AstroNova®

Annual Report

YEAR ENDING JANUARY 31

2024

Data Visualization Technologies

CORPORATE PROFILE

Who We Are

AstroNova® is a global leader in data visualization technologies. We develop, manufacture, and support a broad array of products that acquire, store, analyze, and transform data into meaningful information that is presented in multiple formats. Through our expanding network of manufacturing, sales, and support facilities, we sell our products in approximately 100 countries. We support our customers with locations in the USA, Canada, China, Europe, Malaysia, Mexico, Singapore, and via channel partners worldwide.

Our Product Identification segment provides a wide array of digital end-to-end product marking and identification solutions, including color labeling, direct-to-package, and mail handling solutions for OEMs, commercial printers, and brand owners under our QuickLabel, TrojanLabel, and Astro Machine brands. From tabletop printers to large scale industrial and commercial printing and packaging solutions, our innovative products enable customers to minimize their product identification expenses and experience greater flexibility, improving their ability to identify, track, and market their products. Our GetLabels supplies group provides carefully matched supplies, including inks, toners, thermal transfer ribbons, and a vast array of media types to ensure the highest quality imaging results.

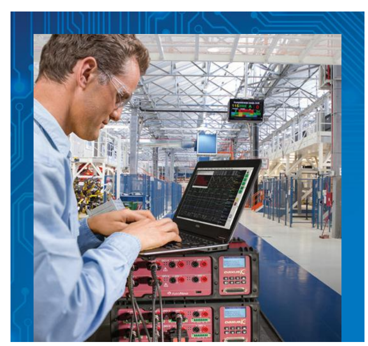
Our Test & Measurement segment consists of two product groups: Aerospace and Test & Measurement. The Aerospace group provides avionics equipment and systems for commercial, regional, business, and military aircraft. Customers include many of the world's major aircraft manufacturers, defense contractors, and airlines. The Test & Measurement group provides data acquisition solutions that acquire, record, and analyze electronic signals from local and networked sensors for the aerospace and defense market, as well as energy, power, transportation, telemetry, and industrial markets.

Implemented in 2013 and built upon our core values, the AstroNova Operating System (AOS) provides the framework for systematically applying lean enterprise tools and business management processes to drive operational excellence towards supporting our strategic objectives for profitable growth.

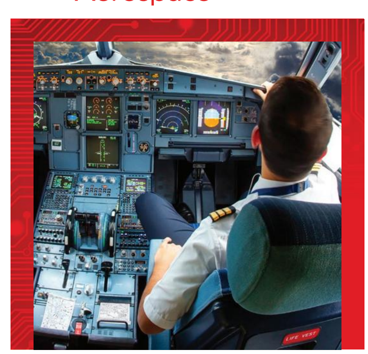
AstroNova®
Product Identification

GetLabels™
An AstroNova Division

AstroNova®
Test & Measurement



AstroNova®
Aerospace



AstroNova Operating System (AOS)

Customer First
Superior customer satisfaction driven by the voice of the customer

One Global Team
Total employee involvement with integrity and mutual respect for all

Innovation
Rapid product and process development

Continuous Improvement
Accelerated using AOS tools

Building Value
Through superior quality, delivery, cost, and growth

A passionate commitment to quality and innovation are fundamental AstroNova principles. AstroNova is certified to ISO9001:2015 and AS9100:D Quality Management System Standards. AstroNova also holds numerous aviation certifications and maintains FAA/EASA Part 145 Repair Station approval to support our aerospace and defense industries.

SHAREHOLDERS LETTER

Dear Fellow Shareholders,

Fiscal 2024 was a strong year for AstroNova. We delivered record net revenue and operating income, driven by higher operating profit in both our Product Identification (PI) and Test & Measurement (T&M) segments. Notably, we accomplished several key milestones during the year, placing us on an even stronger and more profitable financial trajectory.

Net revenue grew 4% to $148.1 million in FY 2024. The increase was driven primarily by the Aerospace product line within our T&M segment, which continued to benefit from the post-COVID rebound of the commercial aviation industry. Favorable revenue mix and prudent expense management fueled a 62% increase in total operating income to $8.8 million. On the bottom line, we grew net income to $4.7 million, or $0.63 per diluted share, from $2.7 million, or $0.36 per diluted share, in FY 2023.

Strategic Realignment of Product Identification Segment

Perhaps the year's most significant accomplishment was the strategic realignment of our PI segment. As part of the realignment, we shifted a substantial portion of our PI printer manufacturing to our Astro Machine plant in Elk Grove Village, Illinois. We further enhanced efficiencies by exiting certain lower-margin, low-volume products to concentrate on higher-margin PI products with advanced functionality. In addition, we consolidated our international PI sales and distribution facilities and streamlined our channel partner network.

These initiatives contributed to a 200-basis-point improvement in the PI segment operating profit margin to 9.7% in FY 2024 from 7.7% in FY 2023. Our focus as an organization is to deliver the best engineered solutions for our customers and the highest return opportunities for the Company. Streamlining the PI segment advances that objective, creating a leaner and more efficient business.

Introduction of New PI Products

FY 2024 marked a year of significant product innovation for the Company, as we launched new products under our QuickLabel®, TrojanLabel®, and Astro Machine brands at major trade shows in the United States and Europe. These products continue our mission of offering customers a unique, total solution -- printers, inks/toners, labels, and related supplies, as well as our proprietary software and global support. Our new products include:

- **QuickLabel QL-900**, an industrial-grade desktop inkjet label printer designed for rigorous, high-production applications;
- **TrojanLabel T2-PRO**, a compact, high-resolution digital label press designed for our high-volume customers and the professional printing segments; and
- **TrojanLabel T3-PRO**, a compact, CMYK digital print module designed for direct-to-package applications that are in high demand from our OEM customers.

The initial deliveries of these products have been well received by our customers, and we expect them to gain full production momentum in the second half of FY 2025.

Strong Performance of T&M Segment

Another key accomplishment of FY 2024 was the continued growth of our T&M segment. We expanded our position in airborne printers, ruggedized ethernet switches, and thermal paper in our core commercial, defense, and business jet markets. Our printers are an integral link in the aircraft communications chain between pilots and air traffic control, delivering numerous routine operational messages as well as urgent time critical messages.

The T&M segment, which consists of our aerospace and data acquisition product lines, posted its highest revenue in four years in FY 2024. Fueled by the rebound in commercial air travel and aircraft build rates, T&M revenue from hardware, supplies, and service/other all increased from FY 2023. The segment appears well on the way to returning to its pre-COVID highs.

Over the past decade, we have built our airborne printer product line organically and through acquisitions. In addition to our advanced ToughWriter brand, we manufacture and market printers acquired from our M&A transactions with Honeywell, RITEC, and Miltope. Recently, we have begun gradually transitioning our OEM and airline-direct customers to our ToughWriter printers from those that were initially designed by others in our portfolio. The transition means upgraded technology for our customers as well as more streamlined parts and services, which, in turn, enables us to increase efficiencies.

Looking Ahead to Continued Growth in FY 2025

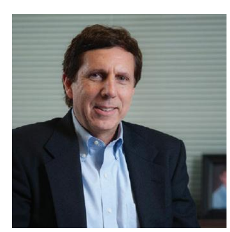
We made measurable financial and operational strides in FY 2024, positioning AstroNova to deliver improved shareholder value. As we look ahead to FY 2025 and beyond, we are focused on driving continued product innovation, operating efficiencies, and margin improvement across our business. For the current fiscal year, we expect to achieve full-year organic revenue growth in the mid-single digits on a percentage basis. We further expect to increase our Adjusted EBITDA margin to the 13% to 14% range in FY 2025, with continued Adjusted EBITDA margin improvement of 100 basis points over the following two fiscal years.

On behalf of our Team Members and Board of Directors, thank you for your ongoing support and confidence in AstroNova.

Sincerely,

Gregory A. Woods

President and Chief Executive Officer



[1] AstroNova has not reconciled the forward-looking Adjusted EBITDA growth percentage included in its 2025 financial targets and outlook to the most directly comparable forward-looking GAAP measure because this cannot be done without unreasonable effort due to the lack of predictability regarding cost of sales, operating expenses, depreciation and amortization, and stock-based compensation. The impact of any of these items, individually or in the aggregate, may be significant.

FINANCIAL HIGHLIGHTS

($ in millions, except per share amounts)	Years Ended January 31, 2024	2023	2022
BOOKINGS	$143.7	$138.6	$128.6
REVENUE	$148.1	$142.5	$117.5
GROSS PROFIT	$51.6	$48.2	$43.7
GROSS PROFIT MARGIN	34.9%	33.8%	37.2%
OPERATING INCOME	$8.8	$5.4	$4.3
OPERATING MARGIN	5.9%	3.8%	3.6%
NET INCOME - GAAP	$4.7	$2.7	$6.4
NET INCOME PER SHARE - DILUTED (GAAP)	$0.63	$0.36	$0.88
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING - DILUTED	7,496,000	7,374,000	7,339,000
ADJUSTED EBITDA(1)	$17.6	$11.0	$7.3
ADJUSTED EBITDA(1) MARGIN	11.9%	7.7%	6.2%

(1) *Reconciliation of Net Income to Adjusted EBITDA:*

	Years Ended January 31, 2024	2023	2022
GAAP Net Income	$4.7	$2.7	$6.4
Interest Expense	2.7	1.7	0.7
Income Tax Expense	1.4	0.7	0.6
Share-Based Compensation	1.3	1.3	1.5
Depreciation/Amortization	4.3	3.9	4.0
Restructuring Charges, net(2)	2.6	-	-
Product Retrofit Costs, net(2)	0.6	-	-
Transaction Costs(2)	-	0.7	-
Employee Retention Credit(2)	-	-	(2.1)
PPP Loan Forgiveness(2)	-	-	(4.5)
ERP Write-off(2)	-	-	0.7
Adjusted EBITDA	$17.6	$11.0	$7.3

(2) *Net of taxes*

Use of Non-GAAP Financial Measure

The non-GAAP financial measure, Adjusted EBITDA, is defined as earnings before interest, taxes, depreciation, amortization, share-based compensation, restructuring charges, product retrofit costs, employee retention credit, PPP loan forgiveness and ERP write-off. AstroNova believes that the inclusion of this non-GAAP financial measure helps investors gain a meaningful understanding of changes in the Company's core operating results, and also can help investors who wish to make comparisons between AstroNova and other companies on both a GAAP and a non-GAAP basis. AstroNova's management uses Adjusted EBITDA, in addition to other GAAP financial measures, as the basis for measuring its core operating performance and comparing such performance to that of prior periods and to the performance of its competitors. Adjusted EBITDA also is used by the Company's management to assist with their financial and operating decision-making.

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 January 31, 2024

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 0-13200

AstroNova, Inc.
(Exact name of registrant as specified in its charter)

Rhode Island **(State or other jurisdiction of incorporation or organization)**	**05-0318215** **(I.R.S. Employer Identification No.)**
600 East Greenwich Avenue, West Warwick, Rhode Island **(Address of principal executive offices)**	**02893** **(Zip Code)**

Registrant's telephone number, including area code: (401) 828-4000

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, $.05 Par Value	**ALOT**	**NASDAQ Global 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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐		Accelerated filer	☒
Non-accelerated filer ☐		Smaller Reporting Company	☒
		Emerging growth company	☐

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

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

The aggregate market value of the registrant's voting common equity held by non-affiliates at July 28, 2023, was approximately $102,820,000 based on the closing price on the Nasdaq Global Market on that date. The registrant has no non-voting common shares.

As of April 5, 2024, there were 7,743,140 shares of Common Stock (par value $0.05 per share) of the registrant outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's definitive Proxy Statement for the 2024 Annual Meeting of Shareholders are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated.

Auditor Firm Id: PCAOB ID No. 392 Auditor Name: Wolf & Company, P.C. Auditor Location: Boston, MA

ASTRONOVA, INC.
FORM 10-K
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ASTRONOVA, INC.

Forward-Looking Statements

The information included in this Annual Report on Form 10-K may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not statements of historical fact, but rather reflect our current expectations concerning future events and results. We generally use the words "believes," "expects," "intends," "plans," "anticipates," "likely," "continues," "may," "will," and similar expressions to identify forward-looking statements. Such forward-looking statements, including those concerning our expectations, involve risks, uncertainties, and other factors, some of which are beyond our control, which may cause our actual results, performance or achievements to be materially different from those expressed or implied by such forward-looking statements. These risks, uncertainties and factors include, but are not limited to, those factors set forth in this Annual Report on Form 10-K under "Item 1A. Risk Factors." We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The reader is cautioned not to unduly rely on such forward-looking statements when evaluating the information presented in this Annual Report on Form 10-K.

PART I

Item 1. *Business*

General

Unless otherwise indicated, references to "AstroNova," the "Company," "we," "our," and "us" in this Annual Report on Form 10-K refer to AstroNova, Inc. and its consolidated subsidiaries.

We design, develop, manufacture, and distribute a broad range of specialty printers and data acquisition and analysis systems, including both hardware and software, which incorporate advanced technologies to acquire, store, analyze, and present data in multiple formats. Target markets for our hardware and software products include aerospace, apparel, automotive, avionics, chemicals, computer peripherals, communications, distribution, food and beverage, general manufacturing, packaging, and transportation.

Our products are distributed worldwide through our own sales force, authorized dealers, and independent dealers and representatives.

Our business consists of two segments, Product Identification ("PI") and Test & Measurement ("T&M"). The PI segment includes specialty printing systems and related supplies sold under the QuickLabel®, TrojanLabel®, and GetLabels™ brand names. The T&M segment includes our line of aerospace printers, ethernet networking products and test and measurement data acquisition systems sold under the AstroNova ® brand name. Refer to Note 16, "Nature of Operations, Segment Reporting and Geographical Information," in our audited consolidated financial statements elsewhere in this report for financial information regarding our segments.

On August 4, 2022, we acquired Astro Machine LLC ("Astro Machine"), an Illinois-based manufacturer of printing equipment, including label printers and related accessories, tabbers, conveyors, and envelope feeders. Astro Machine is reported as a part of our PI segment beginning with the third quarter of fiscal 2023. Refer to Note 2, "Acquisitions," in our audited consolidated financial statements included elsewhere in this report.

The following description of our business should be read in conjunction with "Management's Discussion and Analysis of Financial Conditions and Results of Operations" included elsewhere in this Annual Report on Form 10-K.

Description of Business

Product Overview

We leverage our expertise in data visualization technologies to design, manufacture and market specialty printing systems, test and measurement systems, and related services for select growing markets globally.

PI products sold under the QuickLabel, TrojanLabel and GetLabels brands are used in brand owner and commercial applications to provide product packaging, marketing, tracking, branding, and labeling solutions to a wide array of industries. The PI segment offers a variety of digital color label tabletop printers and light commercial label printers, direct-to-package printers, high-volume presses, and specialty original equipment manufacturer ("OEM") printing systems, as well as a wide range of label, tag and other supplies, including ink and toner, allowing customers to mark, track, protect and enhance the appearance of their products. PI products sold under the Astro Machine brand acquired on August 4, 2022, also include a variety of label printers, envelope and packaging printing, and related processing and handling equipment. In the T&M segment, we have a long history of using our technologies to provide networking systems and high-resolution flight deck and cabin printers for the aerospace market. In addition, the T&M segment includes data acquisition recorders, sold under the AstroNova brand, to enable our customers to acquire and record visual and electronic signal data from local and networked data streams and sensors. The recorded data is processed, analyzed, stored and presented in various visual output formats.

Product Identification

Our PI segment includes three brands: QuickLabel, TrojanLabel, and GetLabels. Additionally, PI also includes the Astro Machine brand that is sold directly to end users though our channel partners and to OEM customers, which generally rebrand these products for sales to their customers. The segment provides a wide array of digital end-to-end product marking and identification solutions including hardware, software, and supplies for OEMs, commercial printers, and brand owners. Our customers typically label or mark products on a short- to mid-size run basis and benefit from the efficiency, flexibility, and cost-savings of digitally printing labels or packaging in their facility, on-demand, with the ability to accommodate multiple SKUs or variable data such as bar codes, lot numbers or expiration dates. QuickLabel brand products include tabletop printers, production-ready digital color label printers, and specialty OEM printing systems for either standalone output or inline integration with existing pre-processing and finishing systems. Customers use our digital printing products in a wide variety of industries, including chemicals, cosmetics, food and beverage, medical products, nutraceuticals, pharmaceuticals, and many others. TrojanLabel expands our customer market by providing a range of higher volume digital color printers, OEM printing systems, and supplies that target the more demanding needs of brand owners, commercial printers, label converters, and packaging manufacturers, giving them the ability to digitally mark or encode products directly or to produce labels for post-printing applications. GetLabels brand products include a full line of media supplies, including label materials, tags, inks, toners, and thermal transfer ribbons designed for optimal performance with our printing hardware, and are also compatible with a wide variety of competitive and third-party printing hardware.

Current QuickLabel models include a selection of professional tabletop digital color label printers. We recently introduced the QL-E100, an entry-level, compact, full-color tabletop label printer. It delivers professional-quality output at a lower price point, which we believe is ideal for targeting smaller businesses entering the on-demand label market, and larger enterprises that require multiple on-demand label printers at distributed locations throughout their facilities. The high-speed QL-120X was built on our pioneering and successful Kiaro!® platform. To expand the product line further, the QL-120Xe, a sister product to the dye ink QL-120X, was introduced in 2021 as a lower price point option for price-sensitive customers. In 2020, we introduced the QL-120D, which features high-performance pigment inks that can produce durable BS5609-certified labels and labels that can withstand a wide range of demanding environmental conditions from sterilization to cryogenic freezing. Introduced early in 2019, the high-performance QL-300 was the first 5-color toner-based electrophotographic tabletop production label printer in the market. The QL-30 and QL-60 are high-end monochrome printers which print a variety of labels and tags using direct thermal or thermal transfer technology. In fiscal 2024, we introduced the QL-900, a wider format inkjet color label printer. Also in fiscal 2024, we obsoleted the QL-850 and QLS-4100 Xe to rationalize our product lines and manufacturing system, creating a leaner and more efficient business.

Our TrojanLabel portfolio includes a range of products from professional digital color label mini-presses to large-scale all-in-one inline specialty printing systems for brand owners, OEMs, and commercial printers. The T2-C, a compact, digital mini-press designed for 24/7 label production, includes numerous differentiating features for several end-use market applications. Beyond label printing, the T3-OPX, the first of its kind direct-to-package printer, which was introduced in late 2020, allows printing directly onto a range of flat products, including cardboard, paper bags, flat wood planks and many other items using pigment inks that are resistant to both water and UV exposure. In fiscal 2024, we launched two new products: the T2-PRO and the T3-PRO, both of which have wide-format print capabilities.

GetLabels provides a broad range of high-quality supplies for both our printers and third-party printers, including label and tag materials, inks, toner, and thermal transfer material, all specifically designed and constructed for a wide variety of labeling applications. Label material and substrates are carefully qualified and tested on-site in our Rhode Island Materials Research Laboratory to ensure durability and compatibility with our QuickLabel and TrojanLabel branded products, along with a variety of third-party printers.

Astro Machine is a U.S.-based manufacturer and engineering development company providing inkjet printers, conveyors, tabbers, software, and various components to the mail and addressing markets, as well as the label and packaging markets. Astro Machine serves OEMs and value-added resellers.

The PI segment provides worldwide training and support as well as develops and licenses various specialized software programs to design and manage labels, print images, manage and operate our printers and presses, and coordinate printing on an automated basis directly over networked systems.

Test & Measurement

Products sold under our T&M segment are designed and manufactured for airborne printing and networking solutions and data acquisition. Our aerospace products include flight deck printing solutions, networking hardware and specialized aerospace-grade thermal paper. Our data acquisition systems are used in research and development; flight testing; missile/rocket telemetry; and production monitoring and power and maintenance applications. These products are sold to customers in various industries, including aerospace and defense, automotive, commercial airline, energy, manufacturing and transportation, to meet their need to acquire and record data from local and networked data streams and sensors.

Our airborne printers, which include our flagship ToughWriter® series, are used in the flight decks and cabins of military, commercial, and business aircraft to print hard copies of data to enhance flight safety and reduce pilot workload by providing ready access to many types of critical flight-specific information required for the safe and efficient operation of aircraft. Examples of printed data include navigation maps, arrival and departure information, flight itineraries, weather maps, notice to air missions ("NOTAMs"), performance data, passenger data, and air traffic control data. ToughSwitch® Ethernet switches are used primarily in military aircraft and military vehicles to connect multiple computers or Ethernet devices. Our ToughWriter airborne printers and ToughSwitch ethernet switches are ruggedized to comply with rigorous military and commercial flight-worthiness standards for operation under extreme environmental conditions. We are currently furnishing ToughWriter printers for various aircraft made by Airbus, Boeing, Bombardier, Lockheed, Gulfstream, and others. In addition to our ToughWriter products, we furnish other acquired flight deck printer products, including the TP/NP series, the RTP80 series and the PTA-45B series of airborne printers. The PTA-45B is subject to an Asset Purchase and License Agreement with Honeywell International, Inc. (the "Honeywell Agreement"), pursuant to which we acquired an exclusive perpetual worldwide license to manufacture and support Honeywell's narrow-format flight deck printers for the Boeing B737 and Airbus A320 aircraft. Over time we expect customers to replace the PTA-45B and other acquired printer product lines with the AstroNova designed ToughWriter products because of its numerous technical features, functional advantages and significant weight savings. Currently, approximately one-third of the airborne printers we sell are ToughWriter branded, and we expect the percentage of ToughWriter products to continue to grow over the next several years, and notably in fiscal 2026.

