automated quotation system on which Shares are listed.

(b) **Restrictions on Transferability.**

The Director acknowledges and agrees that the Shares issued on settlement of any vested RSUs are subject to a holding period requirement whereby the Director (or the Director's beneficiary or estate, as the case may be) may not sell or otherwise dispose of the Shares until six months following the date of issuance of the Shares in settlement of the RSUs. The stock certificates evidencing the Shares issued in settlement of the RSUs may include one or more legends that set forth such restrictions on transferability as may apply to the Shares under this Agreement and the Plan. Alternatively, such restrictions may be enforced through such other methods as may be determined by the Company in its sole discretion, including by restrictions on electronic transfers from accounts.

8. **Electronic Delivery.**

The Company may, in its sole discretion, decide to deliver any documents related to RSUs awarded under the Plan or any future awards under the Plan by electronic means or request the Director's consent to participate in the Plan by electronic means. The Director hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

9. **Agreement Severable.**

If any provision in this Agreement is held to be invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

10. **Governing Law.**

Except to the extent preempted by an applicable federal law, the Plan and this Agreement will be construed and administered in accordance with the laws of the State of New York, without reference to the principles of conflicts of laws thereunder.

11. **Non-Transferability of RSU.**

This Award may not be transferred in any manner other than by will or by the laws of descent or distribution. Any purported transfer in violation of the preceding sentence will be void and of no effect.

12. **Binding Effect.**

This Agreement is binding upon, and inures to the benefit of, the respective successors, assigns, heirs, executors, administrators and guardians of the parties covered by the Agreement.

13. **Tax Consequences.**

The Director acknowledges that this Award will have tax consequences to the Director and that any and all such tax consequences are the sole responsibility of the Director. The Director should consult a tax adviser before accepting this Award or disposing of any Shares.

14. **Risks.**

The Director is advised that the value of the RSUs and the Shares acquired under the RSUs will fluctuate as the trading price of the Shares fluctuates. The Director exclusively accepts all risks associated with a decline in the market price of the Shares and all other risks associated with the holding of Shares. No amount will be paid to, or in respect of, the Director to compensate for a downward fluctuation in the price of the Shares, nor will any other form of benefit be conferred upon, or in respect of, the Director for such purpose.

15. **Effect of Agreement.**

The Director acknowledges that a copy of the Plan has been made available to him or her and represents that he or she is familiar with its terms and provisions (and has had an opportunity to obtain advice regarding this Award), and accepts this Award and agrees to be bound by its contractual terms as set forth in this Agreement and in the Plan. The Director agrees to accept as binding, conclusive and final all decisions and interpretations of the Committee regarding any questions relating to this Award. The Director understands that the Plan is discretionary in nature and may be amended, suspended or terminated by the Company at any time in accordance with its terms. In the event of a conflict between the terms and provisions of the Plan and the terms and provisions of this Agreement, the terms and provisions of the Plan will prevail. Modifications to this Agreement may be made only in a written agreement executed by a duly authorized officer of the Company. The Director agrees at all times to abide by, and acknowledges that this Award is subject to, all applicable policies of the Company, including the Company's insider trading policies and any recoupment or clawback policy, as may exist from time to time.

16. **Section 409A.**

All RSUs granted under this Agreement are intended to comply with or to be exempt from Section 409A of the Internal Revenue Code of 1986 (the "Code") and will be construed accordingly. However, the Company will not be liable to the Director or any beneficiary with respect to any adverse tax consequences arising under Section 409A or other provision of the Code. All terms of this Agreement that are undefined or ambiguous must be interpreted in a manner that is consistent with Code Section 409A if necessary to comply with Code Section 409A.

17. **Notices.**

Any notice required to be delivered to the Company under this Agreement shall be in writing and addressed to General Counsel of the Company at the Company's principal corporate offices. Any notice required to be delivered to the Director under this Agreement shall be in writing and addressed to the Director at the Director's address as shown in the records of

the Company. Either party may designate another address in writing (or by such other method approved by the Company) from time to time.