Other T&M products include the TMX® all-in-one high-speed data acquisition system for applications requiring high channel counts and acquisition rates; the Daxus® DXS-100 distributed data acquisition platform; the SmartCorder® DDX-100, a portable all-in-one data acquisition system for R&D facility and field testing; and the Everest® EV-5000 digital strip chart recording system used mainly in aerospace and defense applications. The Daxus DXS-100 can be connected to the SmartCorder to increase channel count or networked as part of a distributed measurement system spanning vast distances.

Technology

Our core technologies are data visualization technologies that relate to (1) acquiring data; (2) conditioning the data; (3) displaying or printing the data on hard copy, visual displays or electronic storage media; and (4) analyzing the data. To support our data visualization technology, we maintain technological core competencies and trade secret know-how concerning the subject matter peculiar to each business unit. The technological disciplines are diverse and include electronic, software, mechanical and industrial engineering aspects. Additionally, we possess engineering expertise in digital signal processing, image processing, fluidics, color theory, high-speed material handling, and airworthiness design.

Intellectual Property

We rely on a combination of copyright, patent, trademark, and trade secret laws in the United States and other jurisdictions to protect our technology and brand names. While we consider our intellectual property to be important to the operation of our business, other than our Honeywell license agreement, we do not believe that any existing patent, trademark, or other intellectual property right is of such significance that its loss or termination would have a material adverse effect on our business taken as a whole.

Manufacturing and Supplies

We manufacture many of the products that we design and sell. Raw materials and supplies are typically available from a wide variety of sources. We manufacture many sub-assemblies and parts in-house, including certain specialty printed circuit board assemblies and harnesses, and we have extensive electronic and mechanical final assembly and test operations. Many parts that are not manufactured in-house are standard electronic items available from multiple sources. Other printers and parts are designed or modified by us and manufactured by outside vendors according to our specifications. We also purchase certain components, assembled products, and supplies used to manufacture or to be sold with our products, from single-or limited- source suppliers. Although we believe the majority of these sole or limited source components, assembled products, and supplies could be sourced elsewhere with appropriate changes in the design of our products, the required design changes might not be feasible on a timely basis, and any interruption in these components, products or supplies could adversely affect our business. When circumstances cause us to anticipate that we may not be able to acquire such components, products or supplies on a timely basis, our practice is to procure a sufficient quantity in advance. In the past, we have made such advanced purchases primarily for aerospace products and in quantities that we anticipate will suffice for the life of the aircraft program for which those printers are designed.

Marketing and Competition

We compete worldwide in multiple markets. Through our existing network of manufacturing, sales and support facilities, during fiscal 2024, we sold our products to customers in approximately 100 countries.

We believe we are a market leader in tabletop digital color label printing technology in the specialty on-demand printing field, the market leader in flight deck printers, and an innovator in digital color mini-press systems. In the data acquisition area, we are one of the leaders in general-purpose, portable, high-speed data acquisition systems.

We retain our leadership position in the markets we serve by virtue of our proprietary technology, product reputation, delivery, our channels to market, technical assistance, and service to customers. The number of competitors we face in any given market varies by product line. Key competitive factors vary among our product lines but include technology, quality, service and support, distribution network and breadth of product and service offerings.

Our PI products are sold by direct field salespersons, OEMs, and independent dealers and representatives, while our T&M products are sold predominantly through direct sales and independent representatives. In the United States, we have factory-trained direct-field salespeople located throughout the country specializing in PI products. We also have direct field sales or service centers in Canada, China, Denmark, France, Germany, Malaysia, Mexico, Singapore, and the United Kingdom staffed by our own employees and dedicated third-party contractors. Additionally, we utilize over 100 independent dealers and representatives selling and marketing our products in over 60 countries.

No single customer accounted for 10% or more of our net revenue in any of the last three fiscal years.

Order Backlog

Our order backlog is predominantly but not exclusively for products that will be delivered within twelve months, and backlog scheduled for beyond twelve months is predominantly within the T&M segment. However, backlog varies regularly and is not a highly reliable predictive indicator of near-term future sales trends, primarily due to the frequent longer-term original equipment and supplies orders within the T&M segment. In the PI segment, we have multi-period (but typically not multi-year) blanket order arrangements with many customers for labels and other supplies. Printer hardware in the PI segment is typically shipped within a short period of time after orders are booked. Manufacturing production is designed to meet forecasted demands and built-to-order customer requirements. Backlog at January 31, 2024 and 2023 was $31.4 million and $35.8 million, respectively.

Government Regulation

We are subject to a wide variety of laws, rules, mandates, and regulations, some of which apply or may apply to us as a result of our business, particularly with respect to our aircraft cockpit printer business which sells in a highly regulated industry. For example, material modifications to an airborne printer cannot be made without having progressed through an extensive series of product qualification and certification steps that are technically complicated, expensive to execute, typically slow the pace of product development in that industry and can constrain our ability to quickly respond to pricing fluctuations or disruptions to our supply chain for products.

Other applicable and potentially applicable regulations and laws include regulations and laws regarding taxation, accounting and U.S. Securities and Exchange Commission ("SEC") reporting, privacy, data protection, pricing, content, distribution, energy consumption, environmental regulation, competition, consumer protection, employment, import and export matters, information reporting requirements, access to our services and facilities, the design and operation of websites, health, safety, and sanitation standards, the characteristics and quality of products and services, product labeling and unfair and deceptive trade practices.

Our business outside of the U.S. exposes us to foreign and additional U.S. laws and regulations, including but not limited to, laws and regulations relating to taxation, business licensing or certification requirements, consumer protection, intellectual property rights, consumer and data protection, privacy, encryption, restrictions on pricing or discounts, and the U.S. Foreign Corrupt Practices Act and other applicable U.S. and foreign laws prohibiting corrupt payments to government officials and other third parties.

Environmental Matters

We believe that we are in compliance with all applicable federal, state, and local laws concerning the discharge of material into the environment or otherwise relating to the protection of the environment. We have not experienced any material costs in connection with environmental compliance and do not believe that such compliance will have any material effect on our financial position, results of operations, cash flows, or competitive position.

Employees

As of January 31, 2024 we employed 365 full-time employees. Of our full-time employees, 276 were in the United States, 69 were in Europe, 11 were in Canada, seven were in Asia, and two were in Mexico.

None of our employees are represented by a labor union or covered by a collective bargaining agreement, except for employees in France, where local regulations generally require collective bargaining agreements.

Successful execution of our business strategy depends on our ability to retain several key employees in both individual contributor and management roles. We continuously assess the risk of losing our key employees through regular communications, engagement surveys and assessments of the labor market. Our retention strategy is focused on ensuring competitive compensation packages, career and professional development, leadership coaching and other initiatives to improve overall engagement with our key employees.

Culture

We are deeply committed to and invest substantial resources in maintaining and improving a strong and definable company culture that shapes how we operate and engage with stakeholders and employees. Our culture consists of four key components:

- A powerful set of core values: Customer First, One Global Team, Innovation, Continuous Improvement and Building Shareholder Value.
- The AstroNova Operating System (AOS), the comprehensive business management process which helps us manage the business in pursuit of continuous improvements in quality, delivery, cost, and growth.
- A commitment to operating with integrity and compliance to ensure our business is conducted in an honest, legal, and environmentally responsible manner.
- A passionate commitment to quality that drives our goal to achieve zero defects and understand our customers' changing needs and expectations.

Our objective is for these core values to guide our employees' behavior and direct how we conduct our business. These core values are reinforced during new hire orientation, ongoing engagement surveys, leadership development, and team development activities and are also demonstrated through teamwork, leadership, and everyday interactions.

Diversity and Inclusion

We believe that our culture and core values are strengthened through diversity and inclusion. Our diversity initiatives include—but are not limited to—our practices and policies on recruitment and selection; compensation and benefits; professional development and training; promotions; transfers; social and recreational programs; layoffs; terminations; and the ongoing development of a work environment built on the premise of gender and diversity equity. These initiatives include targeted recruitment of women in technical, engineering and sales roles, leadership development programs for women, periodic evaluation of our workforce demographics as compared to the demographics in the workforce market, and an affirmative effort to attract, recruit, retain and train a diverse workforce that is representative of the populations in the regions in which we do business. Metrics that track performance against these goals are regularly reported to and monitored by the Human Capital and Compensation Committee of our Board of Directors.

Other Information

Our business is not seasonal in nature. However, our revenue is impacted by the variable size of certain individual customer revenue transactions, which can cause fluctuations in revenue from quarter to quarter and which may be inconsistent with the underlying business or general economic trends. For example, in our T&M segment, government procurement and contracting practices can result in material fluctuations in our backlog and revenues.

Information about Our Executive Officers

The following sets forth certain information with respect to all executive officers of the Company. All officers serve at the pleasure of the Board of Directors.

Name	Age	Position
Gregory A. Woods	65	President, Chief Executive Officer and Director
David S. Smith	67	Vice President, Chief Financial Officer and Treasurer
Stephen M. Petrarca	61	Vice President—Operations
Michael J. Natalizia	60	Vice President Technology & Strategic Alliances, Chief Technology Officer
Tom W. Carll	57	Vice President and General Manager—Aerospace

Mr. Woods has served as Chief Executive Officer of the Company since February 1, 2014. Mr. Woods joined the Company in September 2012 as Executive Vice President and Chief Operating Officer and was appointed President and Chief Operating Officer on August 29, 2013.

Mr. Smith was appointed Vice President, Chief Financial Officer and Treasurer of the Company effective January 22, 2018. Prior to joining the Company, Mr. Smith served as Managing Partner of S.C. Advisors LLC, a financial management consultancy firm from 2008 through January 2018.

Mr. Petrarca was appointed Vice President—Operations in 1998. He has previously held positions as General Manager of Manufacturing, Manager of Grass Operations and Manager of Grass Sales. He has been with the Company since 1980.

Mr. Natalizia was appointed Vice President and Chief Technology Officer of the Company on March 9, 2012. Prior to this appointment, Mr. Natalizia had held the position of Director of Product Development of the Company since 2005.

Mr. Carll joined the Company in 1989 and has held the position of Vice President and General Manager—Aerospace since 2011. Previously, Mr. Carll was Product Manager and National Sales Manager of the AstroNova Test & Measurement product group and, from its formation in 2004, the AstroNova Aerospace business group.

Code of Ethics

We have adopted a Code of Conduct which applies to all of our directors, officers and employees of the Company, including our Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO"), and principal accounting officer which meets the requirements of a "code of ethics" as defined in Item 406 of Regulation S-K. A copy of the Code of Conduct will be provided to shareholders, without charge, upon request directed to Investor Relations or can be obtained on our website, *(www.astronovainc.com)*, under the heading "Investors—Corporate Governance—Governance Documents." We intend to disclose any amendment to, or waiver of, a provision of the Code of Conduct for the CEO, CFO, principal accounting officer, or persons performing similar functions by posting such information on our website.

Available Information

We make available on our website (www.astronovainc.com) our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and, if applicable, amendments to those reports filed or furnished pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. These filings are also accessible on the SEC's website at http://www.sec.gov.

Item 1A. *Risk Factors*

The following risk factors should be carefully considered in evaluating AstroNova, because such factors may have a significant impact on our business, operating results, liquidity and financial condition. As a result of the risk factors set forth below, actual results could differ materially from those projected in any forward-looking statements. Additional risks and uncertainties not presently known to us, or that we currently consider to be immaterial, may also impact our business operations.

Business and Industry Risks:

Our operating results and financial condition could be harmed if the markets into which we sell our products decline or do not grow as anticipated.

Any decline in our customers' markets or their general economic conditions would likely result in a reduction in demand for our products. For example, the 2020 grounding, suspension and subsequent slow restart of the Boeing B737 MAX, coupled with the impact of the COVID-19 pandemic reduced the demand for our airborne printers, as well as for the related repairs and supplies, which negatively affected our business. Although we have experienced a significant recovery in the demand for our airborne printers following the negative impact of the COVID-19 pandemic on the demand for new aircraft and travel, demand remains lower than it was pre-pandemic, and currently the outlook is uncertain. While demand for air travel has recently increased, the impact of air-safety incidents or of another viral pandemic or other widespread health emergency could negatively impact this trend in the future. Also, we believe that the pandemic negatively impacted our customers' financial capacity materially enough to alter their strategies and industry dynamics, but the increase in travel demand has caused the industry profitability to rebound. Production or supply chain issues experienced by any aircraft manufacturer may cause aircraft deliveries to grow more slowly or decline, which would reduce demand for our products, and in turn harm our results of operations, financial position and cash flows.

Our future revenue growth depends on our ability to develop and introduce new products and services on a timely basis and achieve market acceptance of these new products and services.

The markets for our products are characterized by evolving technologies which in turn affect our product introduction cycles. Our future success depends largely upon our ability to address the rapidly changing needs of our customers by developing and supplying high-quality, cost-effective products, product enhancements and services on a timely basis and by keeping pace with technological developments and emerging industry standards. The success of our new products will also depend on our ability to differentiate our offerings from our competitors' offerings, price our products competitively, anticipate our competitors' development of new products, and maintain high levels of product quality and reliability. We spend a significant amount of time and effort on the development of our airborne and color printer products as well as our data acquisition and recorder products. Failure to meet our customers' changing business needs or to further develop any of our new products and their related markets as anticipated could adversely affect our future revenue growth and operating results.

As we introduce new or enhanced products, we must also successfully manage the transition from older products to minimize disruption in customers' ordering patterns, avoid excessive levels of older product inventories and provide sufficient supplies of new products to meet customer demands. The introduction of new or enhanced products may shorten the life cycle of our existing products, or replace sales of some of our current products, thereby offsetting the benefit of even a successful product introduction and may cause customers to defer purchasing existing products in anticipation of the new products. Additionally, when we introduce new or enhanced products, we face numerous risks relating to product transitions, including the inability to accurately forecast demand, manage excess and obsolete inventories, address new or higher product cost structures, and manage different sales and support requirements due to the type or complexity of the new products. Any customer uncertainty regarding the timeline for rolling out new products or our plans for future support of existing products may cause customers to delay purchase decisions or purchase competing products which would adversely affect our business and operating results.

Operational and Business Strategy Risks:

We are dependent upon contract manufacturers for some of our products. If these manufacturers do not meet our requirements, either in volume or quality, then we could be materially harmed.

We subcontract the manufacturing and assembly of certain of our products to independent third parties at facilities located in various countries. Relying on subcontractors involves a number of significant risks, including:

- Disruptions in the global supply chain;
- Limited control over the manufacturing process;
- Potential absence of adequate production capacity;

- Potential delays in production lead times;
- Unavailability of certain process technologies;
- Reduced control over delivery schedules, manufacturing yields, quality and costs; and
- Exposure to rapid unplanned cost increases that cannot be adequately recovered by customer price increases due to market competition or contractual constraints.

If one of our significant subcontractors becomes unable or unwilling to continue to manufacture or provide these products in required volumes, fails to meet our quality standards, or imposes rapid price increases that we cannot recover in the market, we will have to identify alternate qualified subcontractors, take over the manufacturing ourselves, or redesign our products to use components from other suppliers. Additional qualified subcontractors may not be available or may not be available on a timely or cost-competitive basis. Any interruption in the supply, increase in the cost of the products manufactured by a third-party subcontractor, or failure of a subcontractor to meet quality standards could have a material adverse effect on our business, operating results and financial condition.

For certain components, assembled products and supplies, we are dependent upon single or limited source suppliers. If these suppliers do not meet demand, either in volume or quality, then we could be materially harmed.

Although we use standard parts and components for our products where possible, we purchase certain components, assembled products and supplies used in the manufacture of our products from a single source or limited supplier sources. If the supply of a key component, assembled products, or certain supplies were to be delayed or curtailed or, in the event a key manufacturing or sole supplier delays shipment of such components or assembled products, our ability to ship products in desired quantities and in a timely manner would be adversely affected. For example, as a result of the global COVID-19 pandemic, there was a disruption to our supply chain due to the delays of component shipments from our vendors in China and other jurisdictions in which normal business operations were disrupted. The supply chain disruption continues to affect our business as it has become difficult to ramp up production as quickly as needed to respond to the post-COVID increase in customer demand. Our business, results of operations and financial position could also be adversely affected, depending on the time required to obtain sufficient quantities from the original source or, if possible, to identify and obtain sufficient quantities from an alternative source as well as incurring higher costs to obtain needed components.

Additionally, if any single or limited source supplier becomes unable or unwilling to continue to supply components, assembled products, or supplies in required volumes or at acceptable prices, we will have to identify and qualify acceptable replacements or redesign our products with different components. Alternative sources may not be available, or product redesign may not be feasible on a timely basis. For example, in fiscal 2023, we experienced increased difficulty in obtaining certain technology-based parts, components and supplies from the largest single supplier of our PI segment at stable or predictable prices. Additionally, we experienced repeated significant quality problems with that supplier. We have responded to these issues by increasing our inventories of those products to mitigate supply risk, negotiating quality related cost reimbursements, and in some cases, accelerating our development of PI products that rely on alternative suppliers. In fiscal 2024, we incurred $0.6 million of incremental expense relating to warranty services and implementation of corrective retrofits resulting from these issues. Any interruption in the supply of or increase in the cost of the components, assembled products and supplies provided by single or limited source suppliers could have a material adverse effect on our business, operating results, and financial condition.

We face significant competition, and our failure to compete successfully could adversely affect our results of operations and financial condition.

We operate in an environment of significant competition, especially in the markets in which we sell our PI printers and T&M data acquisition products. This competition is driven by rapid technological advances, evolving industry standards, frequent new product introductions and the demands of customers to become more efficient. Our competitors range from large international companies to relatively small firms. We compete based on technology, performance, price, quality, reliability, brand, distribution and customer service and support. Our success in future performance is largely dependent upon our ability to compete successfully in the markets we currently serve and to expand into additional market segments. Additionally, current competitors or new market entrants may develop new products or services with features that could adversely affect the competitive position of our products. To remain competitive, we must develop new products, services and applications and periodically enhance our existing offerings. If we are unable to compete successfully, our customers could seek alternative solutions from our competitors and we could lose market share, which could materially and adversely affect our business, results of operations and financial position.

Our profitability is dependent upon our ability to obtain adequate pricing for our products and to control our cost structure.

Our success depends on our ability to obtain adequate pricing for our products and services. For a variety of complex reasons, many of which were triggered by the COVID-19 pandemic, the general economy has been significantly impacted by supply chain disruptions. Examples of some of these impacts on us include reduced availability of certain electronic components and the need to pay premium prices to obtain them, and noticeably higher costs for a wide array of other parts and raw material components in both of our product segments. Additionally, due to supply chain disruptions, it has become more difficult to obtain the needed components for our legacy T&M products, and as a result we have incurred higher costs to obtain these components. The supply chain disruptions have been exacerbated by increases in the cost of transportation to expedite incoming components and supplies. In many cases, we have had to expedite delivery of critical materials through significantly higher cost airfreight methods. Our ability to offset these effects through pricing actions for our products and services may not prove sufficient to offset these or further cost increases. Attempts to increase prices may not hold in the face of customer resistance and/or competition. If we are unable to obtain adequate pricing for our products and services, our results of operations and financial position could be materially adversely affected.

We are also continually reviewing our operations with a view towards reducing our cost structure, including but not limited to reducing our labor cost-to-revenue ratio, improving process and system efficiencies and outsourcing certain internal functions. In fiscal 2024, we engaged in restructuring actions to reduce our cost structure in our PI segment. However, if these efforts to constrain the cost of our operations are inadequate to offset higher product and employee wage costs, our results of operations and financial position could be materially adversely affected.

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

We rely on patents, trademarks, licenses, and proprietary knowledge and technology, both internally developed and acquired, in order to maintain a competitive advantage. Our competitors may develop technologies that are similar or superior to our proprietary technologies or design technologies around the intellectual property protections or licenses that we currently own. The loss of our Honeywell license agreement could have a material adverse impact on our business. Operating outside the United States also exposes us to additional intellectual property risk. The laws and enforcement practices of certain jurisdictions in which we operate do not protect our intellectual property rights to the same extent as in the United States. Any diminution in our ability to defend against the unauthorized use of these rights and assets could have an adverse effect on our results of operations and financial condition. Litigation may be necessary to protect our intellectual property rights or defend against claims of infringement, which could result in significant costs and divert our management's focus away from operations.

We have significant inventories on hand.

We maintain a significant amount of inventory, and as a result of recent supply chain disruptions and announced or anticipated price increases from suppliers, we have further increased the amount of inventory we maintain on hand to ensure we are able to meet market demand for our products at a reasonable price. These increases have been concentrated in label printing machines and supplies sold by our PI business, as well as in electronic components and assemblies in our T&M business. We maintain allowances for slow-moving and obsolete inventory that we believe are adequate, but any significant unanticipated changes in future product demand or market conditions, could have an impact on the value of inventory and adversely affect our business, operating results and financial condition.

We could incur liabilities as a result of installed product failures due to design or manufacturing defects.

We have incurred and could in the future incur additional liabilities because of product failures due to design or manufacturing defects. Our products may have defects despite our internal testing or testing by customers. These defects could result in, among other things, increased warranty provisions, a delay in recognition of sales, loss of sales, loss of market share, failure to achieve market acceptance, or damage to our reputation. We could be subject to material claims by customers and may incur substantial expenses to correct any product defects. While in the past, we have successfully obtained partial compensation from suppliers for their contribution to product quality issues, we may not be successful in such a recovery in the future, and these recoveries have not in the past and are not in the future likely to fully offset the full financial impact on us. For example, in fiscal 2023, the quality of products obtained from one of the key suppliers to our PI segment declined and we were unable to detect latent defects in their products in a timely manner, which resulted in our incurring increased technical service and warranty expenses. We obtained partial compensation from that supplier, but this was insufficient to fully cover all of our costs related to this issue. We also believe we have experienced demand declines as a result of customers' perceptions of the quality defects related to this supplier. In fiscal 2024, we continued to have quality and reliability issues in certain models of our PI printers as a result of faulty ink provided by one of our larger suppliers. During the second quarter of fiscal 2024, we initiated a program to retrofit all of the printers sold to our customers that were affected by the faulty ink at a total cost of $0.6 million. If we continue to experience product failures due to design or manufacturing defects, our business, results of operations and financial position could be materially and adversely affected.

In addition, through our acquisitions, we have assumed, and may in the future, assume liabilities related to products previously developed by an acquired company that may not have been subjected to adequate product development, testing and quality control processes, and may have unknown or undetected defects. Some types of defects may not be detected until the product is installed in a user environment. This may cause us to incur significant warranty, repair, or re-engineering costs. As such, it could also divert the attention of engineering personnel from product development efforts, which may result in increased costs and lower profitability.

We could experience a significant disruption in or security breach of our information technology system, which could harm our business and adversely affect our results of operations.

We rely on on-premise and cloud-based information technology systems, some of which are managed by or licensed from third parties, to support many critical aspects of our business, as well as to process, transmit and store our own electronic proprietary or confidential information, and confidential information of customers, employees, suppliers and others, including personally identifiable information, credit card data, and other proprietary confidential information. These systems are vulnerable to damage, disruptions and/or shutdowns due to attacks by cyber-criminals, data breaches, employee error, power outages, computer viruses, telecommunication or utility failures, systems failures, natural disasters, catastrophic events, or other unforeseen events. These vulnerabilities could interfere with our operations, compromise our data processing capacity and the security of our information and that of our customers and suppliers, and expose us to liability which could adversely impact our business and reputation. We actively manage these risks through a variety of hardware and software-based techniques that we own, license, or otherwise procure from third parties under contract to safeguard our systems, and we own or procure from third parties system data storage redundancy and disaster recovery capability. In particular, we have increased our investment in tools, techniques and training that we believe will reduce our vulnerability to attacks from cyber-criminals. However, due to the complexity of our systems, and especially due to the ever-increasing sophistication of cyber-criminals, there is no assurance that our efforts will be sufficient to prevent cyber-attacks, security breaches, or the other potential exploitation of vulnerabilities or systems failures. In any such circumstance, our system redundancy and other disaster recovery planning may be ineffective or inadequate. While we have experienced, and expect to continue to experience, these types of threats to our information technology networks and infrastructure, none of them to date has had a material impact. However, in the future, such events could result in legal claims or proceedings, liability or penalties under privacy laws, disruption in operations, and damage to our brand and reputation, all of which could adversely affect our business, operating results and financial condition.

We maintain insurance for a variety of cybersecurity risks to mitigate their possible impact, but because of the prevalence of claims in the market for cybersecurity insurance, the cost for that insurance has increased and the underwriting criteria to obtain such insurance has become far more demanding. There is no assurance that we will be able to obtain such insurance in the future, despite our substantial investments in cybersecurity, and if we are able to do so, it may be at substantially higher costs. In addition, in response to these higher costs, we may choose to reduce the amount of insurance we maintain because we believe our improvements in our cybersecurity profile have reduced our risk exposure relative to the increased cost of insurance. If our risk assessments prove incorrect and we were to have a loss not fully covered by insurance, our financial condition and results of operations could be materially negatively impacted.

We depend on our key employees and other highly qualified personnel and our ability to attract and develop new, talented professionals. Our inability to attract and retain key employees, as well as challenges with respect to the management of human capital resources, could compromise our future success and our business could be harmed.

Our future success depends upon our ability to attract and retain, through competitive compensation and benefits programs, professional and executive employees, including sales, operating, marketing, and financial management personnel as well as our ability to manage human capital resources. There is substantial competition for skilled personnel, and the failure to attract, develop, retain and motivate adequately qualified personnel could negatively impact our business, financial condition, results of operations and prospects. In order to hire new personnel or retain or replace our key personnel, we must maintain competitive compensation and benefits, and we may also be required to increase compensation, which would decrease net income. Additionally, several key employees have special knowledge of customers, supplier relationships, business processes, manufacturing operations, regulatory and customer quality compliance management, and financial management issues. The loss of any of these employees as the result of competitive compensation pressures or ineffective management of human capital resources could harm our ability to perform efficiently and effectively until their knowledge and skills are replaced, which might be difficult to do quickly, and as a result could have a material adverse effect on our business, financial condition, and results of operations. Failure to retain or attract key personnel could impede our ability to grow and could result in our inability to operate our business profitably.

Although we have not experienced any material disruptions due to labor shortages to date, we have observed an overall tightening and increasingly competitive labor market, and the demand for qualified individuals is expected to remain strong for the foreseeable future. Any sustained labor shortage or increased turnover rates within our employee base, could lead to increased costs and lost profitability and could otherwise compromise our ability to efficiently operate our business.

We may record future impairment charges, which could materially adversely impact our results of operations.

We test our goodwill balances annually, or more frequently if indicators are present or changes in circumstances suggest that impairment may exist. We assess goodwill for impairment at the reporting unit level and monitor the key drivers of fair value to detect events or other changes that would warrant an interim impairment test of our goodwill and intangible assets. Declines in the future performance and cash flows of a reporting unit or asset group, changes in our reporting units or in the structure of our business as a result of future reorganizations, acquisitions or divestitures of assets or businesses, or changes in other key assumptions, may result in the recognition of significant asset impairment charges, which could have a material adverse impact on our results of operations.

We also review our long-lived assets including property, plant and equipment, and other intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable.

Factors we consider include significant under-performance relative to expected historical or projected future operating results, significant negative industry or economic trends and our market capitalization relative to net book value. We may be required in the future to record a significant charge to earnings in our financial statements during the period in which any impairment of our long-lived assets is determined. Such charges could have a significant adverse impact on our results of operations and our financial condition.

Financial and Economic Risks:

*We face risks related to recession, inflation, stagflation and other economic conditions***.**

Customer demand for our products may be impacted by weak economic conditions, inflation, stagflation, recession, rising interest rates, equity market volatility or other negative economic factors in the U.S. or other nations. For example, under these conditions or the expectation of such conditions, our customers may cancel orders, delay purchasing decisions, or reduce their use of our services. In addition, these economic conditions could result in higher inventory levels and the possibility of additional charges if we request changes in delivery schedules or if suppliers incur additional costs that they pass on to us. Further, in the event of a recession or threat of a recession, our suppliers, distributors, and other third-party partners may suffer their own financial and economic challenges and, as a result, they may demand pricing accommodations, delay payment, or become insolvent, which could harm our ability to meet our customers' demands or collect revenue or could otherwise harm our business. Similarly, disruptions in financial or credit markets may impact our ability to manage normal commercial relationships with our customers, suppliers and creditors and might cause us to not be able to continue to access preferred sources of liquidity when we would like if at all, and our borrowing costs could increase. Thus, if general macroeconomic conditions continue to deteriorate, our business and financial results could adversely affect our business, operating results and financial condition.

In addition, we are subject to risks from inflation and increasing market prices of certain components, supplies, and raw materials, which are incorporated into our end products or used by our suppliers to manufacture our end products. These components, supplies and other raw materials have from time to time become restricted. General market factors and conditions have in the past and may in the future affect pricing of such components, supplies, and commodities.

Economic, political and other risks associated with international sales and operations could adversely affect our results of operations and financial position.

Because we sell our products worldwide, our business is subject to risks associated with doing business internationally. Revenue from international operations, which includes both direct and indirect sales to customers outside the U.S., accounted for approximately 43% of our total revenue for fiscal 2024, and we anticipate that international sales will continue to account for a significant portion of our revenue. In addition, we have employees, suppliers, contractors and facilities located outside the U.S. Accordingly, our business, operating results and financial condition could be harmed by a variety of factors, including:

- Interruption to transportation flows for delivery of parts to us and finished goods to our customers;
- Customer and vendor financial stability;
- Fluctuations in foreign currency exchange rates;
- Changes in a specific country's or region's environment including political, economic, monetary, regulatory, or other conditions;
- Trade protection measures and import or export licensing requirements;
- Negative consequences from changes in tax laws;
- Difficulty in managing and overseeing operations that are distant and remote from corporate headquarters;
- Difficulty in obtaining and maintaining adequate staffing;
- Differing labor regulations;
- Failure to comply with complex and rapidly changing government economic sanctions against other countries, especially arising from responses to armed conflict;
- Unexpected changes in regulatory requirements; and
- Geopolitical turmoil, including terrorism, war and public health disruptions, such as that caused by the COVID-19 pandemic or Russia's invasion of Ukraine.

To date, the impact of the Russian invasion of Ukraine and the resulting governmental sanctions and our decision to halt all activities in the affected areas has had an immaterial direct impact on our revenues. We believe, however, that the impact on the economies of Western Europe, especially Germany, which is the largest non-North American market for our products, has had a negative impact on demand for our products.

Changes in our tax rates or exposure to additional income tax liabilities or assessments could affect our profitability. In addition, audits by tax authorities could result in additional tax payments for prior periods.

As a global company, we are subject to taxation in numerous countries, states and other jurisdictions. As a result, our effective tax rate is based on the tax rates in effect where we operate. In preparing our financial statements, we estimate the amount of tax that will become payable in each jurisdiction. Our effective tax rate may vary as a result of numerous factors, including changes in the mix of our profitability from jurisdiction to jurisdiction, the results of examinations and audits of our tax filings, whether we secure or sustain acceptable arrangements with tax authorities, adjustments to the value of our uncertain tax positions, changes in accounting for income taxes and changes in tax laws. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods or our current expectations.

Changes to tax laws and regulations or changes to the interpretation thereof, the ambiguity of tax laws and regulations, the subjectivity of factual interpretations, uncertainties regarding the geographic mix of earnings in any particular period, and other factors could have a material impact on our estimates of our effective tax rate and our deferred tax assets and liabilities. The impact of these factors may be substantially different from period to period. In addition, the amount of income taxes we pay is subject to ongoing audits by U.S. federal, state, and local tax authorities. If audits result in payments or assessments different from our reserves, our future results may include unfavorable adjustments to our tax liabilities and our financial statements could be adversely affected. Any further significant changes to the tax system in the United States or in other jurisdictions (including changes in the taxation of international income as further described below) could adversely affect our financial statements.

We may have exposure to additional tax liabilities, which could negatively impact our income tax expense, net income and cash flow.

We are subject to income and other taxes in both the U.S. and the foreign jurisdictions in which we operate. The determination of our worldwide provision for income taxes and current and deferred tax assets and liabilities requires judgment and estimation. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. We are subject to regular review and audit by both domestic and foreign tax authorities and to the prospective and retrospective effects of changing tax regulations and legislation. Although we believe our tax estimates are reasonable, the ultimate tax outcome may materially differ from the amounts recorded in our consolidated financial statements and may materially affect our income tax benefit or expense, net loss or income, and cash flows in the period in which such determination is made.

Deferred tax assets are recognized for the expected future tax consequences of temporary differences between the carrying amount for financial reporting purposes and the tax bases of assets and liabilities, and for net operating losses and tax credit carry forwards. In some cases, we may record a valuation allowance to reduce our deferred tax assets to estimated realizable value. We review our deferred tax assets and valuation allowance requirements quarterly. If we are unable to demonstrate that it is more likely than not that we will not be able to generate sufficient future taxable income to realize the net carrying value of deferred tax assets, we will record a valuation allowance to reduce the deferred tax assets to estimated realizable value, which could result in a material income tax charge. As part of our review, we consider positive and negative evidence, including cumulative results of recent years.

If we are unable to successfully comply with our credit agreement with Bank of America or secure alternative financing, our business and financial condition could be materially adversely affected.

Our credit agreement with Bank of America, N.A. requires us, among other things, to satisfy certain financial ratios on an ongoing basis, consisting of a maximum consolidated leverage ratio, a minimum consolidated fixed charge coverage ratio and an asset coverage ratio. We are also required to comply with other covenants and conditions, set forth in the credit agreement, including, among others, limitations on our and our subsidiaries' ability to incur future indebtedness, to place liens on assets, to pay dividends or distributions on their capital stock, to repurchase or acquire their capital stock, to conduct mergers or acquisitions, to sell assets, to alter their capital structure, to make investments and loans, to change the nature of their business, and to prepay subordinated indebtedness, in each case subject to certain exceptions and thresholds as set forth in the credit agreement. If we were to violate the terms of the credit agreement and we were unable to renegotiate its terms at that time or secure alternative financing, it could have a material adverse impact on us.

The agreements governing our indebtedness subject us to various restrictions that limit our ability to pursue business opportunities.

The credit agreement governing our credit facility with Bank of America, N.A. contains, and any future debt agreements may include several restrictive covenants that impose significant operating and financial restrictions on us and our subsidiaries. Such restrictive covenants may significantly limit our ability to:

- Incur future indebtedness;
- Place liens on assets;
- Pay dividends or distributions on our and our subsidiaries' capital stock;
- Repurchase or acquire our capital stock;
- Conduct mergers or acquisitions;
- Sell assets; and/or
- Alter our or our subsidiaries' capital structure, to make investments and loans, to change the nature of their business, and to prepay subordinated indebtedness.

We may not realize the anticipated benefits of past or future acquisitions, divestitures and strategic partnerships, and integration of acquired companies or divestiture of businesses may negatively impact our overall business.

We have made strategic investments in other companies, products and technologies, including our August 2022 acquisition of Astro Machine LLC. We will continue to identify and pursue acquisitions of complementary companies and strategic assets, such as customer bases, products and technology. However, there can be no assurance that we will be able to identify suitable acquisition opportunities. In any acquisition that we complete, we cannot be certain that:

- We will successfully integrate the operations of the acquired business with our own;
- All the benefits expected from such integration will be realized;
- Management's attention will not be diverted or divided, to the detriment of current operations;
- Amortization of acquired intangible assets or possible impairment of acquired intangibles will not have a negative impact on operating results or other aspects of our business;
- Delays or unexpected costs related to the acquisition will not have a detrimental impact on our business, operating results and financial condition;
- Customer dissatisfaction with, or performance problems at, an acquired company will not have an adverse impact on our reputation;
- We will successfully implement effective disclosure controls and internal controls over financial reporting at the acquired business in a timely fashion; and
- Respective operations, management and personnel will be compatible.

For example, in the recently acquired Astro Machine business, revenues are concentrated in a relatively small number of customers. Failure to satisfy the delivery requirements of those customers or to adequately respond to their evolving product requirements could cause us to lose one or more customers which would have a material adverse impact on our financial condition and results of operation due to lower revenue and could result in intangible asset impairment.

In certain instances, as permitted by applicable law and NASDAQ rules, acquisitions, such as the Astro Machine acquisition, may be consummated without seeking and obtaining shareholder approval, in which case shareholders will not have an opportunity to consider and vote upon the merits of such an acquisition. Although we will endeavor to evaluate the risks inherent in an acquisition, there can be no assurance that we will properly ascertain or assess such risks.

We may also divest certain businesses from time to time. Divestitures will likely involve risks, such as difficulty splitting up businesses, distracting employees, potential loss of revenue and negatively impacting margins, and potentially disrupting customer relationships. A successful divestiture depends on various factors, including our ability to:

- Effectively transfer assets, liabilities, contracts, facilities and employees to the purchaser;
- Identify and separate the intellectual property to be divested from the intellectual property that we wish to keep; and
- Reduce fixed costs previously associated with the divested assets or business.

All of these efforts require varying levels of management resources, which may divert our attention from other business operations. Further, if market conditions or other factors lead us to change our strategic direction, we may not realize the expected value from such transactions.

If we are not able to successfully integrate or divest businesses, products, technologies or personnel that we acquire or divest, or able to realize the expected benefits of our acquisitions, divestitures or strategic partnerships, our business, results of operations and financial condition could be adversely affected.

Changes in our business strategy or restructuring of our businesses may increase our costs or otherwise affect the profitability of our businesses.

We continually review our operations with a view toward reducing our cost structure, including but not limited to reducing our labor cost-to-revenue ratio, improving process and system efficiencies and increasing our revenues and operating margins. For example, in fiscal 2024 we implemented a restructuring plan in our PI segment to reduce operating costs within that segment. As changes in our business environment occur, we may need to adjust our business strategies to meet these changes, or we may otherwise find it necessary to restructure our operations or particular businesses or assets. When these changes or events occur, we may incur costs to change our business strategy and may need to write down the value of assets or sell certain assets. In any of these events our costs may increase, and we may have significant charges or losses associated with the write-down or divestiture of assets.

Adverse conditions in the global banking industry and credit markets could impair our liquidity or interrupt our access to capital markets, borrowings or financial transactions to hedge certain risks.

At the end of fiscal 2024, we had approximately $4.5 million of cash and cash equivalents. Our cash and cash equivalents are held in bank demand deposit accounts and foreign bank accounts. Disruptions in the financial markets may, in some cases, result in an inability to access assets such as money market funds that traditionally have been viewed as highly liquid. Any failure of our counterparty financial institutions or funds in which we have invested may adversely impact our cash and cash equivalent positions and, in turn, our financial position.

To date, we have been able to access financing that has allowed us to make investments in growth opportunities and fund working capital requirements as needed. In addition, we occasionally enter into financial transactions to hedge certain foreign exchange and interest rate risks. Our continued access to capital markets, the stability of our lenders and their willingness to support our needs, and the stability of the counterparties to our financial transactions that hedge risks are essential for us to meet our current and long-term obligations, fund operations, and fund our future strategic initiatives. An interruption in our access to external financing or financial transactions to hedge risk could materially and adversely affect our business and financial condition.

Inadequate self-insurance accruals or insurance coverage for employee healthcare benefits could have an adverse effect on our business, financial results or financial condition.

In the U.S., we maintain an employee health insurance coverage plan on a self-insured basis backed by stop-loss coverage which sets a limit on our liability for both individual and aggregate claim costs. We record expenses based on actual claims incurred and estimates of the costs of expected claims, administrative costs, and stop-loss insurance premiums.

We record a liability for our estimated cost of U.S. claims incurred and unpaid as of each balance sheet date. Our estimated liability is recorded on an undiscounted basis and is based on historical trends and data provided by our insurance broker. Our history of claims activity is closely monitored, and liabilities are adjusted as warranted based on changing circumstances. It is possible, however, that our actual liabilities may exceed our estimates of losses. We may also experience an unexpectedly large number of claims that result in costs or liabilities in excess of our projections, which could cause us to record additional expenses, which could adversely impact our business, financial condition, results of operations and cash flow.

Legal and Regulatory Risks:

Certain of our products require certifications by customers, regulators or standards organizations, and our failure to obtain or maintain such certifications could negatively impact our business.

In certain industries and for certain products, such as those used in aircraft, we must obtain certifications for our products by customers, regulators or standards organizations. If we fail to obtain required certifications for our products, or if we fail to maintain such certifications on our products after they have been certified, our business, financial condition, results of operations and cash flows could be materially and adversely affected.

We are subject to laws and regulations; failure to address or comply with these laws and regulations could harm our business and adversely affect our results of operations.

Our operations are subject to laws, rules, regulations, including environmental regulations, government policies and other requirements in each of the jurisdictions in which we conduct business. Changes in laws, rules, regulations, policies or requirements could result in the need to modify our products and could affect the demand for our products, which may have an adverse impact on our future operating results. In addition, we must comply with regulations restricting our ability to include lead and certain other substances in our products. If we do not comply with applicable laws, rules and regulations we could be subject to costs and liabilities and our business may be adversely impacted.

We are subject to regulatory constraints and compliance requirements due to our status as a publicly held company. Public company compliance costs are increasing due to the increase in SEC regulations and enforcement actions, and the heightened scrutiny that we and the public accounting industry face from the Public Companies Accounting Oversight Board. Additionally, certain new and proposed regulations in the State of Rhode Island, where we are headquartered, are likely to increase compliance costs. In some instances, the regulations may mandate action on our part for which, to our knowledge, no current technical means to comply exist. If enacted, the costs of complying with these regulations could have a material adverse impact on our business.

Our business outside of the United States exposes us to foreign and additional U.S. laws and regulations, including but not limited to, laws and regulations relating to taxation, business licensing or certification requirements, employee rights and protection, consumer protection, intellectual property rights, consumer and data protection, privacy, encryption, restrictions on pricing or discounts, and the U.S. Foreign Corrupt Practices Act and other applicable U.S. and foreign laws prohibiting corrupt payments to government officials and other third parties. For example, the increased use of sanctions in U.S. international relations recently has increased our cost of compliance with the regulations intended to enforce them.

Section 404 of the Sarbanes-Oxley Act of 2002 requires that companies evaluate and report on the effectiveness of their internal control over financial reporting and any inability to achieve and maintain effective disclosure controls and procedures and internal control over financial reporting, could adversely affect our results of operations, our stock price and investor confidence in our company.

We have identified a material weakness in our internal control over financial reporting and that weakness has led to a conclusion that our internal control over financial reporting and disclosure controls and procedures were not effective as of January 31, 2024. The material weakness related to our failure to design and maintain an effective control environment at our Astro Machine subsidiary, which was acquired in August of 2022. Management is taking action to remediate this material weakness in its internal controls over financial reporting by designing an effective control environment and expanding our existing enterprise resource planning system to include the Astro Machine subsidiary.