18. **Counterparts.**

This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together will constitute one and the same instrument. Counterpart signature pages to this Agreement transmitted by facsimile transmission, by electronic mail in portable document format (.pdf), or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, will have the same effect as physical delivery of the paper document bearing an original signature.

19. **Data Privacy.**

It is a condition of participation in the Plan and acceptance of this Award that the Director acknowledges and explicitly consents to the collection, use, processing and transfer of personal data as described in this paragraph. The Company holds certain personal information about the Director, including, but not limited to, the Director's name, home address and telephone number, date of birth, social security number or other employee tax identification number, salary, nationality, job title, and any awards granted, cancelled, purchased, vested, unvested or outstanding in the Director's favor, for the purpose of managing and administering the Director's Award under the Plan and this Agreement ("Personal Data"). The Director understands that the Company will transfer Personal Data to any third parties assisting the Company in the implementation, administration and management of the Director's RSUs. These recipients may be located in the United State or elsewhere. The Director authorizes them to receive, possess, use, retain and transfer the Personal Data, in electronic or other form, for the purposes of implementing, administering and managing the Director's RSUs. The Director may, at any time, review Personal Data, require any necessary amendments to it or withdraw the consent herein in writing by contacting the Company; however, withdrawing the consent may affect the Director's ability to participate in the Plan and receive Shares upon vesting in the RSUs.

ASTRONICS CORPORATION

By: _____ (Signature)

Name: _____

Title: _____

DIRECTOR:

By: _____
(Signature)

Name: _____

ASTRONICS CORPORATION AMENDED AND RESTATED
2017 LONG TERM INCENTIVE PLAN
TIME-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT

THIS TIME-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT (the “Agreement”), dated as of _____, 20__ (the “Grant Date”), is between Astronics Corporation, a New York corporation with a corporate office at 130 Commerce Way, East Aurora, New York 14052 (“Astronics” and, together with its Subsidiaries, the “Company”), and _____, an employee of the Company (the “Employee”).

WHEREAS, the Company wishes to provide the Employee with an incentive to continue in the service of the Company and to acquire a meaningful, significant and growing proprietary interest in Astronics by providing him or her with the opportunity to own Company Stock;

NOW, THEREFORE, in consideration of the promises and mutual agreements set forth in this Agreement, the Employee and the Company hereby agree as follows:

1. **Grant of RSUs.**

The Company hereby grants to the Employee an Award of _____ Restricted Stock Units (“RSUs”). This Award represents the right to receive one share of Common Stock of Astronics (“Share”) for each RSU awarded under this Agreement, subject to the fulfillment of the vesting requirements and other terms and conditions set forth in this Agreement and the Astronics Corporation Amended and Restated 2017 Long Term Incentive Plan (“Plan”), which is incorporated into and made a part of this Agreement by reference. Unless otherwise defined in this Agreement, the terms used in this Agreement have the meanings given them in the Plan.

2. **Vesting.**

(a) **In General.** The Employee will vest in the RSUs subject to this Agreement in accordance with the following schedule:

Vesting Date	Vested Percentage
Prior to 3 rd Anniversary of Grant Date	0%
3 rd Anniversary of Grant Date	100%

Except as otherwise set forth in this Agreement, if the Employee’s employment with the Company terminates for any reason before reaching an applicable vesting date, any unvested RSUs will be automatically forfeited.

(b) **Retirement.** If the Employee voluntarily terminates employment with the Company on or after the date the Employee attains age 65, the Employee will vest in 100% of the RSUs awarded under this Agreement.

(c) Death or Disability. If the Employee's employment with the Company terminates on account of the Employee's death or Disability, the Employee will vest in 100% of the RSUs awarded under this Agreement.

(d) Voluntary Termination; Termination Without Cause. If the Employee voluntarily terminates employment with the Company other than on account of Retirement under Section 2(b), or the Employee is terminated by the Company without Cause, the Employee will forfeit any unvested RSUs under this Agreement.

(e) Cause. If the Employee is terminated by the Company for Cause, all of the Employee's unpaid RSUs, both vested and unvested, will be forfeited and the Employee will have no further rights to payment or settlement of the RSUs under this Agreement.