If action to remediate this material weakness is not completed on a timely basis, or if other remediation efforts are not successful, we may, in the future, identify additional internal control deficiencies that could rise to the level of a material weakness or uncover other errors in financial reporting.

Failure to have effective internal control over financial reporting and disclosure controls and procedures could impair our ability to produce accurate financial statements on a timely basis, or provide reliable financial statements needed for business decision processes, and our business and results of operations could be harmed. Additionally, investors could lose confidence in our reported financial information and our ability to obtain additional financing, or additional financing on favorable terms, could be adversely affected. Also, failure to maintain effective internal control over financial reporting could result in sanctions by regulatory authorities.

Certain of our operations and products are subject to environmental, health and safety laws and regulations, which may result in substantial compliance costs or otherwise adversely affect our business.

Our operations are subject to numerous federal, state, local and foreign laws and regulations relating to protection of the environment, including those that impose limitations on the discharge of pollutants into the air and water, establish standards for the use, treatment, storage and disposal of solid and hazardous materials and wastes, and govern the cleanup of contaminated sites. As such, our business is subject to and may be materially and adversely affected by compliance obligations and other liabilities under those environmental, health and safety laws and regulations. Certain of our products contain, and some of manufacturing operations use various substances which have been or may be deemed to be hazardous or dangerous. Thus, we have and will continue to generate a generally limited amounts of hazardous waste in our operations. We manage our compliance with laws and regulations and the proper mitigation of risks internally and through the input of external consultants and outside service providers and we believe we are in material compliance with all applicable environmental laws and regulations. We desire to reduce and ultimately eliminate any adverse environmental impact of our business and to comply with relevant laws and regulations. We expect this effort to affect our ongoing operations and require additional capital and operating expenditures. If we were to fail to manage our environmental compliance effectively, we could suffer economic or reputational harm.

Our operations are subject to anti-corruption laws, including the U.S. Foreign Corrupt Practices Act, and any determination that we or any of our subsidiaries has violated the Foreign Corrupt Practices Act could have a material adverse effect on our business.

The U.S. Foreign Corrupt Practices Act (FCPA), the UK Bribery Act and similar worldwide anti-corruption laws generally prohibit companies and their intermediaries from making improper payments to government officials and others for the purpose of obtaining or retaining business. Our internal policies mandate compliance with these anti-corruption laws. We operate in parts of the world that have experienced governmental corruption to some degree, and in certain circumstances, strict compliance with anti-corruption laws may conflict with local customs and practices. Despite our training and compliance programs, there can be no assurance that our internal control policies and procedures will protect us from reckless or criminal acts committed by those of our employees or agents who violate our policies.

Unauthorized access to personal data could give rise to liabilities as a result of governmental regulation, conflicting legal requirements or differing views of personal privacy rights and compliance with laws designed to prevent unauthorized access of personal data could be costly.

We collect and store certain data, including proprietary business information, and may have access to confidential or personal information that is subject to privacy and security laws, regulations and customer-imposed controls. Security breaches or other unauthorized access to, or the use or transmission of, personal user information could result in a variety of claims against us, including privacy-related claims. There are numerous federal, state, local, and international laws and regulations regarding privacy and the storage, sharing, use, processing, disclosure and protection of this kind of information, the scope of which are changing, inconsistent and conflicting and subject to differing interpretations.

We also expect that there will continue to be new laws, regulations, and industry standards concerning privacy, data protection, and information security proposed and enacted in various jurisdictions. For example, in 2016 the European Commission adopted the General Data Protection Regulation (GDPR), a comprehensive privacy and data protection reform that became effective in May 2018. The GDPR, which is applicable to all companies processing data of European Union residents, imposes significant fines and sanctions for violations. These requirements are complicated, and compliance is technically complex to maintain. We contract with outside experts to advise us, conduct internal and external compliance training, and believe we are currently in compliance, however, maintaining compliance has increased costs and diverted resources. Similarly, the California Consumer Privacy Act of 2018, which was enacted in June 2018 and came into effect on January 1, 2020, provides a new private right of action for data breaches and requires companies that process information on California residents to make new disclosures to consumers about their data collection, use and sharing practices and allow consumers to opt out of certain data sharing with third parties.

Additionally, other jurisdictions have enacted or are enacting data localization laws that require data generated in or relating to the residents of those jurisdictions to be physically stored within those jurisdictions. In many cases, these laws and regulations apply not only to transfers between unrelated third parties but also to transfers between us and our subsidiaries. All these evolving compliance and operational requirements impose significant costs that are likely to increase over time.

While we continue to assess these requirements and the ways they may impact the conduct of our business, we believe that we materially comply with applicable laws and industry codes of conduct relating to privacy and data protection. There is no assurance that we will not be subject to claims that we have violated applicable laws or codes of conduct, that we will be able to successfully defend against such claims or that we will not be subject to significant fines and penalties in the event we are found not to be in compliance with such laws or codes of conduct.

Any failure or perceived failure by us (or any third parties with whom we have contracted to store such information) to comply with applicable privacy and security laws, policies or related contractual obligations or any compromise of security that results in unauthorized access to personal information may result in governmental enforcement actions, significant fines, litigation, claims of breach of contract and indemnity by third parties and adverse publicity. In the case of such an event, our reputation may be harmed, we could lose current and potential users and the competitive positions of our various brands could be diminished, any or all of which could adversely affect our business, financial condition and results of operations.

Changes in accounting standards and subjective assumptions, estimates, and judgments by management related to complex accounting matters could significantly affect our financial results or financial condition.

Generally accepted accounting principles and related accounting pronouncements, implementation guidelines, and interpretations with regard to a wide range of matters that are relevant to our business, such as revenue recognition, asset impairment and fair value determinations, inventories, business combinations and intangible asset valuations, income taxes, and warranties, are highly complex and involve many subjective assumptions, estimates and judgments. Changes in these rules or their interpretation or changes in underlying assumptions, estimates, or judgments could significantly change our reported or expected financial performance or financial condition.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Cybersecurity Risk Management and Strategy

We have made substantial investments in cybersecurity risk management, and it is an integral part of our overall enterprise risk management program. We have implemented a variety of tools and a process designed to identify, monitor, evaluate and respond to cybersecurity threats and incidents, including those associated with our use of third-party vendors and service providers. Our process consists of steps for identifying the source of a cybersecurity threat or incident, including whether such cybersecurity threat or incident is associated with a third-party vendor or service provider; implementing cybersecurity countermeasures and mitigation strategies, and informing management and our board of directors of potentially material cybersecurity threats and incidents or other significant changes in the evolving cybersecurity threat landscape. We intend to continue to make substantial investments in cybersecurity risk management to improve our tools and processes because the cybersecurity threat continues to evolve. While we continue to invest in our infrastructure environment and monitoring capability, and in due diligence with respect to the third parties with whom we interact, there can be no assurance that we can prevent, mitigate, or remediate the risk of any compromise or failure in the cybersecurity infrastructure owned or controlled by us or any third-party vendor or service providers that we use.

Our Information Technology team reports to senior management and is responsible for assessing and maintaining our cybersecurity risk management program. In addition, they collaborate with third-party security specialists as necessary, aiming for thorough risk assessments and system improvements. Together with our third-party security service providers, the Information Technology team oversees our processes for the prevention, detection, mitigation, and resolution of cybersecurity incidents. Throughout the year, we regularly train our employees on cybersecurity awareness and confidential information protection. We review or update our cybersecurity policies and the effectiveness of our programs to manage cybersecurity risk on a continuing basis, to account for changes in the evolving cybersecurity threat landscape, as well as for any related legal and regulatory developments that may occur.

Cybersecurity threats have the potential to materially affect our company, including our business strategy, results of operations, and financial condition. While we have not experienced material adverse effects from cybersecurity threats to date, we recognize the evolving nature of these risks and remain vigilant in our efforts to mitigate potential impacts. Refer to “Item 1A. - Risk Factors” in this annual report on Form 10-K, including, “We could experience a significant disruption in or security breach of our information technology system which could harm our business and adversely affect our results of operations,” for additional discussion on our cybersecurity related risks.

Cybersecurity Governance

Our management, including our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), and Information Technology team are responsible for identifying and assessing cybersecurity risks on an ongoing basis, establishing processes designed to provide reasonable assurance that such potential cybersecurity risk exposures are monitored, instituting appropriate mitigation and remediation measures, and maintaining cybersecurity programs. Additionally, since we do not have a full time Chief Information Security Officer, we obtain additional domain expertise from third party outside resources. Our cybersecurity programs are managed under the direction of our CFO, who receives reports from our Information Technology team and third-party resources to monitor the prevention, detection, mitigation, and remediation of cybersecurity risks.

Our board of directors has oversight responsibility for our overall enterprise risk management and directly oversees our cybersecurity risk management. As part of its enterprise risk management efforts, our board of directors regularly receives reports from management on our cybersecurity programs with regard to any risks that may arise from specific cybersecurity threats and incidents. The board of directors oversees management’s programs, policies and processes in place that identify, monitor, assess, and respond to cybersecurity, data privacy, and other information technology risks to which we are exposed.

Item 2. ***Properties***

The following table sets forth information regarding our principal owned properties. The West Warwick property is subject to a security agreement and a mortgage in favor of the lender under our credit facility.

Location	Approximate Square Footage	Principal Use
West Warwick, Rhode Island, United States	135,500	Corporate headquarters, research and development, manufacturing, sales and service
Elk Grove Village, Illinois	34,460	Astro Machine principal place of business

The West Warwick facility is used by both of our business segments, while the Elk Grove Village facility is exclusively used by the PI segment.

We also lease facilities in various other locations. The following information pertains to each location:

Location	Approximate Square Footage	Principal Use
Dietzenbach, Germany	18,630	Manufacturing, sales and service (PI segment)
Copenhagen, Denmark	4,800	R&D, sales and service (PI segment)
Brossard, Quebec, Canada	4,500	Manufacturing, sales and service (PI segment)
Elancourt, France	4,150	Sales and service (PI segment)
Shah Alam, Selangor, Malaysia	2,067	Sales (PI segment)
Singapore	2,400	Sales (T&M segment)
Shanghai, China	425	Sales (PI segment)
Mexico City, Mexico	97	Sales (PI segment)

We believe all our facilities are well maintained in good operating condition and generally adequate to meet our needs for the foreseeable future.

Item 3. ***Legal Proceedings***

We are party to various legal proceedings arising from normal business activities. Management believes that the ultimate resolution of these matters will not have a material adverse effect on our financial position, results of operations or cash flows. Additionally, because of the nature of our business, we may be subject in the future to lawsuits or other claims, including those pertaining to product liability, patent infringement, commercial, employment, employee benefits, environmental and stockholder matters and an unfavorable resolution of any of these matters could materially affect our future results of operations, cash flows or financial position.

Item 4. ***Mine Safety Disclosures***

Not applicable.

PART II

Item 5. ***Market for the Registrant's Common Stock, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Our common stock trades on the NASDAQ Global Market under the symbol "ALOT."

As of April 5, 2024, we had approximately 370 shareholders, which does not reflect shareholders with beneficial ownership in shares held in nominee name.

Stock Repurchases

During the fourth quarter of fiscal 2024, we made the following repurchases of our common stock:

	Total Number of Shares Repurchased	Average Price paid Per Share ($)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares That May Be Purchased Under the Plans or Programs
November 1 – November 30	—	—	—	—
December 1 – December 31	309(a)	15.16(a)	—	—
January 1 – January 31	—	—	—	—

(a) An executive of the company delivered 309 shares of our common stock toward the satisfaction of taxes due in connection with the vesting of restricted shares. The shares delivered were valued at a market value of $15.16 per share and are included with treasury stock in the consolidated balance sheet.

Item 6. [Reserved]

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

The following discussion and analysis are meant to provide material information relevant to an assessment of the financial condition and results of operations of our company, including an evaluation of the amounts of cash flows from operations and outside resources, liquidity and certain other factors that may affect future results so as to allow investors to better view our company from management’s perspective. The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements and the related notes and other financial information included elsewhere in this annual report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this annual report on Form 10-K, including information with respect to our plans and strategy for our business and financing, includes forward-looking statements that involve risks and uncertainties. Carefully review the “Forward-Looking Statements” and “Risk Factors” sections of this annual report on Form 10-K for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a multi-national enterprise that leverages our proprietary data visualization technologies to design, develop, manufacture, distribute and service a broad range of products that acquire, store, analyze and present data in multiple formats. We organize our structure around a core set of competencies, including research and development, manufacturing, service, marketing and distribution. We market and sell our products and services through the following two segments:

- Product Identification (“PI”) – offers color and monochromatic digital label printers, over-printers and custom OEM printers. PI also provides software to design, manage and print labeling and packaging images locally and across networked printing systems, as well as all related printing supplies such as pressure-sensitive labels, tags, inks, toners and thermal transfer ribbons used by digital printers. PI also provides on-site and remote service, spare parts and various service contracts.
- Test and Measurement (“T&M”) – offers a suite of products and services that acquire data from local and networked data streams and sensors as well as wired and wireless networks. The T&M segment includes a line of aerospace printers used to print hard copies of data required for the safe and efficient operation of aircraft, including navigation maps, clearances, arrival and departure procedures, NOTAMs, flight itineraries, weather maps, performance data, passenger data, and various air traffic control data. Aerospace products also include aircraft networking systems for high-speed onboard data transfer. T&M also provides repairs, service and spare parts.

On August 4, 2022, we completed the acquisition of Astro Machine, an Illinois-based manufacturer of printing equipment, including label printers, tabbers, conveyors, and envelope feeders, for aggregate consideration of $17.1 million. Astro Machine is reported as part of our PI segment beginning with the third quarter of fiscal 2023. Refer to Note 2, “Acquisition,” in our consolidated financial statements included elsewhere in this report for further details.

On July 26, 2023, we adopted a restructuring plan (the “2024 Restructuring Plan”) for our PI segment that transitioned a portion of the printer manufacturing within that segment from our facility in Rhode Island to our Astro Machine facility located in Illinois. Additionally, we ceased selling certain of our older, lower-margin or low-volume PI segment products and made targeted reductions to our workforce. As part of the 2024 Restructuring Plan, we also consolidated certain of our international PI sales and distribution facilities and streamlined our channel partner network. The total cost of this plan was $2.5 million, comprised primarily of non-cash charges related to inventory write-offs and facility exit costs, and cash charges related to severance-related costs. As of January 31, 2024, we have completed the 2024 Restructuring Plan. Refer to Note 19, “Restructuring,” in our consolidated financial statements included elsewhere in this report for further details.

In connection with our 2024 Restructuring Plan, we identified the need to address quality and reliability issues in certain models of our PI printers as a result of faulty ink provided by one of our larger suppliers. We identified approximately 150 printers sold to our customers that were affected by the faulty ink. In order to remedy these issues and maintain solid customer relationships, during the second quarter of fiscal 2024, we initiated a program to retrofit all of the affected printers sold to our customers (the “2024 Product Retrofit Program”). The costs associated with this program, which included the cost of parts, labor and travel, were $0.6 million and were included in cost of revenue in our consolidated income statement for the year ended January 31, 2024. During fiscal 2024, we worked with our customers to either repair or replace the affected printers and at the end of the fourth quarter of fiscal 2024, the 2024 Product Retrofit Program was concluded. Refer to Note 19, “Restructuring,” in our consolidated financial statements included elsewhere in this report for further details.

We market and sell our products and services globally through a diverse distribution structure of direct sales personnel, manufacturers’ representatives, OEMs, and authorized dealers that deliver a full complement of branded products and services to customers in our respective markets. Our growth strategy centers on organic growth through product innovation made possible by research and development initiatives, as well as strategic acquisitions that fit into or complement existing core businesses. In fiscal 2024, 2023, and 2022, revenue from customers in various geographic areas outside the United States, primarily in Western Europe, Canada and Asia, amounted to $63.3 million, $59.0 million, and $49.3 million, respectively.

We maintain an active program of product research and development. We spent approximately $6.9 million in fiscal 2024 and $6.8 million in both fiscal 2023 and 2022, on Company-sponsored product development. We are committed to continuous product development as essential to our organic growth and expect to continue our focus on research and development efforts in fiscal 2025 and beyond.

We also continue to invest in sales and marketing initiatives by expanding and improving the existing sales force and using various marketing campaigns to achieve our goals of sales growth and increased profitability.

Impact of COVID-19

The lingering impact of the COVID-19 pandemic continues to affect our business, most notably in our T&M segment. While sales demand in this segment has largely recovered in the current year due to the increase in demand for air travel and new aircraft, it has not yet reached pre-COVID-19 levels. Additionally, the lingering disruptions in the supply chain from the COVID-19 pandemic continue to impact our business, as it has become difficult to ramp up production as quickly as needed to respond to the increase in customer demand. Furthermore, due to supply chain disruptions, it has become increasingly difficult to obtain the needed components for our legacy T&M products and as a result we have incurred higher costs to obtain these components.

Results of Operations

Fiscal 2024 compared to Fiscal 2023

The following table presents the revenue of each of our segments, as well as the percentage of total revenue and change from the prior year.

($ in thousands)	2024			2023	
	Revenue	As a % of Total Revenue	% Change Over Prior Year	Revenue	As a % of Total Revenue
PI	$ 104,041	70.3%	0.9%	$ 103,089	72.3%
T&M	44,045	29.7%	11.7%	39,438	27.7%
Total	$ 148,086	100.0%	3.9%	$ 142,527	100.0%

Net revenue in fiscal 2024 was $148.1 million, a 3.9% increase compared to net revenue of $142.5 million for fiscal 2023. Current year revenue through domestic channels was $84.8 million, an increase of 1.4% from prior year domestic revenue of $83.6 million. International revenue of $63.3 million for fiscal 2024 increased 7.4% compared to prior year international revenue of $59.0 million. Fiscal 2024 international revenue reflects a favorable foreign exchange rate impact of $0.4 million, compared to an unfavorable foreign exchange rate impact of $3.5 million in fiscal 2023.

Hardware revenue in fiscal 2024 was $49.4 million, a $7.0 million or 16.5% increase compared to fiscal 2023 hardware revenue of $42.4 million due to increased hardware sales in both the T&M and PI segments. T&M hardware sales increased 15.8% or $3.8 million compared to the prior year primarily due to increased sales in our aerospace printer product line. Current year hardware sales in the PI segment increased 17.4% or $3.1 million compared to the prior year, predominately as a result of the August 2022 acquisition of Astro Machine which contributed a full year of revenue for fiscal 2024, compared to six months in fiscal 2023. The increase in PI hardware sales for the current year was slightly offset by a decline in sales of our QuickLabel and TrojanLabel product line printers.

Revenue from supplies in fiscal 2024 was $79.3 million, a 3.4% or $2.8 million decrease compared to fiscal 2023 supplies revenue of $82.1 million. The current year decrease in supplies revenue was primarily due to lower sales of ink jet supply products in the PI segment, which declined $3.3 million or 5.2% from the prior year. Also contributing to the decrease in current year supply revenue was the decline in thermal film supplies in the PI segment. The overall decline in supplies sales in the current year was partially offset by increased sales of toner and media supplies in our PI segment and an increase in paper supply revenue for the aerospace printers in our T&M segment.

Service and other revenue in fiscal 2024 was $19.4 million, a 7.7% or $1.4 million increase compared to fiscal 2023 service and other revenue of $18.0 million. The increase is primarily due to the inclusion of a full year of Astro Machine parts revenue in the PI segment for the current year, compared to six months in fiscal 2023. Also contributing to the current year increase is the increased repair and parts revenue for aerospace printer products in the T&M segment due to the impact of increased flight hour usage and pricing increases.

Gross profit was $51.6 million for fiscal 2024, reflecting a 7.2% increase compared to fiscal 2023 gross profit of $48.2 million. Our gross profit margin of 34.9% in fiscal 2024 reflects a 1.1 percentage point increase compared to fiscal 2023 gross profit margin of 33.8%. The increased gross profit and related profit margin for the current year compared to the prior year is primarily attributable to higher margins on a favorable product mix.

Operating expenses for the current year were $42.8 million, representing a 0.3% increase from the prior year's operating expenses of $42.7 million. Specifically, selling and marketing expenses of $24.4 million in fiscal 2024 decreased 0.1% from the prior year amount of $24.5 million. The slight decrease in selling and marketing expenses for the current year is primarily due to a decrease in wages and benefits as well as a decrease in maintenance contract fees. Current year selling and marketing expense was also impacted by $0.4 million in restructuring costs related to the 2024 Restructuring Plan. The current year decrease in selling and marketing expenses was partially offset by an increase in amortization expense related to the customer relationship and trademark intangibles acquired as part of the Astro Machine acquisition. General and administrative expenses increased 0.5% to $11.5 million in the current year compared to $11.4 million in the prior year, as increases in professional fees, wages, and bonuses were largely offset by decreases in outside service and employee fees. Current year general and administrative expense was also impacted by $0.1 million of restructuring costs related to the 2024 Restructuring Plan. Research & development ("R&D") costs in fiscal 2024 of $6.9 million increased 1.2% from fiscal 2023, as increases in outside consulting and service expenses were substantially offset by decreases in employee wage and bonus expenses. The R&D spending level for fiscal 2024 represents 4.7% of net revenue, compared to the prior year level of 4.8%.

Other expense in fiscal 2024 was $2.7 million compared to $2.0 million in fiscal 2023. Current year other expense includes $2.7 million of interest expense on our debt and revolving credit facility and $0.1 million of net foreign exchange loss, offset by net other income of $0.1 million. Prior year other expense included interest expense on debt and revolving credit facility of $1.7 million, and net foreign exchange loss of $0.5 million, offset by other income of $0.1 million.

We recognized $1.4 million of income tax expense for the current fiscal year, resulting in an effective tax rate of 22.7% compared to 22.0% in fiscal 2023. The increase in the effective tax rate in fiscal 2024 from fiscal 2023 is primarily related to the impact of the valuation allowance recorded on China net operating losses, the increase in the current provision for state and local taxes, and the change in the foreign rate differential. This increase was partially offset by other factors decreasing the effective tax rate such as foreign derived intangible income deduction, share based compensation, and the R&D tax credit.

Net income for fiscal 2024 was $4.7 million, or $0.63 per diluted share. The results for this period were impacted by expense of $2.6 million ($2.0 million net of tax or $0.27 per diluted share) related to the 2024 Restructuring Plan and expense of $0.6 million ($0.5 million net of tax or $0.07 per diluted share) related to the 2024 Product Retrofit Program. Net income for fiscal 2023 was $2.7 million, or $0.36 per diluted share. The results for the fiscal 2023 year were impacted by expenses of $0.7 million ($0.5 million net of tax, or $0.07 per diluted share) related to transaction costs of the Astro Machine acquisition.

Fiscal 2023 compared to Fiscal 2022

For a comparison of our results of operations for the fiscal years ended January 31, 2023, and January 31, 2022, see "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our annual report on Form 10-K for the fiscal year ended January 31, 2023, filed with the SEC on April 17, 2023.

Segment Analysis

We report two segments consistent with our product revenue groups: PI and T&M. Segment performance is evaluated based on the operating segment's profit before corporate and financial administration expenses. The following table summarizes selected financial information by segment.

($ in thousands)	Revenue			Segment Operating Profit			Segment Operating Profit as a % of Revenue		
	2024	2023	2022	2024	2023	2022	2024	2023	2022
P I	$ 104,041	$ 103,089	$ 90,915	$ 10,087	$ 7,889	$ 10,411	9.7%	7.7%	11.5%
T&M	44,045	39,438	26,565	10,200	8,989	3,398	23.2%	22.8%	12.8%
Total	$ 148,086	$ 142,527	$ 117,480	20,287	16,878	13,809	13.7%	11.8%	11.8%
Corporate Expenses				11,491	11,435	9,553			
Operating Income				8,796	5,443	4,256			
Other Income (Expense), Net				(2,723)	(2,033)	2,778			
Income Before Income Taxes				6,073	3,410	7,034			
Income Tax Provision				1,379	749	605			
Net Income				$ 4,694	$ 2,661	$ 6,429			

Product Identification

Revenue from the PI segment increased 0.9% in fiscal 2024, with revenue of $104.0 million compared to revenue of $103.1 million in the prior year. The current year increase is primarily attributable to the contribution of a full year of revenue from the fiscal 2023 acquisition of Astro Machine, compared to six months in the prior year. Trojan Label related product supplies and part revenues also grew in fiscal 2024 compared to the prior year due to the larger installed base of these printers. The current year increase in PI revenue was largely offset by declines in the revenue from inkjet supplies and certain tabletop label hardware sales, particularly in North America resulting primarily from the continued adverse market reaction to the deterioration of certain label printers due to the ink quality issues related to one of our larger suppliers. PI current year segment operating profit was $10.1 million with a profit margin of 9.7%, compared to the prior year segment operating profit of $7.9 million and related profit margin of 7.7%. The increase in the current year PI segment operating profit and margin is primarily due to the inclusion of Astro Machine for the full twelve months of fiscal 2024, lower manufacturing and operating expenses and a favorable product mix, partially offset by the impact of $2.5 million of costs related to the 2024 Restructuring Plan and $0.6 million of costs recognized in the current year relating to the 2024 Product Retrofit Program. At this time, we believe the outlook for PI business is favorable due to the strategic realignment accomplished by the 2024 Restructuring Plan which will allow us to concentrate on higher-margin PI products as well as consolidate our PI sales and distribution facility and streamline our channel partner network.

Test & Measurement

Revenue from the T&M product group was $44.0 million for fiscal 2024, an 11.7% increase compared to revenue of $39.4 million in the prior year. The increase in revenue for the current year was primarily attributable to strong hardware sales in our aerospace product lines as a result of increased aerospace printer product unit volume. Demand for printers has increased due to the post-pandemic recovery in air travel demand, which has driven new orders for airplanes and a corresponding increase in production rates. Also contributing to the current year increase in revenue were increased sales of ToughSwitch ethernet products, which continue to recover to levels consistent with the fiscal 2019 through 2021 period after a large decline in fiscal 2022, and we currently expect comparable revenue from those products in fiscal 2025. T&M revenue in fiscal 2024 and 2023 was also impacted by $1.3 million and $1.1 million, respectively, of revenue recognized as the result of successful claims for component cost increases for printer shipments to one customer as described in Note 3, “Revenue Recognition,” in our consolidated financial statements included elsewhere in this report. The current year increase in T&M revenue was additionally favorably impacted by increased repair, parts and paper supply revenue related to aerospace printers, as flight hours and product utilization increased. The current year T&M segment revenue increase was partially offset by a decline in T&M hardware sales in the data recorder product line. At this time, we believe the outlook for T&M supplies, service and other revenue is favorable as the expected higher flight hours in commercial aviation should correlate favorably to higher aerospace printer supplies, parts and repair revenue. T&M current year segment operating profit was $10.2 million resulting in a 23.2% profit margin compared to the prior year segment operating profit of $9.0 million and related operating margin of 22.8%. The increased profit and margins were primarily attributable to higher revenue from high-margin product lines.

Liquidity and Capital Resources

Overview

Historically, our primary sources of short-term liquidity have been cash generated from operating activities and borrowings under our revolving credit facility. These sources have also historically funded the majority of our capital expenditures and contractual contingent consideration obligations. In fiscal 2024, we financed, under our secured equipment loan facility agreement, $0.8 million of capital investments to upgrade production machinery to support planned revenue growth and cost reduction objectives. In fiscal 2023, we funded the acquisition of Astro Machine in part by borrowing under our credit facilities, as further described below.

We believe that in the coming year and in the longer term, cash flow generation from operations and available unused credit capacity under our credit facility will support our anticipated needs. In fiscal 2025 (after required debt amortization and payment of minimum guaranteed royalty payments to Honeywell), we will be focused on inventory reduction and reduction of debt outstanding under our revolving credit facility, to the degree possible as constrained by supply chain management challenges. Furthermore, if acquisition opportunities develop that would require additional cash above our current available capacity, based on regular communication with our lender, we believe that our current operating performance and the reduction in leverage ratios as measured by the covenants within our credit facilities since the acquisition of Astro Machine would permit us to obtain sufficient additional short and long term debt financing, barring any unforeseen changes in the credit and capital markets.

In connection with our purchase of Astro Machine on August 4, 2022, we entered into a Second Amendment to Amended and Restated Credit Agreement (the “Second Amendment”) with Bank of America, N.A., as lender (the “Lender”). The Second Amendment amended the Amended and Restated Credit Agreement dated as of July 30, 2020, as amended by the First Amendment to Amended and Restated Credit Agreement, dated as of March 24, 2021, and the LIBOR Transition Amendment, dated as of December 24, 2021 (the “Existing Credit Agreement,” and the Existing Credit Agreement as amended by the Second Amendment, the “Amended Credit Agreement”), between the Company and the Lender.

The Amended Credit Agreement provides for (i) a new term loan in the principal amount of $6.0 million, which term loan was in addition to the existing term loan outstanding under the Existing Credit Agreement in the principal amount of $9.0 million as of the effective date of the Second Amendment, and (ii) an increase in the aggregate principal amount of the revolving credit facility available thereunder from $22.5 million to $25.0 million. Under the Amended Credit Agreement, revolving credit loans may continue to be borrowed, at our option, in U.S. Dollars or, subject to certain conditions, Euros, British Pounds, Canadian Dollars or Danish Kroner.

At January 31, 2024, our cash and cash equivalents were $4.5 million and we had an outstanding balance of $8.9 million drawn and outstanding under our revolving credit facility. At January 31, 2024, we had $16.1 million available for borrowing under that facility.

Indebtedness

Term Loan

The Amended Credit Agreement requires that the term loan be paid in quarterly installments on the last day of each of our fiscal quarters over the term of the Amended Credit Agreement on the following repayment schedule: the principal amount of each quarterly installment required to be paid on the last day of each of our fiscal quarters ending on or about October 31, 2022 through July 31, 2023 is $375,000; and the principal amount of each quarterly installment required to be paid on the last day of each of our fiscal quarters ending on or about October 31, 2023 through April 30, 2027 is $675,000. The entire remaining principal balance of the term loan is required to be paid on August 4, 2027. We may voluntarily prepay the term loan, in whole or in part, from time to time without premium or penalty (other than customary breakage costs, if applicable). We may repay borrowings under the revolving credit facility at any time without premium or penalty (other than customary breakage costs, if applicable), but in any event no later than August 4, 2027, and any outstanding revolving loans thereunder will be due and payable in full, and the revolving credit facility will terminate on such date. We may reduce or terminate the revolving credit facility at any time, subject to certain thresholds and conditions, without premium or penalty.

The loans under the Amended Credit Agreement are subject to certain mandatory prepayments, subject to various exceptions, from (a) net cash proceeds from certain dispositions of property, (b) net cash proceeds from certain issuances of equity, (c) net cash proceeds from certain issuances of additional debt and (d) net cash proceeds from certain extraordinary receipts.

Amounts repaid under the revolving credit facility may be reborrowed, subject to our continued compliance with the Amended Credit Agreement. No amount of the term loan that is repaid may be reborrowed.

The interest rates under the Amended Credit Agreement are as follows: the term loan and revolving credit loans bear interest at a rate per annum equal to, at our option, either (a) the BSBY Rate as defined in the Amended Credit Agreement (or, in the case of revolving credit loans denominated in a currency other than U.S. Dollars, the applicable quoted rate), plus a margin that varies within a range of 1.60% to 2.50% based on our consolidated leverage ratio, or (b) a fluctuating reference rate equal to the highest of (i) the federal fund rate plus 0.50%, (ii) Bank of America's publicly announced prime rate, (iii) the BSBY Rate plus 1.00%, or (iv) 0.50%, plus a margin that varies within a range of 0.60% to 1.50% based on our consolidated leverage ratio. In addition to certain other fees and expenses that we are required to pay to the Lender, we are required to pay a commitment fee on the undrawn portion of the revolving credit facility that varies within a range of 0.15% and 0.35% based on our consolidated leverage ratio.

We must comply with various customary financial and non-financial covenants under the Amended Credit Agreement. The financial covenants under the Amended Credit Agreement consist of a maximum consolidated leverage ratio, a minimum consolidated fixed charge coverage ratio and a minimum consolidated asset coverage ratio. The primary non-financial covenants limit our and our subsidiaries' ability to incur future indebtedness, to place liens on assets, to pay dividends or distributions on our or our subsidiaries' capital stock, to repurchase or acquire our or our subsidiaries' capital stock, to conduct mergers or acquisitions, to sell assets, to alter our or our subsidiaries' capital structure, to make investments and loans, to change the nature of our or our subsidiaries' business, and to prepay subordinated indebtedness, in each case subject to certain exceptions and thresholds as set forth in the Amended Credit Agreement, certain of which provisions were modified by the Second Amendment. As of January 31, 2024, we believe we are in compliance with all of the covenants in the Credit Agreement.

The Lender is entitled to accelerate repayment of the loans and to terminate its revolving credit commitment under the Amended Credit Agreement upon the occurrence of any of various customary events of default, which include, among other events, the following (which are subject, in some cases, to certain grace periods): failure to pay when due any principal, interest or other amounts in respect of the loans, breach of any of our covenants or representations under the loan documents, default under any other of our or our subsidiaries' significant indebtedness agreements, a bankruptcy, insolvency or similar event with respect to us or any of our subsidiaries, a significant unsatisfied judgment against us or any of our subsidiaries, or a change of control.

Our obligations under the Amended Credit Agreement continue to be secured by substantially all of our personal property assets (including a pledge of the equity interests we hold in AstroNova Scandinavia ApS, AstroNova GmbH and AstroNova SAS), subject to certain exceptions, and by a mortgage on our owned real property in West Warwick, Rhode Island, and are guaranteed and secured by substantially all of the personal property assets of Astro Machine.

Equipment Loan

In January 2024, we entered into a secured equipment loan facility agreement with Banc of America Leasing & Capital, LLC and borrowed the principal amount of $0.8 million thereunder for the financing of our purchase of production equipment. The loan matures on January 23, 2029, and bears interest at a fixed rate of 7.06%.

Cash Flow

The statements of cash flows for the years ended January 31, 2024, 2023, and 2022 are included on page F-7 of this Form 10-K. Net cash provided by operating activities was $12.4 million in fiscal 2024 compared to net cash used by operating activities of $2.9 million in the previous year. The increase in net cash provided by operations for the current year is primarily due to the impact of changes in working capital items. Specifically, the changes in accounts receivable, inventory, income taxes, accounts payable and accrued expenses for the current year increased cash by $1.0 million in fiscal 2024 compared to a decrease in cash of $14.3 million in the prior year.

Our accounts receivable balance increased to $23.1 million at January 31, 2024, compared to $21.6 million at January 31, 2023. The increase in the accounts receivable balance is related to sales product mix in fiscal 2024 compared to the prior year, as well as the addition of Astro Machine for a full year in fiscal 2024. The days sales outstanding increased to 52 days at year end compared to 49 days at the end of fiscal 2023 contributing to the higher receivables balance at January 31, 2024. The days sales outstanding increase in the current year is due to customer mix, as aerospace receivables typically take longer to collect.

The year-end inventory balance decreased to $46.4 million at January 31, 2024 versus $51.3 million at January 31, 2023, a $5.0 million decrease from the prior year end. The decrease in our inventory balance is primarily due to the write-down of inventory of $2.0 million related to the 2024 Restructuring Plan. Also contributing to the current year reduction in inventory is usage of safety stock we had accumulated in prior years as a result of supply chain issues we were experiencing at that time. Inventory days on hand decreased to 168 days at the end of the current year from 176 days at the prior year end.

Net cash used by investing activities for fiscal 2024 was $0.9 million for capital expenditures, compared to fiscal 2023 cash used of $17.2 million, which includes $17.0 million related to the acquisition of Astro Machine and $0.2 million for capital expenditures.

Net cash used by financing activities for fiscal 2024 was $11.0 million. Cash used by financing activities for fiscal 2024 includes $7.0 million of net repayment activity under the revolving credit facility, $2.1 million of principal payments on our long term debt and guaranteed royalty obligation payments of $1.7 million. Cash provided from financing activities for fiscal 2023 includes

$15.9 million for borrowings under the revolving credit facility and $6.0 million of proceeds from long term borrowings, which were partially offset by $2.0 million in guaranteed royalty obligation payments and $1.0 million of principle payments on long term debt.

Fiscal 2023 compared to Fiscal 2022

For a comparison of our cash flow for the fiscal years ended January 31, 2023, and January 31, 2022, see "Part II, Item 7. Management's Discussion and Analysis of Liquidity and Capital Resources" in our annual report on Form 10-K for the fiscal year ended January 31, 2023, filed with the SEC on April 17, 2023.

Contractual Obligations, Commitments and Contingencies

As of January 31, 2024, we had contractual obligations related to lease arrangements, debt and royalty obligation arrangements and purchase commitments.

The lease arrangements are for certain of our facilities at various locations worldwide. As of January 31, 2024, we had fixed lease payment obligations of $0.6 million, with $0.2 million due within 12 months. Refer to Note 11, "Leases," in our audited consolidated financial statements included in this Annual Report on Form 10-K for further details.

Debt arrangements under our Amended Credit Agreement with Bank of America, N.A., consist of a term loan with an outstanding principal balance of $12.2 million at January 31, 2024, of which $2.7 million is due within the 12 months after that date. Additionally, in January 2024, we entered into a secured equipment loan facility agreement and borrowed the principal amount of $0.8 million thereunder to finance our purchase of production equipment, of which $0.1 million is due within the 12 months after such date. For additional details regarding our long-term debt obligations, see Note 8, "Credit Agreement and Long Term Debt," in our audited consolidated financial statements included in this Annual Report on Form 10-K.

We are subject to a guaranteed minimum royalty payment obligation over the next five years pursuant to the Honeywell Agreements, which, at January 31, 2024 included a balance due of $4.7 million, with $2.6 million due within 12 months. Refer to Note 2 "Acquisitions" and Note 10, "Royalty Obligation," in our audited consolidated financial statements included in this Annual Report on Form 10-K for further details.

In order to meet our manufacturing demands and, in some cases, lock in particular pricing structures for specific goods used in manufacturing, we enter into purchase commitments with our suppliers. At January 31, 2024, our purchase commitments totaled $25.8 million, with $23.1 million due within 12 months, some of which are non-cancelable.

We are also subject to contingencies, including legal proceedings and claims arising out of our business that cover a wide range of matters, such as: contract and employment claims; workers' compensation claims; product liability claims; warranty claims; and claims related to modification, adjustment or replacement of component parts of units sold. While it is impossible to ascertain the ultimate legal and financial liability with respect to contingent liabilities, including lawsuits, we believe that the aggregate amount of such liabilities, if any, in excess of amounts provided, or covered by insurance, will not have a material adverse effect on our consolidated financial position or results of operations. It is possible, however, that our results of operations for any future period could be materially affected by changes in our assumptions or strategies related to these contingencies or changes out of our control.

Critical Accounting Policies and Estimates

Our discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. Certain of our accounting policies require the application of judgment in selecting the appropriate assumptions for calculating financial estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. We periodically evaluate the judgments and estimates used for our critical accounting policies to ensure that such judgments and estimates are reasonable for our interim and year-end reporting requirements. These judgments and estimates are based on our historical experience, current trends and information available from other sources, as appropriate. We do not believe there is a great likelihood that materially different amounts would be reported using different assumptions pertaining to the accounting policies described below, however, if actual conditions differ from the assumptions used in our judgments, our financial results could be materially different from our estimates.

We believe the following critical accounting policies require significant judgments and estimates in the preparation of our consolidated financial statements:

Revenue Recognition: We recognize revenue in accordance with Accounting Standards Codification (ASC) 606, "Revenue from Contracts with Customers." Under ASC 606, based on the nature of our contracts, we recognize most of our revenue upon shipment, which is when the performance obligation has been satisfied.

Our accounting policies relating to the recognition of revenue under ASC 606 require management to make estimates, determinations and judgments based on historical experience and on various other assumptions, which include (i) the existence of a contract with the customer, (ii) the identification of the performance obligations in the contract, (iii) the value of any variable consideration in the contract, (iv) the standalone selling price of multiple obligations in the contract, for the purpose of allocating the consideration in the contract, and (v) determining when a performance obligation has been met. Recognition of revenue based on incorrect judgments, including the identification of performance obligation arrangements as well as the pattern of delivery for those services, could result in inappropriate recognition of revenue, or incorrect timing of revenue recognition, which could have a material effect on our financial condition and results of operations.

We recognize revenue for non-recurring engineering (NRE) fees, as necessary, for product modification orders upon completion of agreed-upon milestones. Revenue is deferred for any amounts received prior to completion of milestones. Certain of our NRE arrangements include formal customer acceptance provisions. In such cases, we determine whether we have obtained customer acceptance for the specific milestone before recognizing revenue.

Infrequently, we receive requests from customers to hold products purchased from us for the customers' convenience. We recognize revenue for such bill and hold arrangements in accordance with the guidance provided by ASC 606, which requires the transaction to meet the following criteria in order to determine that the customer has obtained control: (a) the reason for the bill and hold is substantive, (b) the product has separately been identified as belonging to the customer, (c) the product is currently ready for physical transfer to the customer, and (d) we do not have the ability to use the product or direct it to another customer.

Allowance for Doubtful Accounts: Accounts receivable consists primarily of receivables from our customers arising from the sale of our products. We actively monitor our exposure to credit risk through the use of credit approvals and credit limits. Accounts receivable is presented net of reserves for doubtful accounts.

We estimate the collectability of our receivables and establish allowances for accounts receivable that we estimate to be uncollectible. We base these allowances on our historical collection experience, the length of time our accounts receivable are outstanding and the financial condition of individual customers. In situations where we are aware of a specific customer's inability to meet its financial obligation, such as in the case of a bankruptcy filing, we assess the need for a specific reserve for bad debts. We believe that our procedure for estimating such amounts is reasonable and historically has not resulted in material adjustments in subsequent periods. Bad debt expense was less than 1% of net sales in each of fiscal 2024 and 2023.

Warranty Claims: We offer warranties on some of our products. We establish a reserve for estimated costs of warranties at the time the product revenue is recognized. This reserve requires us to make estimates regarding the amounts necessary to settle future and existing claims using historical data on products sold as of the balance sheet date. The length of the warranty period, the product's failure rates, and the customer's usage affect estimated warranty cost. If actual warranty costs differ from our estimated amounts, future results of operations could be affected adversely. Warranty cost is recorded as cost of revenue, and the reserve balance recorded as an accrued expense. While we maintain product quality programs and processes, our warranty obligation is affected by product failure rates and the related corrective costs. If actual product failure rates and/or corrective costs differ from the estimates, we revise our estimated warranty liability accordingly.