3. **Settlement**.

As soon as practicable, but no later than 60 days, following the third anniversary of the Grant Date, the Company will issue to the Employee (or to his or her beneficiary or estate, as the case may be) one whole Share for each vested RSU. Notwithstanding the previous sentence, if the Employee's employment with the Company terminates before the third anniversary of the Grant Date other than due to termination by the Company for Cause, the Company will issue to the Employee (or to his or her beneficiary or estate, as the case may be), one whole Share for each vested RSU, if any, as soon as practicable, but no later than 60 days, after the date the Employee's employment terminates. Issuance of the Shares will be subject to Sections 4 and 7 below.

4. **Tax Withholding**.

As a condition of this Award, the Employee agrees to pay or make arrangements for the payment to the Company of the amount of any and all federal, state and local income and employment taxes that the Company determines it is required by law to withhold with respect to the RSUs. Payment will be due on the date the Company is required to withhold such taxes. Unless the Committee determines otherwise in its sole discretion, notwithstanding Section 7(b) the Company will satisfy the withholding requirement in accordance with Section 17 of the Plan by withholding from delivery to the Employee, Shares having a value equal to the amount of tax required to be withheld.

5. **Dividend Equivalents**.

No dividend equivalents will be issued to the Employee with respect to the RSUs granted under this Award.

6. **Rights as Shareholder**.

Neither the Employee nor any transferee has any rights as a shareholder with respect to any Shares covered by or relating to this Award until the date the Employee or transferee becomes the holder of record of the Shares.

7. **Additional Conditions to Issuance of Stock**.

(a) Compliance with Laws and Regulations. The Company is not obligated to issue or deliver any certificates evidencing Shares under this Award unless and until the

Company is advised by its counsel that the issuance and delivery of the certificates is in compliance with all applicable laws, regulations of governmental authority and the requirements of the securities exchange or automated quotation system on which Shares are listed.

(b) **Restrictions on Transferability.**

The Employee acknowledges and agrees that the Shares issued on settlement of any vested RSUs are subject to a holding period requirement whereby the Employee (or the Employee's beneficiary or estate, as the case may be) may not sell or otherwise dispose of the Shares until six months following the date of issuance of the Shares in settlement of the RSUs. The stock certificates evidencing the Shares issued in settlement of the RSUs may include one or more legends that set forth such restrictions on transferability as may apply to the Shares under this Agreement and the Plan. Alternatively, such restrictions may be enforced through such other methods as may be determined by the Company in its sole discretion, including by restrictions on electronic transfers from accounts.

8. **Electronic Delivery.**

The Company may, in its sole discretion, decide to deliver any documents related to RSUs awarded under the Plan or any future awards under the Plan by electronic means or request the Employee's consent to participate in the Plan by electronic means. The Employee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

9. **Agreement Severable.**

If any provision in this Agreement is held to be invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Agreement.

10. **Governing Law.**

Except to the extent preempted by an applicable federal law, the Plan and this Agreement will be construed and administered in accordance with the laws of the State of New York, without reference to the principles of conflicts of laws thereunder.

11. **Non-Transferability of RSU.**

This Award may not be transferred in any manner other than by will or by the laws of descent or distribution. Any purported transfer in violation of the preceding sentence will be void and of no effect.

12. **Binding Effect.**

This Agreement is binding upon, and inures to the benefit of, the respective successors, assigns, heirs, executors, administrators and guardians of the parties covered by the Agreement.

13. **Tax Consequences.**

The Employee acknowledges that this Award will have tax consequences to the Employee and that any and all such tax consequences are the sole responsibility of the Employee. The Employee should consult a tax adviser before accepting this Award or disposing of any Shares.

14. **Risks.**

The Employee is advised that the value of the RSUs and the Shares acquired under the RSUs will fluctuate as the trading price of the Shares fluctuates. The Employee exclusively accepts all risks associated with a decline in the market price of the Shares and all other risks associated with the holding of Shares. No amount will be paid to, or in respect of, the Employee to compensate for a downward fluctuation in the price of the Shares, nor will any other form of benefit be conferred upon, or in respect of, the Employee for such purpose.