Inventories: Inventories are stated at the lower of average and standard cost or net realizable value. The process for evaluating and recording obsolete and excess inventory provisions consists of analyzing the inventory supply on hand and estimating the net realizable value of the inventory based on historical experience, current business conditions and anticipated future revenue. We believe that our procedures for estimating such amounts are reasonable and historically have not resulted in material adjustments in subsequent periods when the estimates are adjusted to actual experience.

Income Taxes: A valuation allowance is established when it is "more-likely-than-not" that all or a portion of deferred tax assets will not be realized. A review of all available positive and negative evidence must be considered, including our performance, the market environment in which we operate, length of carryforward periods, existing revenue backlog and future revenue projections. If actual factors and conditions differ materially from the estimates made by management, the actual realization of the net deferred tax assets or liabilities could vary materially from the amounts previously recorded. At January 31, 2024, we had provided valuation allowances for future tax benefits resulting from certain domestic R&D tax credits, foreign tax credit carryforwards, and China net operating losses, all of which are expected to expire unused.

The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions. Although guidance on the accounting for uncertain income taxes prescribes the use of a recognition and measurement model, the determination of whether an uncertain tax position has met those thresholds will continue to require significant judgment by management. If the ultimate resolution of tax uncertainties is different from what we have estimated, our income tax expense could be materially impacted.

Business Combinations: We account for business acquisitions under the acquisition method of accounting in accordance with ASC 805, "Business Combinations," where the total purchase price is allocated to the tangible and identified intangible assets acquired and liabilities assumed based on their estimated fair values. The purchase price is allocated using the information currently available, and may be adjusted, up to one year from acquisition date, after obtaining more information regarding, among other things, asset valuations, liabilities assumed and revisions to preliminary estimates that, if known, would have affected the measurement of the amounts recognized as of the acquisition date. The purchase price in excess of the fair value of the tangible and identified intangible assets acquired less liabilities assumed is recognized as goodwill. Determining the fair value of assets acquired and liabilities assumed requires management to use significant judgment and estimates, including the selection of valuation methodologies, estimates of future revenue, costs and cash flows, discount rates, and selection of comparable companies. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. As a result, actual results may differ from these estimates. During the measurement period, we may record adjustments to acquired assets and assumed liabilities, with corresponding offsets to goodwill. Upon the conclusion of a measurement period, any subsequent adjustments are recorded to earnings.

Goodwill and Intangible Assets: We recognize goodwill in accordance with ASC 350, *Intangibles—Goodwill and Other* ("ASC 350"). Goodwill is the excess of cost of an acquired entity over the fair value amounts assigned to assets acquired and liabilities assumed in a business combination and is not amortized.

Goodwill is tested for impairment at the reporting unit. A reporting unit is an operating segment or a business unit one level below an operating segment if discrete financial information for that business is prepared and regularly reviewed by segment management. However, components within an operating segment are aggregated as a single reporting unit if they have similar economic characteristics. Management evaluates the recoverability of goodwill annually or more frequently if events or changes in circumstances, such as declines in revenue, earnings or cash flows, or material adverse changes in the business climate, indicate that the carrying value of an asset might be impaired. Goodwill is first qualitatively assessed to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. Factors that management considers in this assessment include macroeconomic conditions, industry and market considerations, overall financial performance (both current and projected), changes in management and strategy and changes in the composition or carrying amount of net assets. If this qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying value, then a quantitative assessment is required for the reporting unit. The quantitative assessment compares the fair value of the reporting unit with its carrying value. If a quantitative assessment is required, we estimate the fair value of our reporting units using the income approach based upon a discounted cash flow model. We believe that this approach is appropriate because it provides a fair value estimate based upon the reporting unit's expected long-term operating cash flow performance. In addition, we use the market approach, which compares the reporting unit to publicly traded companies and transactions involving similar business, to support the conclusions based upon the income approach. The income approach requires the use of many assumptions and estimates including future revenue, expenses, capital expenditures, and working capital, as well as discount factors and income tax rates. If the fair value of the reporting unit exceeds the carrying value of the net assets including goodwill assigned to that unit, goodwill is not impaired. If the carrying value of the reporting unit's net assets including goodwill exceeds the fair value of the reporting unit, then we record an impairment charge based on that difference. No goodwill impairment was identified for the years ended January 31, 2024 or January 31, 2023.

We recognize intangibles assets in accordance with ASC 350. Acquired intangible assets subject to amortization are stated at fair value and are amortized using the straight-line method over the estimated useful lives of the assets. Intangible assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. If the projected undiscounted cash flows are less than the carrying value, then an impairment charge would be recorded for the excess of the carrying value over the fair value, which is determined by the discounting of future cash flows. No impairment of intangible assets was identified for the years ended January 31, 2024 or January 31, 2023.

Share-Based Compensation: Compensation expense for time-based restricted stock units is measured at the grant date and recognized ratably over the vesting period. We determine the fair value of time-based and performance-based restricted stock units based on the closing market price of our common stock on the grant date. The recognition of compensation expense associated with performance-based restricted stock units requires judgment in assessing the probability of meeting the performance goals, as well as defined criteria for assessing achievement of the performance-related goals. For purposes of measuring compensation expense, the number of shares ultimately expected to vest is estimated at each reporting date based on management's expectations regarding the relevant performance criteria. The performance shares begin vesting only upon the achievement of the performance criteria. The achievement of the performance goals can impact the valuation and associated expense of the restricted stock units. The assumptions used in accounting for the share-based payment awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if circumstances change and we use different assumptions, our stock-based compensation expense could be materially different in the future.

Recent Accounting Pronouncements

Reference is made to Note 1, “Summary of Significant Accounting Policies,” in our audited consolidated financial statements included elsewhere in this report.

Item 7A. *Quantitative and Qualitative Disclosures about Market Risk*

Our primary financial market risks consist of foreign currency exchange rates risk and the impact of changes in interest rates that fluctuate with the market on our variable rate credit borrowings under our existing credit agreement.

Foreign Currency Exchange Risk

The functional currencies of our foreign subsidiaries and branches are the local currencies—the British Pound in the U.K., the Canadian Dollar in Canada, the Danish Kroner in Denmark, the Chinese Yuan in China, and the Euro in France and Germany. We are exposed to foreign currency exchange risk as the functional currency financial statements of foreign subsidiaries are translated to U.S. dollars. The assets and liabilities of our foreign subsidiaries having a functional currency other than the U.S. dollar are translated into U.S. dollars at the exchange rate prevailing at the balance sheet date, and at an average exchange rate for the reporting period for revenue and expense accounts. The cumulative foreign currency translation adjustment is recorded as a component of accumulated other comprehensive loss in shareholders’ equity. The reported results of our foreign subsidiaries will be influenced by their translation into U.S. dollars by currency movements against the U.S. dollar. Our primary currency translation exposure is related to our subsidiaries that have functional currencies denominated in Danish Kroner and the Euro. A hypothetical 10% change in the rates used to translate the results of our foreign subsidiaries would result in an increase or decrease in our consolidated net income of less than $0.1 million for the year ended January 31, 2024.

Transactional exposure arises where transactions occur in currencies other than the functional currency. Transactions in foreign currencies are recorded at the exchange rate prevailing at the date of the transaction. The resulting monetary assets and liabilities are translated into the appropriate functional currency at exchange rates prevailing at the balance sheet date and the resulting gains and losses are reported as foreign exchange gain (loss) in the consolidated statements of income. Foreign exchange losses resulting from transactional exposure were $0.1 million for the year ended January 31, 2024.

Interest Rate Risk

At January 31, 2024, our total indebtedness included an outstanding principal amount of $12.2 million of term loan variable-rate debt and an outstanding principal balance of $8.9 million under our revolving credit facility. At January 31, 2024, the term loan bears interest at a BSBY (Bloomberg Short-Term Bank Yield) rate plus a margin that varies between 1.60% and 2.30% based on our consolidated leverage ratio. During fiscal 2024, the weighted average interest rate on our variable rate debt was 7.54% and the weighted average interest rate on our revolving credit facility was 7.70%. The impact on our results of operations of a 100 basis point change in the interest rates on the outstanding balance of our variable-rate debt and revolving credit facility would be approximately $0.3 million annually.

Item 8. *Financial Statements and Supplementary Data*

The consolidated financial statements required under this item are submitted as a separate section of this report on the pages indicated at Item 15(a)(1).

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

None.

Item 9A. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures

Our management has evaluated, under the supervision and with the participation of our Principal Executive Officer and Principal Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K pursuant to Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms promulgated by the SEC. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, our Principal Executive Officer and our Principal Financial Officer have concluded that our disclosure controls and procedures were not effective as of January 31, 2024, because of the material weakness in our internal control over financial reporting described below.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of its financial reporting and the preparation of published financial statements in accordance with generally accepted accounting principles.

Because of the 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 risk that controls may become inadequate because of changes in conditions, or the degree of compliance may deteriorate.

Management conducted its evaluation of the effectiveness of its internal control over financial reporting as of January 31, 2024. In making this assessment, management used the criteria set forth in the Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment, our Principal Executive Officer and Principal Financial Officer believe that as of January 31, 2024, our internal control over financial reporting was not effective based on criteria set forth by COSO in "Internal Control-Integrated Framework" because of the material weakness in our internal control over financial reporting as described below.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. As of January 31, 2024, we did not design or maintain an effective control environment to ensure the accurate and timely reporting of transactions related to our Astro Machine subsidiary, which was acquired August 4, 2022.

Management is taking action to remediate this deficiency in its internal controls over financial reporting by designing an effective control environment and expanding our existing enterprise resource planning system to include the Astro Machine subsidiary. We anticipate that these actions and resulting improvements in controls will strengthen our internal control over financial reporting and will address the related material weakness.

The effectiveness of our internal control over financial reporting as of January 31, 2024 has been audited by Wolf & Company, P.C., an independent registered public accounting firm, as stated in their attestation report, which is included herein.

Changes in Internal Controls over Financial Reporting

There have been no changes in our internal control over financial reporting during our most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our 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 required by this item is incorporated herein by reference to our definitive proxy statement to be filed for our 2024 Annual Meeting of Shareholders, which will be filed with the SEC no later than 120 days after the end of our fiscal year (our "Proxy Statement"). Certain other information relating to our executive officers appears in Part I of this Annual Report on Form 10-K under the heading "Information about our Executive Officers."

Item 11. *Executive Compensation*

The information required by this item is incorporated herein by reference to our Proxy Statement.

The information set forth under the heading "Compensation Committee Report" in our Proxy Statement is furnished and shall not be deemed filed for purposes of Section 18 of the Exchange Act, nor be incorporated by reference in any filing under the Securities Act of 1933, as amended.

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

The information required by this item is incorporated herein by reference to our Proxy Statement.

Item 13. *Certain Relationships, Related Transactions and Director Independence*

The information required by this item is incorporated herein by reference to our Proxy Statement.

Item 14. *Principal Accountant Fees and Services*

The information required by this item is incorporated herein by reference to our Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedule

(a)(1) Financial Statements:

The following documents are included as part of this Annual Report filed on Form 10-K:

(a)(2) Financial Statement Schedule:

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore, have been omitted.

Item 16. Form 10-K Summary

Not Applicable.

(a)(3) Exhibits:

Exhibit Number	
(2.1)	Share Purchase Agreement, dated January 7, 2017, as amended, by and among ANI ApS, Trojan Holding ApS, as a Seller and as the Sellers' Representative, and Li Wei Chong filed as Exhibit 2.1 to our Annual Report on Form 10-K for the year ended January 31, 2017 and incorporated by reference herein.*
(3A)	Restated Articles of Incorporation of the Company and all amendments thereto filed as Exhibit 3A to our Quarterly Report on Form 10-Q for the quarter ended April 30, 2016 and incorporated by reference herein.
(3B)	By-laws of the Company as amended to date filed as Exhibit 3B to our Annual Report on Form 10-K for the fiscal year ended January 31, 2008 (File No. 000-13200) and incorporated by reference herein.
(4.1)	Specimen form of common stock certificate of the Company filed as Exhibit 4 to our Quarterly Report on Form 10-Q for the quarter ended April 30, 2016 and incorporated by reference herein.
(4.2)	Description of securities registered pursuant to Section 12 of the Exchange Act filed as Exhibit 4.2 to our Annual Report on Form 10-K for the fiscal year ended January 31, 2020 (File No. 000-13200) and incorporated by reference herein.
(10.1)	Astro-Med, Inc. 2007 Equity Incentive Plan as filed as Appendix A to the Definitive Proxy Statement filed on April 25, 2007 on Schedule 14A (File No. 000-13200) for the 2007 annual shareholders meeting and incorporated by reference herein.**
(10.2)	Change in Control Agreement dated as of November 24, 2014 by and between the Company and Gregory A. Woods filed as Exhibit 10.13 to our Annual Report on Form 10-K for the year ended January 31, 2015 and incorporated by reference herein.**
(10.3)	AstroNova Inc. 2015 Equity Incentive Plan filed as Exhibit A to the Definitive Proxy Statement filed on April 21, 2015 (File No. 000-13200) for the 2015 annual shareholders meeting and incorporated by reference herein.**
(10.4)	Form of Incentive Stock Option Agreement granted under the 2015 Equity Incentive Plan filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**

Exhibit Number	
(10.5)	Form of Non-Statutory Stock Option Agreement granted under the 2015 Equity Incentive Plan filed as Exhibit 10.4 to the Company’s Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**
(10.6)	Form of Non-Employee Director Non-Statutory Stock Option Agreement granted under the 2015 Equity Incentive Plan filed as Exhibit 10.5 to the Company’s Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**
(10.7)	Form of Restricted Stock Agreement granted under the 2015 Equity Incentive Plan filed as Exhibit 10.6 to the Company’s Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**
(10.8)	Form of Non-Employee Director Restricted Stock Agreement granted under the 2015 Equity Incentive Plan filed as Exhibit 10.7 to the Company’s Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**
(10.9)	Form of Time-Based Restricted Stock Unit Agreement granted under the 2015 Equity Incentive Plan filed as Exhibit 10.8 to the Company’s Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**
(10.10)	Form of Performance Restricted Stock Unit Agreement granted under the 2015 Equity Incentive Plan filed as Exhibit 10.9 to the Company’s Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**
(10.11)	Asset Purchase and License Agreement, dated September 28, 2017, by and between AstroNova, Inc. and Honeywell International, Inc. filed as Exhibit 10.1 to the Company’s Current Report on Form 8-K, event date September 28, 2017, filed with the SEC on October 4, 2017 and incorporated by reference herein.
(10.12)	Form of Performance-based Restricted Stock Unit Award Agreement filed as Exhibit 10.1 to the Company’s Current Report on Form 8-K, event date June 4, 2018, filed with the SEC on June 4, 2018 and incorporated by reference herein.**
(10.13)	Form of Restricted Stock Unit Agreement (time-based vesting) filed as Exhibit 10.2 to the Company’s Current Report on Form 8-K, event date June 4, 2018, filed with the SEC on June 4, 2018 and incorporated by reference herein.**
(10.15)	Form of Non-statutory Stock Option filed as Exhibit 10.4 to the Company’s Current Report on Form 8-K, event date June 4, 2018, filed with the SEC on June 4, 2018 and incorporated by reference herein.**
(10.16)	Form of Non-statutory Stock Option (Non-employee Director) filed as Exhibit 10.5 to the Company’s Current Report on Form 8-K, event date June 4, 2018, filed with the SEC on June 4, 2018 and incorporated by reference herein.**
(10.17)	Form of Restricted Stock Agreement filed as Exhibit 10.6 to the Company’s Current Report on Form 8-K, event date June 4, 2018, filed with the SEC on June 4, 2018 and incorporated by reference herein.**
(10.18)	Form of Non-employee Director Restricted Stock Agreement filed as Exhibit 10.7 to the Company’s Current Report on Form 8-K, event date June 4, 2018, filed with the SEC on June 4, 2018 and incorporated by reference herein.**
(10.19)	AstroNova, Inc. Amended and Restated Non-Employee Director Annual Compensation Program filed as Exhibit 10.1 to the Company’s Current Report on Form 8-K, event date January 31, 2019, filed with the SEC on February 4, 2019 and incorporated by reference herein.**
(10.20)	AstroNova, Inc. 2018 Equity Incentive Plan Non-Employee Director Restricted Stock Agreement filed as Exhibit 10.41 to the Company’s Annual Report on Form 10-K for the fiscal year ended January 31, 2019 and incorporated by reference herein.*
(10.21)	AstroNova, Inc. 2018 Equity Incentive Plan, as amended, filed as Appendix A to the Company’s Definitive Proxy Statement filed with the SEC on May 25, 2019 on Schedule 14A and incorporated by reference herein.*
(10.22)	Amended and Restated Credit Agreement dated as of July 30, 2020 among AstroNova, Inc., ANI ApS, TrojanLabel ApS, and Bank of America, N.A. filed as Exhibit 10.4 to the Company’s Quarterly Report on Form 10-Q for the quarter ended August 1, 2020 and incorporated by reference herein.
(10.23)	Amended and Restated Security and Pledge Agreement dated as of July 30, 2020 among AstroNova, Inc. and Bank of America, N.A., filed as Exhibit 10.2 to the Company’s Current Report on Form 8-K, event date July 30, 2020, filed with the SEC on August 5, 2020 and incorporated by reference herein.

Exhibit Number	
(10.24)	Open-End Mortgage Deed to Secure Present and Future Loans under Chapter 25 of Title 34 of the Rhode Island General Laws, Assignment of Leases and Rents, Security Agreement and Fixture Filing dated as of July 30, 2020 among AstroNova, Inc. and Bank of America, N.A., filed as Exhibit 10.3 to the Company's Current Report on Form 8-K, event date July 30, 2020, filed with the SEC on August 5, 2020 and incorporated by reference herein.
(10.25)	Change in Control Agreement dated September 8, 2020 by and between AstroNova, Inc. and David S. Smith filed as Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 1, 2020 and incorporated by reference herein.**
(10.26)	First Amendment to Credit Agreement dated as of March 24, 2021 among AstroNova, Inc. ANI ApS, TrojanLabel ApS and Bank of America, N.A., filed as Exhibit 10.34 to the Company's Annual Report on Form 10-K for the period ended January 31, 2021, and incorporated by reference herein.
(10.28)	Form of Indemnification Agreement for directors and officers, filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended October 30, 2021, and incorporated by reference herein.**
(10.29)	LIBOR Transition Amendment dated as of December 14, 2021 among AstroNova, Inc. and Bank of America, N.A., filed as Exhibit 10.33 to the Company's Annual Report on Form 10-K for the period ended January 31, 2022, and incorporated by reference herein.
(10.30)	AstroNova, Inc. 2022 Employee Stock Purchase Plan, filed as Annex A to the AstroNova, Inc. Definitive Proxy Statement on Schedule 14A filed with the SEC on April 29, 2022 and incorporated by reference herein.**
(10.31)	Equity Interest Purchase Agreement, dated as of August 4, 2022, by and among AstroNova, Inc., Astro Machine LLC and GSND Holding Corporation, filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, event date August 4, 2022, filed with the SEC on August 9, 2022 and incorporated by reference herein.
(21)	List of Subsidiaries of the Company.
(23.1)	Consent of Wolf & Company, P.C.
(31.1)	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(31.2)	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(32.1)	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
(32.2)	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
(97)	AstroNova, Inc. Compensation Recovery Policy
(101.INS)	XBRL Instance Document—the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
(101.SCH)	Inline XBRL Taxonomy Extension Schema Document
(104)	Cover Page Interactive Data File (embedded within the Inline XBRL document).

* Schedules to this Exhibit have been omitted in reliance on Item 601(b)(2) of Regulation S-K. The Company will furnish copies of any such schedules to the SEC upon request.

** Management contract or compensatory plan or arrangement.

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.

ASTRONOVA, INC.
(Registrant)

Date: April 12, 2024

By: /s/ Gregory A. Woods
(Gregory A. Woods, Chief Executive 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 date indicated.

Name	Title	Date
/s/ Gregory A. Woods **Gregory A. Woods**	President, Chief Executive Officer and Director (Principal Executive Officer)	April 12, 2024
/s/ David S. Smith **David S. Smith**	Vice President, Chief Financial Officer and Treasurer (Principal Accounting and Financial Officer)	April 12, 2024
/s/ Alexis P. Michas **Alexis P. Michas**	Director	April 12, 2024
/s/ Mitchell I. Quain **Mitchell I. Quain**	Director	April 12, 2024
/s/ Yvonne E. Schlaeppi **Yvonne E. Schlaeppi**	Director	April 12, 2024
/s/ Richard S. Warzala **Richard S. Warzala**	Director	April 12, 2024

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Shareholders and Board of Directors of
AstroNova, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of AstroNova, Inc. (the "Company") as of January 31, 2024 and 2023, and the related consolidated statements of income, comprehensive income, changes in stockholders' equity and cash flows for each of the three years in the period ended January 31, 2024, and the related notes to the consolidated financial statements and the financial statement schedule listed in Item 15(a)(2) (collectively, the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of January 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended January 31, 2024, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of January 31, 2024, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Our report dated April 12, 2024 expressed an opinion that the Company had not maintained effective internal control over financial reporting as of January 31, 2024, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

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 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

Critical audit matters 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. We determined that there are no critical audit matters.

/s/ Wolf & Company, P.C.
We have served as the Company's auditor since 2013.

Boston, Massachusetts
April 12, 2024

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Shareholders and Board of Directors of
AstroNova, Inc.

Opinion on the Internal Control Over Financial Reporting

We have audited AstroNova, Inc.'s (the Company) internal control over financial reporting as of January 31, 2024, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. In our opinion, because of the effect of the material weakness described below on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of January 31, 2024, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements of the Company and our report dated April 12, 2024 expressed an unqualified opinion.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weakness has been identified and included in management's assessment.

As of January 31, 2024, management did not design or maintain an effective control environment to ensure the accurate and timely reporting of transactions related to the Company's Astro Machine subsidiary.

This material weakness was considered in determining the nature, timing and extent of audit tests applied in our audit of the 2024 financial statements, and this report does not affect our report dated April 12, 2024 on those financial statements.

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 in the accompanying Management's Annual 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 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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/ Wolf & Company, P.C.
We have served as the Company's auditor since 2013.

Boston, Massachusetts
April 12, 2024

ASTRONOVA, INC.

CONSOLIDATED BALANCE SHEETS

As of January 31

(In Thousands, Except Share Data)

	2024	2023
ASSETS		
CURRENT ASSETS		
Cash and Cash Equivalents	$ 4,527	$ 3,946
Accounts Receivable, net of reserves of $618 in 2024 and $731 in 2023	23,056	21,598
Inventories	46,371	51,324
Prepaid Expenses and Other Current Assets	2,720	2,894
Total Current Assets	76,674	79,762
Property, Plant and Equipment, net	14,185	14,288
Identifiable Intangibles, net	18,836	21,232
Goodwill	14,633	14,658
Deferred Tax Assets, net	6,882	6,907
Right of Use Asset	603	794
Other Assets	1,438	1,566
TOTAL ASSETS	$ 133,251	$ 139,207
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts Payable	$ 8,068	$ 8,479
Accrued Compensation	2,923	2,750
Other Accrued Expenses	2,706	3,308
Revolving Credit Facility	8,900	15,900
Current Portion of Long-Term Debt	2,842	2,100
Current Liability—Royalty Obligation	1,700	1,725
Current Liability—Excess Royalty Payment Due	935	562
Income Taxes Payable	349	786
Deferred Revenue	1,338	1,888
Total Current Liabilities	29,761	37,498
NON-CURRENT LIABILITIES		
Long-Term Debt, net of current portion	10,050	12,040
Royalty Obligation, net of current portion	2,093	3,415
Lease Liabilities, net of current portion	415	555
Income Taxes Payable	551	491
Deferred Revenue	—	674
Deferred Tax Liabilities	99	167
TOTAL LIABILITIES	42,969	54,840
Commitments and Contingencies (See Note 21)		
SHAREHOLDERS' EQUITY		
Preferred Stock, $10 Par Value, Authorized 100,000 shares, None Issued	—	—
Common Stock, $0.05 Par Value, Authorized 13,000,000 shares; Issued 10,812,137 shares in 2024 and 10,676,851 shares in 2023	541	534
Additional Paid-in Capital	62,684	61,131
Retained Earnings	63,869	59,175
Treasury Stock, at Cost, 3,368,763 shares in 2024 and 3,342,032 shares in 2023	(34,593)	(34,235)
Accumulated Other Comprehensive Loss, net of tax	(2,219)	(2,238)
TOTAL SHAREHOLDERS' EQUITY	90,282	84,367
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 133,251	$ 139,207

See Notes to the Consolidated Financial Statements.

ASTRONOVA, INC.

CONSOLIDATED STATEMENTS OF INCOME

For the years ended January 31

(In Thousands, Except Per Share Data)

	2024	2023	2022
Revenue	$ 148,086	$ 142,527	$ 117,480
Cost of Revenue	96,465	94,371	73,741
Gross Profit	51,621	48,156	43,739
Costs and Expenses:			
Selling and Marketing	24,428	24,456	23,177
Research and Development	6,906	6,822	6,753
General and Administrative	11,491	11,435	9,553
Operating Expenses	42,825	42,713	39,483
Operating Income	8,796	5,443	4,256
Other Income (Expense):			
Interest Expense	(2,697)	(1,678)	(677)
Loss on Foreign Currency Transactions	(83)	(474)	(288)
Gain on Extinguishment of Debt – PPP Loan	—	—	4,466
Loss on Disposal of Assets	—	—	(696)
Other, net	57	119	(27)
Total Other Income (Expense)	(2,723)	(2,033)	2,778
Income before Income Taxes	6,073	3,410	7,034
Income Tax Provision	1,379	749	605
Net Income	$ 4,694	$ 2,661	$ 6,429
Net Income Per Common Share—Basic	$ 0.63	$ 0.36	$ 0.89
Net Income Per Common Share—Diluted	$ 0.63	$ 0.36	$ 0.88
Weighted Average Number of Common Shares Outstanding—Basic	7,415	7,307	7,207
Dilutive Effect of Common Stock Equivalents	81	67	132
Weighted Average Number of Common Shares Outstanding—Diluted	7,496	7,374	7,339

See Notes to the Consolidated Financial Statements.

ASTRONOVA, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the years ended January 31

(In Thousands)

	2024	2023	2022
Net Income	$ 4,694	$ 2,661	$ 6,429
Other Comprehensive Income (Loss), net of taxes and reclassification adjustments:			
Foreign Currency Translation Adjustments	19	(537)	(1,426)
Loss from Cash Flow Hedges Reclassified to Income Statement	—	47	62
Other Comprehensive Income (Loss)	19	(490)	(1,364)
Comprehensive Income	$ 4,713	$ 2,171	$ 5,065

See Notes to the Consolidated Financial Statements.

ASTRONOVA, INC.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

($ In Thousands)

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance January 31, 2021	10,425,094	$ 521	$ 58,049	$ 50,085	$ (33,588)	$ (384)	$ 74,683
Share-Based Compensation	—	—	1,493	—	—	—	1,493
Employee Option Exercises	14,371	1	156	—	—	—	157
Restricted Stock Awards Vested, net	126,939	6	(6)	—	(386)	—	(386)
Net Income	—	—	—	6,429	—	—	6,429
Other Comprehensive Loss	—	—	—	—	—	(1,364)	(1,364)
Balance January 31, 2022	10,566,404	$ 528	$ 59,692	$ 56,514	$ (33,974)	$ (1,748)	$ 81,012
Share-Based Compensation	—	—	1,290	—	—	—	1,290
Employee Option Exercises	25,123	2	153	—	—	—	155
Restricted Stock Awards Vested, net	85,324	4	(4)	—	(261)	—	(261)
Net Income	—	—	—	2,661	—	—	2,661
Other Comprehensive Loss	—	—	—	—	—	(490)	(490)
Balance January 31, 2023	10,676,851	$ 534	$ 61,131	$ 59,175	$ (34,235)	$ (2,238)	$ 84,367
Share-Based Compensation	—	—	1,347	—	—	—	1,347
Employee Option Exercises	18,998	1	212	—	—	—	213
Restricted Stock Awards Vested, net	116,288	6	(6)	—	(358)	—	(358)
Net Income	—	—	—	4,694	—	—	4,694
Other Comprehensive Income	—	—	—	—	—	19	19
Balance January 31, 2024	10,812,137	$ 541	$ 62,684	$ 63,869	$ (34,593)	$ (2,219)	$ 90,282

See Notes to the Consolidated Financial Statements.

ASTRONOVA, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended January 31

(In Thousands)

	2024	2023	2022
Cash Flows from Operating Activities:			
Net Income	$ 4,694	$ 2,661	$ 6,429
Adjustments to Reconcile Net Income to Net Cash Provided (Used) By Operating Activities:			
Depreciation and Amortization	4,266	3,916	3,994
Amortization of Debt Issuance Costs	23	25	44
Restructuring Cost	2,040	—	—
Share-Based Compensation	1,347	1,290	1,493
Loss on Disposal of Assets	—	—	696
Gain on Extinguishment of Debt	—	—	(4,466)
Deferred Income Tax Provision (Benefit)	(78)	(1,336)	210
Changes in Assets and Liabilities, net of impact of acquisition:			
Accounts Receivable	(1,486)	(1,234)	77
Other Receivable – Employee Retention Credit Receivable	—	3,135	(3,135)
Inventories	2,910	(11,581)	(4,883)
Accounts Payable and Accrued Expenses	(46)	(3,236)	4,052
Income Taxes Payable	(343)	1,710	(2,043)
Other	(973)	1,714	(1,074)
Net Cash Provided (Used) by Operating Activities	12,354	(2,936)	1,394
Cash Flows from Investing Activities:			
Cash Paid for Astro Machine Acquisition, net of cash acquired	—	(17,034)	—
Additions to Property, Plant and Equipment	(875)	(229)	(1,796)
Net Cash Used by Investing Activities	(875)	(17,263)	(1,796)
Cash Flows from Financing Activities:			
Net Cash Proceeds from Employee Stock Option Plans	105	85	60
Net Cash Proceeds from Share Purchases under Employee Stock Purchase Plan	107	70	96
Net Cash Used for Payment of Taxes Related to Vested Restricted Stock	(358)	(261)	(386)
Net (Repayments)/Borrowings under Revolving Credit Facility	(7,000)	15,900	—
Payment of Minimum Guarantee Royalty Obligation	(1,725)	(2,000)	(2,000)
Proceeds from Long-Term Debt Borrowings	—	6,000	10,000
Payoff of Long-Term Debt	—	—	(12,576)
Principal Payments on Long-Term Debt	(2,100)	(1,000)	(750)
Payments of Debt Issuance Costs	—	(39)	—
Net Cash Provided (Used) by Financing Activities	(10,971)	18,755	(5,556)
Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents	73	114	(205)
Net Increase (Decrease) in Cash and Cash Equivalents	581	(1,330)	(6,163)
Cash and Cash Equivalents, beginning of year	3,946	5,276	11,439
Cash and Cash Equivalents, end of year	$ 4,527	$ 3,946	$ 5,276
Supplemental Information:			
Cash Paid During the Period for:			
Interest	$ 2,343	$ 791	$ 342
Income Taxes, net of refunds	$ 1,694	$ 311	$ 2,414
Non-Cash Transactions:			
Financed Equipment Purchase	$ 822	$ —	$ —
Reclassification of Inventories to Property, Plant and Equipment	$ —	$ 348	$ —
Recognize intangible asset and royalty payable related to Honeywell Asset Purchase and License Agreement	$ —	$ 530	$ —

See Notes to the Consolidated Financial Statements.

Note 1—Summary of Significant Accounting Policies

Basis of Presentation: The accompanying financial statements and accompanying notes have been prepared by us pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC") and are presented in conformity with U.S. generally accepted accounting principles ("U.S. GAAP"). Our fiscal year end is January 31. Unless otherwise stated, all years and dates refer to our fiscal year.

Principles of Consolidation: The consolidated financial statements include the accounts of AstroNova, Inc. and its subsidiaries. All material intercompany accounts and transactions are eliminated in consolidation.

Reclassification: Certain amounts in prior year's financial statements have been reclassified to conform to the current year's presentation.

Use of Estimates: The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect these financial statements and accompanying notes using information that is reasonably available to us at this time. Some of the more significant estimates relate to revenue recognition; allowances for doubtful accounts; inventory valuation; income taxes; valuation of long-lived assets, intangible assets and goodwill; share-based compensation; and warranty reserves. Management's estimates are based on the facts and circumstances available at the time estimates are made, historical experience, risk of loss, general economic conditions and trends, and management's assessments of the probable future outcome of these matters. Consequently, actual results could differ from those estimates.

Cash and Cash Equivalents: Highly liquid investments with an original maturity of 90 days or less are considered to be cash equivalents. At January 31, 2024 and 2023, $2.3 million and $3.2 million, respectively, was held in foreign bank accounts.

Inventories: Inventories are stated at the lower of standard and average cost or net realizable value and include material, labor and manufacturing overhead.

Property, Plant and Equipment: Property, plant and equipment are stated at cost less accumulated depreciation. Depreciation is provided on the straight-line basis over the estimated useful lives of the assets (land improvements—10 to 20 years; buildings and leasehold improvements—10 to 45 years; machinery and equipment—3 to 10 years; and computer equipment and software—3 to 10 years).

Revenue Recognition: We recognize revenue in accordance with Accounting Standards Codification ("ASC") 606 "Revenue from Contracts with Customers ("ASC 606")." The core principle of ASC 606 is to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. ASC 606 defines a five-step process to recognize revenue and requires judgment and estimates within the revenue recognition process, including identifying contracts with customers, identifying performance obligations in the contract, determining and estimating the amount of any variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation and recognizing revenue when the entity satisfies each performance obligation.

The vast majority of our revenue is generated from the sale of distinct products. Revenue is measured as the amount of consideration we expect to receive in exchange for such products, which is generally at the contractually stated prices, and is recognized when we satisfy a performance obligation by transferring control of a product to a customer. The transfer of control generally occurs at one point in time, upon shipment, when title and risk of loss pass to the customer. Returns and customer credits are infrequent and are recorded as a reduction to revenue. Sales taxes and value added taxes collected concurrently with revenue generating activities are excluded from revenue.

Many of the contracts entered into with customers are commonly comprised of a combination of equipment, supplies, installation and/or training services. We determine performance obligations by assessing whether the products or services are distinct from other elements of the contract. In order to be distinct, the product must perform either on its own or with readily available resources and must be separate within the context of the contract.

Most of our hardware products contain embedded operating systems and data management software which is included in the purchase price of the equipment. The software is deemed incidental to the systems as a whole, as it is not sold or marketed separately, and its production costs are minor compared to those of the hardware system. Hardware and software elements are typically delivered at the same time and are accounted for as a single performance obligation for which revenue is recognized at the point in time when ownership is transferred to the customer.

Installation and training services vary based on certain factors such as the complexity of the equipment, staffing availability in a geographic location and customer preferences, and can range from a few days to a few months. The delivery of installation and training services are not assessed to determine whether they are separate performance obligations, as the amounts are not material to the contract.

Shipping and handling activities that occur after control over a product has transferred to a customer are accounted for as fulfillment activities rather than performance obligations, as allowed under a practical expedient provided by ASC 606. The shipping and handling fees charged to customers are recognized as revenue and the related costs are included in cost of revenue at the point in time when ownership of the product is transferred to the customer.

We may perform services at the request of the customer, generally for the repair and maintenance of products previously sold. These services are short in duration and total approximately 5.0% of revenue for each of the years ended January 31, 2024 and 2023. Revenue is recognized as services are rendered and accepted by the customer. We also provide service agreements on certain of our Product Identification equipment. Service agreements are purchased separately from the equipment and provide for the right to obtain service and maintenance on the equipment for a period of typically one to two years. Accordingly, revenue on these agreements is recognized over the term of the agreements. The portion of service agreement contracts that are uncompleted at the end of any reporting period is included in deferred revenue.

We generally provide warranties for our products. The standard warranty period is typically 12 months for most hardware products except for airborne printers, which typically have warranties that extend for 3-5 years, consistent with industry practice. Such assurance-type warranties are not deemed to be separate performance obligations from the hardware product and costs associated with providing the warranties are accrued in accordance with ASC 450, “Contingencies,” as we have the ability to ascertain the likelihood of the liability and can reasonably estimate the amount of the liability. Our estimate of costs to service the warranty obligations is based on historical experience and expectations of future conditions. To the extent that our experience in warranty claims or costs associated with servicing those claims differ from the original estimates, revisions to the estimated warranty liability are recorded at that time, with an offsetting adjustment to cost of revenue. On occasion, customers request a warranty period longer than our standard warranty. In those instances, in which extended warranty services are separately quoted to the customer, an additional performance obligation is created, and the associated revenue is deferred and recognized as service revenue ratably over the term of the extended warranty period. The portion of service contracts and extended warranty services agreements that are uncompleted at the end of any reporting period are included in deferred revenue.

We recognize and subsequently amortize an asset for the incremental direct costs of obtaining a contract with a customer if we expect the benefit of those costs to be longer than one year (Refer to Note 3, “Revenue Recognition” included in our notes to the consolidated financial statements). We apply the practical expedient to expense costs incurred for costs to obtain a contract when the amortization period would have been less than a year. These costs include sales commissions paid to the internal direct sales team as well as to third-party representatives and distributors. Contractual agreements with each of these parties outline commission structures and rates to be paid. In general, such contracts are all individual procurement decisions by the customers and do not include renewal provisions and, as such, the majority of the contracts have an economic life of significantly less than a year.

Accounts Receivables and Allowance for Doubtful Accounts: Standard payment terms are typically 30 days after shipment but vary by type and geographic location of our customer. Credit is extended based upon an evaluation of the customer’s financial condition. Our allowance for doubtful accounts represents our estimate of expected credit losses related to our trade receivables. We pool our trade receivables based on similar risk characteristics, such as the age of receivables. To estimate our allowance for doubtful accounts, we leverage information on historical losses, asset-specific risk characteristics, current conditions, and reasonable and supportable forecasts of future conditions. Account balances are written off against the allowance when we deem the amount is uncollectible. Accounts receivable are stated at their estimated net realizable value.

Business Combinations: We account for business acquisitions under the acquisition method of accounting in accordance with ASC 805, ‘‘Business Combinations,’’ where the total purchase price is allocated to the tangible and identified intangible assets acquired and liabilities assumed based on their estimated fair values. The purchase price is allocated using the information currently available, and may be adjusted, up to one year from acquisition date, after obtaining more information regarding, among other things, asset valuations, liabilities assumed and revisions to preliminary estimates. The purchase price in excess of the fair value of the tangible and identified intangible assets acquired less liabilities assumed is recognized as goodwill. Determining the fair value of assets acquired and liabilities assumed requires management to use significant judgment and estimates, including the selection of valuation methodologies, estimates of future revenue, costs and cash flows, discount rates, and selection of comparable companies. Management’s estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. As a result, actual results may differ from these estimates. During the measurement period, we may record adjustments to acquired assets and assumed liabilities, with corresponding offsets to goodwill. Upon the conclusion of a measurement period, any subsequent adjustments are recorded to earnings.

At the acquisition date, the Company measures the fair values of all assets acquired and liabilities assumed that arise from contractual contingencies. The Company also measures the fair values of all non-contractual contingencies if, as of the acquisition date, it is more likely than not that the contingencies will give rise to assets or liabilities.

Acquisition-related costs not considered part of the considerations are expensed as incurred and recorded in acquisition costs within the consolidated statement of operations.

Research and Development Costs: We charge costs to expense in the period incurred, and these expenses are presented in the consolidated statement of income. The following costs are included in research and development expense: salaries and benefits, external engineering service costs, engineering related information costs and supplies.

Foreign Currency Translation: The financial statements of foreign subsidiaries and branches are measured using the local currency as the functional currency. Foreign currency-denominated assets and liabilities are translated into U.S. dollars at year-end exchange rates with the translation adjustment recorded as a component of accumulated comprehensive income (loss) in shareholders' equity. Revenues and expenses are translated at the average monthly exchange rates in effect during the related period. We do not provide for U.S. income taxes on foreign currency translation adjustments associated with our subsidiaries in Germany, Denmark and China since their undistributed earnings are considered to be permanently invested. Included in our consolidated statements of income was a net transaction foreign exchange losses of $0.1 million, $0.5 million and $0.3 million in fiscal 2024, 2023 and 2022, respectively.

Advertising: We expense advertising costs as incurred. Advertising costs including advertising production, trade shows and other activities are designed to enhance demand for our products and amounted to approximately $1.8 million, $1.6 million, and $1.3 million in fiscal years 2024, 2023, and 2022, respectively.

Long-Lived Assets: Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. If the projected undiscounted cash flows are less than the carrying value, then an impairment charge would be recorded for the excess of the carrying value over the fair value, as determined by the discounting of future cash flows. There were no impairment charges for our long-lived assets in fiscal years 2024, 2023, or 2022.

Intangible Assets: Intangible assets include the value of customer and distributor relationships, trademarks and existing technology acquired in connection with business and asset acquisitions and are stated at cost (fair value at acquisition) less accumulated amortization. These intangible assets have a definite life and are amortized over the assets' useful lives using a systematic and rational basis which is representative of the assets' use. Intangible assets with a definite life are tested for impairment whenever events or circumstances indicate that the carrying amount of an asset (asset group) may not be recoverable. If necessary, an impairment loss is recognized when the carrying amount of an asset exceeds the estimated undiscounted cash flows used in determining the fair value of the asset. The amount of the impairment loss recorded is calculated by the excess of the asset's carrying value over its fair value. Fair value is generally determined using a discounted cash flow analysis. There were no impairment charges for our intangible assets in fiscal years 2024, 2023, or 2022.

Goodwill: Goodwill represents the excess of the aggregate purchase price over the fair value of the net assets acquired in a purchase business combination. Management evaluates the recoverability of goodwill annually or more frequently if events or changes in circumstances, such as declines in revenue, earnings or cash flows, or material adverse changes in the business climate indicate that the carrying value of an asset might be impaired. Goodwill is tested for impairment at the reporting unit level. A reporting unit is an operating segment, or a business unit one level below an operating segment if discrete financial information for that business is prepared and regularly reviewed by segment management. However, components within an operating segment are aggregated as a single reporting unit if they have similar economic characteristics. We determined that each of our operating segments Product Identification ("PI") and Test & Measurement ("T&M") represents a reporting unit for purposes of goodwill impairment testing.