15. **Effect of Agreement.**

The Employee acknowledges that a copy of the Plan has been made available to him or her and represents that he or she is familiar with its terms and provisions (and has had an opportunity to obtain advice regarding this Award), and accepts this Award and agrees to be bound by its contractual terms as set forth in this Agreement and in the Plan. The Employee agrees to accept as binding, conclusive and final all decisions and interpretations of the Committee regarding any questions relating to this Award. The Employee understands that the Plan is discretionary in nature and may be amended, suspended or terminated by the Company at any time in accordance with its terms. In the event of a conflict between the terms and provisions of the Plan and the terms and provisions of this Agreement, the terms and provisions of the Plan will prevail. Modifications to this Agreement may be made only in a written agreement executed by a duly authorized officer of the Company. The Employee agrees at all times to abide by, and acknowledges that this Award is subject to, all applicable policies of the Company, including the Company's insider trading policies and any recoupment or clawback policy, as may exist from time to time.

16. **No Right to Employment.**

Nothing in this Agreement or the Plan confers upon the Employee any right to continued employment with the Company for any period of time, nor does it interfere in any way with the Employee's right or the Company's right to terminate the employment relationship at any time, for any reason, with or without cause.

17. **Section 409A.**

All RSUs granted under this Agreement are intended to comply with or to be exempt from Section 409A of the Internal Revenue Code of 1986 (the "Code") and will be construed accordingly. However, the Company will not be liable to the Employee or any beneficiary with respect to any adverse tax consequences arising under Section 409A or other provision of the Code. All terms of this Agreement that are undefined or ambiguous must be interpreted in a manner that is consistent with Code Section 409A if necessary to comply with Code Section 409A.

18. **Notices.**

Any notice required to be delivered to the Company under this Agreement shall be in writing and addressed to Corporate Counsel of the Company at the Company's principal corporate offices. Any notice required to be delivered to the Employee under this Agreement shall be in writing and addressed to the Employee at the Employee's address as shown in the records of the Company. Either party may designate another address in writing (or by such other method approved by the Company) from time to time.

19. **Counterparts.**

This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together will constitute one and the same instrument. Counterpart signature pages to this Agreement transmitted by facsimile transmission, by electronic mail in portable document format (.pdf), or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, will have the same effect as physical delivery of the paper document bearing an original signature.

20. **Data Privacy.**

It is a condition of participation in the Plan and acceptance of this Award that the Employee acknowledges and explicitly consents to the collection, use, processing and transfer of personal data as described in this paragraph. The Company holds certain personal information about the Employee, including, but not limited to, the Employee's name, home address and telephone number, date of birth, social security number or other employee tax identification number, salary, nationality, job title, and any awards granted, cancelled, purchased, vested, unvested or outstanding in the Employee's favor, for the purpose of managing and administering the Employee's Award under the Plan and this Agreement ("Personal Data"). The Employee understands that the Company will transfer Personal Data to any third parties assisting the Company in the implementation, administration and management of the Employee's RSUs. These recipients may be located in the United State or elsewhere. The Employee authorizes them to receive, possess, use, retain and transfer the Personal Data, in electronic or other form, for the purposes of implementing, administering and managing the Employee's RSUs. The Employee may, at any time, review Personal Data, require any necessary amendments to it or withdraw the consent herein in writing by contacting the Company; however, withdrawing the consent may affect the Employee's ability to participate in the Plan and receive Shares upon vesting in the RSUs.

ASTRONICS CORPORATION

By: _____
(Signature)

Name: _____
Title: _____

EMPLOYEE:

By: _____
(Signature)

Name: _____

EXHIBIT 21**ASTRONICS CORPORATION****SUBSIDIARIES OF THE REGISTRANT**

<u>Subsidiary</u>	<u>Ownership Percentage</u>	<u>State (Province), Country of Incorporation</u>
Astronics Test Systems Inc.	100%	Delaware, USA
Astronics DME LLC	100%	Florida, USA
Astronics AeroSat Corporation	100%	New Hampshire, USA
Luminescent Systems, Inc.	100%	New York, USA
Astronics Air LLC	100%	New York, USA
Peco, Inc.	100%	Oregon, USA
Astronics Advanced Electronic Systems Corp.	100%	Washington, USA
Luminescent Systems Europe B.V.B.A.	100%	Belgium
Luminescent Systems Canada Inc.	100%	Quebec, Canada
PGA Electronic s.a.	100%	France
Astronics France	100%	France
Astronics Air II LLC	100%	New Hampshire, USA
Astronics Custom Control Concepts Inc.	100%	Washington, USA
Astronics Connectivity Systems & Certification Corp.	100%	Illinois, USA
Freedom Communication Technologies Inc.	100%	Delaware, USA
Diagnosys Holdings Inc.	100%	Delaware, USA
Diagnosys Inc.	100%	Delaware, USA
Diagnosys (Pinpoint) Inc.	100%	Florida, USA
Diagnosys (Customer Support) Inc.	100%	Florida, USA
Diagnosys Systems, Inc.	100%	Delaware, USA
Diagnosys Ferndown Limited	100%	England
Diagnosys GmbH	100%	Germany
Diagnosys Electronics (I) Private Limited	100%	India
Astronics Connectivity Systems & Certification Ukraine	100%	Ukraine
Huizhou Telefonix Technology Co., Ltd.	100%	China
Alliance Technology HK Limited	100%	Hong Kong

EXHIBIT 23

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- a. Registration Statements (Form S-8 No. 333-139292, Form S-8 No. 333-87463) pertaining to the Astronics Corporation Employee Stock Purchase Plan,
- b. Registration Statement (Form S-8 No. 333-127137) pertaining to the Astronics Corporation 2005 Director Stock Option Plan,
- c. Registration Statement (Form S-8 No. 333-143564) pertaining to the Astronics Corporation 2001 Stock Option Plan,
- d. Registration Statement (Form S-8 No. 333-176044) pertaining to the Astronics Corporation 2011 Employee Stock Option Plan,
- e. Registration Statement (Form S-8 No. 333-222010) pertaining to the Astronics Corporation 2017 Long Term Incentive Plan, and
- f. Registration Statement (Form S-8 No. 333-256514) pertaining to the Astronics Corporation Amended and Restated 2017 Long Term Incentive Plan;

of our reports dated March 10, 2023, with respect to the consolidated financial statements and schedule of Astronics Corporation and the effectiveness of internal control over financial reporting of Astronics Corporation included in this Annual Report (Form 10-K) of Astronics Corporation for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Buffalo, New York
March 10, 2023

Exhibit 31.1

Certification of Chief Executive Officer pursuant to Exchange Act rule 13a-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2001

I, Peter J. Gundermann, President and Chief Executive Officer, certify that:

1. I have reviewed this annual report on Form 10-K of the Astronics Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 10, 2023

/s/ Peter J. Gundermann

Peter J. Gundermann
Chief Executive Officer

Exhibit 31.2

Certification of Chief Financial Officer pursuant to Exchange Act rule 13a-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2001

I, David C. Burney, Executive Vice President and Chief Financial Officer, certify that:

1. I have reviewed this annual report on Form 10-K of the Astronics Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 10, 2023

/s/ David C. Burney

David C. Burney
Chief Financial Officer

Exhibit 32

Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2001

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2001, the undersigned officers of Astronics Corporation (the "Company") hereby certify that:

The Company's Annual Report on Form 10-K for the year ended December 31, 2022 fully complies with the requirements of section 13(a) or 15(d) of the Securities and Exchange Act of 1934 and the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 10, 2023

/s/ Peter J. Gundermann

Peter J. Gundermann

Title: Chief Executive Officer

Dated: March 10, 2023

/s/ David C. Burney

David C. Burney

Title: Chief Financial Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section. This certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent specifically incorporated by the Company into such filing.