The accounting guidance related to goodwill impairment testing allows for the performance of an optional qualitative assessment of whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. Factors that management considers in this qualitative assessment include macroeconomic conditions, industry and market considerations, overall financial performance (both current and projected), changes in management and strategy and changes in the composition or carrying amount of net assets. If this qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying value, then a quantitative assessment is required for the reporting unit. Additionally, we can elect to forgo the qualitative assessment and perform the quantitative test. The quantitative assessment compares the fair value of the reporting unit with its carrying value. If the quantitative assessment is performed, we estimate the fair value of our reporting units using a blended income and market approach. The income approach is based on a discounted cash flow model and provides a fair value estimate based upon the reporting unit's expected long-term operating cash flow performance. The market approach compares the reporting unit to publicly traded companies and transactions involving similar business, and requires the use of many assumptions and estimates including future revenue, expenses, capital expenditures, and working capital, as well as discount factors and income tax rates. If the fair value of the reporting unit exceeds the carrying value of the net assets including goodwill assigned to that unit, goodwill is not impaired. If the carrying value of the reporting unit's net assets including goodwill exceeds the fair value of the reporting unit, then we record an impairment charge based on that difference. We performed a qualitative assessment for our fiscal 2024 analysis of goodwill. Based on this assessment, management does not believe that it is more likely than not that the carrying values of the reporting units exceed their fair values. Accordingly, no quantitative assessment was performed. There were no impairment charges for our goodwill in fiscal years 2024, 2023, or 2022.

Leases: We account for our leases in accordance with ASC 842, "Leases" ("ASC 842"). ASC 842 requires a lessee to recognize assets and liabilities on the balance sheet for all leases, with the result being the recognition of a right of use ("ROU") asset and a lease liability. The lease liability is equal to the present value of the minimum lease payments for the term of the lease, including any optional renewal periods determined to be reasonably certain to be exercised, using a discount rate determined at lease commencement. This discount rate is the rate implicit in the lease, if known; otherwise, the incremental borrowing rate for the expected lease term is used. Our incremental borrowing rate approximates the rate we would have to pay to borrow on a collateralized basis over a similar term at lease inception. The value of the ROU asset is equal to the initial measurement of the lease liability plus any lease payments made to the lessor at or before the commencement date and any unamortized initial direct costs incurred by the lessee, less any unamortized lease incentives received. Several of our lease contracts include options to extend the lease term and we include the renewal options for these leases in the determination of the ROU asset and lease liability when the likelihood of renewal is determined to be reasonably certain.

We enter into lease contracts for certain of our facilities at various locations worldwide. At inception of a contract, we determine whether the contract is or contains a lease. If we have a right to obtain substantially all of the economic benefits from the use of the identified asset and the right to direct the use of the asset, then the contract contains a lease.

There are two types of leases, operating leases and finance leases. Lease classification is determined at lease commencement. We have made an accounting policy election to apply the short-term exception, which does not require the capitalization of leases with terms of 12 months or less. All of our leases are classified as operating leases. Operating lease expense is recognized on a straight-line basis over the lease term and included in general and administrative expense on the consolidated statement of income. ROU assets are classified as such on the consolidated balance sheets, short-term lease liabilities are classified in accrued expenses, and long-term lease liabilities are classified as such in the consolidated balance sheets. In the statements of cash flow, payments for operating leases are classified as operating activities.

In addition, several of our facility lease agreements include non-lease components for items such as common area maintenance and utilities which are accounted for separately from the lease component.

Income Taxes: We use the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting basis and tax basis of the assets and liabilities and are measured using statutory tax rates that will be in effect when the differences are expected to reverse. Our deferred taxes are presented as non-current in the accompanying consolidated balance sheet. An allowance against deferred tax assets is recognized when it is more-likely-than-not that some portion or all of the deferred tax assets will not be realized. At both January 31, 2024 and January 31, 2023, a valuation allowance was provided for deferred tax assets attributable to certain domestic R&D, foreign tax credit carryforwards and China net operating losses, all of which are expected to expire unused.

We account for uncertain tax positions in accordance with the guidance provided in ASC 740, "Accounting for Income Taxes." This guidance describes a recognition threshold and measurement attribute for the financial statement disclosure of tax positions taken or expected to be taken in a tax return and requires recognition of tax benefits that satisfy a more-likely-than-not threshold. ASC 740 also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods and disclosure.

Net Income Per Common Share: Basic net income per share is based on the weighted average number of shares outstanding during the period. Diluted net income per share is based on the basic weighted average number of shares and potential common equivalent shares for stock options, restricted stock awards and restricted stock units outstanding during the period using the treasury stock method. In fiscal years 2024, 2023, and 2022, there were 295,370; 685,667; and 345,085, respectively, common equivalent shares that were not included in the computation of diluted net income per common share because their inclusion would be anti-dilutive.

Fair Value Measurement: We measure our assets and liabilities at fair value on a recurring and non-recurring basis in accordance with the guidance provided in ASC 820, "Fair Value Measurement and Disclosures," which defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In addition, ASC 820 establishes a three-tiered hierarchy for inputs used in management's determination of fair value of financial instruments that emphasizes the use of observable inputs over the use of unobservable inputs by requiring that observable inputs be used when available. Observable inputs are inputs that reflect management's belief about the assumptions market participants would use in pricing a financial instrument based on the best information available in the circumstances.

The fair value hierarchy is summarized as follows:

- Level 1—Quoted prices in active markets for identical assets or liabilities;
- Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Cash and cash equivalents, accounts receivable, accounts payable, accrued compensation, other accrued expenses and income tax payable are reflected in the consolidated balance sheet at carrying value, which approximates fair value due to the short-term nature of these instruments.

Self-Insurance: We are self-insured for U.S. medical and dental benefits for qualifying employees and maintain stop-loss coverage from a third party which limits our exposure to large claims. We record a liability associated with these benefits that includes an estimate of both claims filed and losses incurred but not yet reported based on historical claims experience. In estimating this accrual, we utilize an independent third-party broker to estimate a range of expected losses, which are based on analyses of historical data. Assumptions are closely monitored and adjusted when warranted by changing circumstances. Our liability for self-insured claims is included within accrued compensation in our consolidated balance sheets and was $0.3 million at both January 31, 2024 and 2023.

Share-Based Compensation: Compensation expense for time-based restricted stock units is measured at the grant date and recognized ratably over the vesting period. We determine the fair value of time-based and performance-based restricted stock units based on the closing market price of our common stock on the grant date. The recognition of compensation expense associated with performance-based restricted stock units requires judgment in assessing the probability of meeting the performance goals, as well as defined criteria for assessing achievement of the performance-related goals. For purposes of measuring compensation expense, the number of shares ultimately expected to vest is estimated at each reporting date based on management's expectations regarding the relevant performance criteria. The performance shares begin vesting only upon the achievement of the performance criteria. The achievement of the performance goals can impact the valuation and associated expense of the restricted stock units. The assumptions used in accounting for the share-based payment awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if circumstances change and we use different assumptions, our stock-based compensation expense could be materially different in the future.

Share-based compensation becomes deductible for determining income taxes when the related award vests, is exercised, or is forfeited depending on the type of share-based award and subject to relevant tax law.

Derivative Financial Instruments: We occasionally use derivative instruments as part of our overall strategy to manage exposure to market risks primarily associated with fluctuations in foreign currency exchange rates and interest rates. Derivative instruments are recognized as either assets or liabilities in the balance sheet at fair value. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship and, further, on the type of hedging relationship. For derivative instruments not designated as hedging instruments, the gain or loss is recognized in the statement of income during the current period. For those derivative instruments that are designated and qualify as hedging instruments, a company must designate the hedging instrument, based upon the exposure being hedged, as a fair value hedge, cash flow hedge, or a hedge of a net investment in a foreign operation.

For derivative instruments that are designated and qualify as a cash flow hedge, the gain or loss on the derivative instrument is reported as a component of other comprehensive income/(loss) and reclassified into earnings in the same line item associated with the forecasted transaction, and in the same period or periods during which the hedged transaction affects earnings (e.g., in "Interest

Expense" when the hedged transactions are interest cash flows associated with floating-rate debt, or "Other, Net" for portions reclassified relating to the remeasurement of the debt). The remaining gain or loss on the derivative instrument in excess of the cumulative change in the present value of future cash flows of the hedged item, if any, are recognized in the statement of income during the current period.

Recent Accounting Pronouncements

In December 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures" ("ASU 2023-09") to enhance the transparency and decision usefulness of income tax disclosures primarily related to the rate reconciliation and income taxes paid information. ASU 2023-09 modifies the requirement for income tax disclosures to include (1) specific categories in the rate reconciliation, (2) the income or loss from continuing operations before income tax expense or benefit (separated between domestic and foreign) and (3) income tax expense or benefit from continuing operations (separated by federal, state and foreign). ASU 2023-09 also requires entities to disclose their income tax payments to international, federal, state and local jurisdictions. The guidance is effective for annual periods beginning after December 15, 2024. Early adoption is permitted for annual financial statements that have not yet been issued or made available for issuance. ASU 2023-09 should be applied on a prospective basis, but retrospective application is permitted. We will adopt this standard beginning with our fiscal year ending January 31, 2025. We are currently evaluating the potential impact of adopting this new guidance on our consolidated financial statements and related disclosures.

In November 2023, the FASB issued Accounting Standards Update No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures ("ASU 2023-07"), which requires disclosures, on an annual and interim basis, of significant segment expenses that are regularly provided to the chief operating decision maker (CODM), as well as the aggregate amount of other segment items included in the reported measure of segment profit or loss. ASU 2023-07 also requires that a public entity disclose the title and position of the CODM and an explanation of how the CODM uses the reported measure(s) of segment profit or loss. Public entities will be required to provide all annual disclosures currently required by ASU 2023-07 in interim periods. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, with early adoption permitted. We will adopt this standard beginning with our fiscal year ending January 31, 2025, and for interim periods beginning with our first quarter of fiscal 2026. We are currently evaluating the new disclosure requirements of ASU 2023-07 and do not expect the adoption of this guidance to have a material impact on our consolidated financial statements or disclosures.

In October 2023, the FASB issued Accounting Standard Update 2023-06, "Disclosure Improvements: Codification Amendments in Response to the SEC's Disclosure Updated and Simplification Initiative" ("ASU 2023-06"), which amends the disclosure or presentation requirements related to various subtopics in the FASB Accounting Standards Codification. ASU 2023-06 was issued in response to the U.S. Securities and Exchange Commission's (the "SEC") August 2018 final rule that updated and simplified disclosure requirements and is intended to align U.S. GAAP requirements with those of the SEC and to facilitate the application of U.S. GAAP for all entities. For entities subject to the SEC's existing disclosure requirements and for entities required to file or furnish financial statements with or to the SEC in preparation for the sale of or for purposes of issuing securities that are not subject to contractual restrictions on transfer, the effective date for each amendment will be the date on which the SEC removes that related disclosure from its rules. For all other entities, the amendments will be effective two years later. However, if by June 30, 2027, the SEC has not removed the related disclosure from its regulations, the amendments will be removed from the Codification and not become effective for any entity. We are currently assessing potential impacts of ASU 2023-06 and do not expect the adoption of this guidance to have a material impact on our condensed consolidated financial statements and disclosures.

There were no other new accounting pronouncements, issued or effective during fiscal 2024, that have had or are expected to have a material impact on our consolidated financial statements.

Note 2—Acquisitions

Astro Machine

On August 4, 2022, we acquired Astro Machine LLC ("Astro Machine"), an Illinois-based manufacturer of printing equipment, including label printers, tabbers, conveyors, and envelope feeders, for aggregate consideration of $17.1 million.

The acquisition was accomplished pursuant to an Equity Interest Purchase Agreement dated as of August 4, 2022 (the "Purchase Agreement") by and among us, GSND Holding Corporation ("GSND"), the parent company of Astro Machine, and Astro Machine. Pursuant to the Purchase Agreement, we purchased 100% of the issued and outstanding equity interests of Astro Machine from GSND for a purchase price of $15.6 million. The acquisition was funded using borrowings under our credit facility. We obtained a representation and warranty insurance policy and placed $300,000 of the purchase price into an escrow account, which pursuant to the terms and conditions of the Purchase Agreement, are our sole recourse for breaches of representations and warranties by GSND. Upon the closing of the transaction, Astro Machine became a wholly owned subsidiary of AstroNova, Inc.

Concurrently with the signing of the Purchase Agreement, our newly acquired subsidiary, Astro Machine, entered into a Purchase and Sale Agreement with Selak Real Estate Limited Partnership ("SRE"), pursuant to which Astro Machine purchased certain real property assets of SRE for a purchase price, paid in cash, of $1.5 million. These real estate assets are comprised of a 34,460 square foot industrial manufacturing building (including offices) on 1.26 acres of land, which is Astro Machine's principal place of business.

This transaction is a business combination and was accounted for using the acquisition method of accounting prescribed by ASC 805, "Business Combinations" ("ASC 805"), whereby the results of operations, including the revenues and earnings of Astro Machine, are included in our financial statements from the date of acquisition. The purchase price of Astro Machine was allocated to the tangible and intangible assets acquired and liabilities assumed and recognized at their fair value based on widely accepted valuation techniques in accordance with ASC 820, "Fair Value Measurement," as of the acquisition date. The process for estimating fair values requires the use of significant estimates, assumptions and judgments, including determining the timing and estimates of future cash flows and developing appropriate discount rates. The excess of the purchase price over the fair value of the net identified assets acquired and liabilities assumed was recorded as goodwill. ASC 805 establishes a measurement period to provide companies with a reasonable amount of time to obtain the information necessary to identify and measure various items in a business combination and cannot extend beyond one year from the acquisition date.

The following table sets forth the final purchase price allocation of the Astro Machine acquisition for the estimated fair value of the net asset acquired and liabilities assumed as of the date of acquisition:

(In thousands)		
Cash	$	91
Accounts Receivable		3,393
Inventory		5,715
Property, Plant and Equipment		4,200
Identifiable Intangible Assets		3,480
Goodwill		2,730
Accounts Payable and Other Current Liabilities		(2,484)
Total Purchase Price	$	17,125

The fair value of the intangible assets acquired was estimated by applying the income approach. This fair value measurement is based on significant inputs that are not observable in the market and therefore represent a Level 3 measurement as defined in ASC 820, "Fair Value Measurement." Key assumptions in estimating the fair value of the intangibles include (1) remaining useful life of the tradename/trademarks and customer relations (2) the royalty rate of 0.75%, (3) customer attrition rate of 18.0%, (4) discount rate of 19.0% and (5) a range of revenue and net income projections for the fiscal years 2023 through 2026.

The following table sets forth the fair value of the acquired identifiable intangible assets and related estimated useful lives:

(In thousands)		Fair Value	Useful Life (years)
Customer Relations	$	3,060	5
Trademarks/Tradenames		420	5
Total	$	3,480	

The Customer Relations intangible asset represents the relationships that will be maintained with certain historical customers of Astro Machine. The trademark/tradename intangible assets reflect the industry reputation of the Astro Machine name recognition and the registered trademarks for the use of several marks and logos held by Astro Machine.

Goodwill of $2.7 million, which is not deductible for tax purposes, represents the excess of the purchase price over the estimated fair value assigned to the tangible and identifiable intangible assets acquired and liabilities assumed from Astro Machine. The goodwill recognized under ASC 805 is attributable to synergies which are expected to enhance and expand our overall product portfolio, opportunities in new and existing markets, future technologies that have yet to be determined and Astro Machine's assembled work force. The carrying amount of the goodwill was allocated to the PI segment.

Total acquisition-related costs of $0.7 million are included in general and administrative expenses in our consolidated statement of income for the year ended January 31, 2023.

The amounts of revenue and earnings before taxes attributable to Astro Machine and included in our consolidated statement of income were as follows:

(In thousands)	2024	2023
Revenue	$ 18,147	$ 12,515
Earnings before Taxes	$ 2,616	$ 1,571

Astro Machine results are reported as part of the PI segment. Proforma results are not provided, as disclosure of such amounts was impractical to determine as the acquired business had insufficient financial records and no audit history prior to the transaction.

Honeywell Asset Purchase and License Agreement

On June 30, 2022, we entered into an Asset Purchase and License Agreement with Honeywell Inc. ("New HW Agreement") to acquire an exclusive, perpetual, world-wide license to manufacture Honeywell's flight deck printers for the Boeing 787 aircraft. The New HW Agreement provides for royalty payments to Honeywell based on gross revenues from the sales of the printers, paper and repair services of the licensed products in perpetuity. The royalty rates vary based on the year in which they are paid or earned and as products are sold or as services provided and range from single-digit to mid-double-digit percentages of gross revenue. The New HW Agreement included a provision for guaranteed minimum royalty payments to be paid in the event that the royalties earned by Honeywell do not meet the minimum for the preceding calendar year as follows: $100,000 in 2024, $200,000 in 2025, $233,000 in 2026 and 2027, and $234,000 in 2028.

This transaction was evaluated under ASC 805, "Business Combinations," and was accounted for as an asset acquisition.

The purchase price was allocated to the customer relationship intangible, which was the only asset acquired as a result of this transaction. This asset will be amortized over the useful life of the intangible. The minimum royalty payment obligation and related customer relation intangible were recorded at the present value of the minimum royalty payments.

The acquired identifiable intangible asset is as follows:

(In thousands)	Fair Value	Useful Life (Years)
Customer Contract Relationships	$ 530	20

The minimum royalty payment due was discounted based on the payment schedule and applicable discount rate, resulting in an outstanding royalty obligation of $0.5 million as of January 31, 2023, including $0.1 million recorded as a current liability. Additional royalties based on sales activity will be recorded in the period that the associated revenue is earned. During the fourth quarter of fiscal 2023, we incurred $0.1 million in excess royalty expense, which was paid in the first quarter of the current fiscal year. As of the end of fiscal 2024, we incurred $0.2 million in additional royalties payable to Honeywell. As of January 31, 2024, the outstanding royalty obligation is $0.6 million, including $0.2 million recorded as a current liability in the accompanying consolidated balance sheet.

Note 3—Revenue Recognition

We derive revenue from the sale of (i) hardware, including digital color label printers and specialty OEM printing systems, portable data acquisition systems and airborne printers used in the flight deck and interior of commercial, business and military aircraft, (ii) related consumable supplies including paper, labels, tags, inks, toners and ribbons, (iii) repairs and maintenance of equipment and (iv) service agreements.

Revenues disaggregated by primary geographic markets and major product types are as follows:

Primary geographical markets:

(In thousands)	2024	2023*	2022
United States	$ 84,757	$ 83,559	$ 68,185
Europe	41,761	38,859	31,922
Canada	8,742	8,690	6,519
Asia	7,216	5,547	5,926
Central and South America	4,221	4,589	3,271
Other	1,389	1,283	1,657
Total Revenue	$ 148,086	$ 142,527	$ 117,480

*Certain amounts have been reclassified to conform to the current year's presentation.

Major product types:

(In thousands)	2024	2023	2022
Hardware	$ 49,440	$ 42,445	$ 31,492
Supplies	79,252	82,072	73,244
Service and Other	19,394	18,010	12,744
Total Revenue	$ 148,086	$ 142,527	$ 117,480

In December 2022, we entered into an amended contract with one of our T&M customers that provided for a total payment of $3.25 million to be received as a result of our claims allowable under French law relating to additional component costs we have incurred and will continue to incur in order to supply aerospace printers under the contract for the period beginning in April 2022 and continuing through 2025. As of January 31, 2023, we recognized $1.1 million in revenue as a result of this arrangement and the $2.15 million balance was recorded as deferred revenue in the accompanying consolidated balance sheet. During fiscal 2024, we recognized an additional $1.3 million which is included in revenue in the consolidated statement of income for the period ended January 31, 2024, and at January 31, 2024, the remaining balance to be received of $0.8 million is included in deferred revenue in the accompanying consolidated balance sheet. The remaining revenue to be recognized will be based on our shipments of the printers during fiscal 2025.

Contract Assets and Liabilities

We normally do not have contract assets, which are primarily unbilled accounts receivable that are conditional on something other than the passage of time.

Our contract liabilities, which represent billings in excess of revenue recognized, are related to advanced billings for purchased service agreements and extended warranties. Contract liabilities were $530,000 and $412,000 at January 31, 2024 and January 31, 2023, respectively, and are recorded as current deferred revenue in the accompanying consolidated balance sheet. The increase in the deferred revenue balance for the year ended January 31, 2024 is primarily due to cash payments received in advance of satisfying performance obligations, offset by $704,000 of revenue recognized during the period that was included in the deferred revenue balance at January 31, 2023.

Contract Costs

We recognize an asset for the incremental costs of obtaining a contract with a customer if we expect the benefit of those costs to be longer than one year. We have determined that certain costs related to obtaining sales contracts for our aerospace printer products meet the requirement to be capitalized. These costs are deferred and amortized over the remaining useful life of these contracts, which we currently estimate to be approximately 17 years as of January 31, 2024. Amortized contract costs for each of the years ended January 31, 2024 and 2023, were $75,000 and were $60,000 for the year ended January 31, 2022. The balance of deferred incremental direct costs net of accumulated amortization at January 31, 2024, was $1.3 million, of which $0.1 million is reported in other current assets and $1.2 million is reported in other assets in the accompanying consolidated balance sheet.

Note 4—Intangible Assets

Intangible assets are as follows:

	January 31, 2024				January 31, 2023			
(In thousands)	Gross Carrying Amount	Accumulated Amortization	Currency Translation Adjustment	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Currency Translation Adjustment	Net Carrying Amount
Miltope:								
Customer Contract Relationships	$ 3,100	$ (3,100)	$ —	$ —	$ 3,100	$ (2,777)	$ —	$ 323
RITEC:								
Customer Contract Relationships	2,830	(1,689)	—	1,141	2,830	(1,623)	—	1,207
TrojanLabel:								
Existing Technology	2,327	(2,420)	93	—	2,327	(2,087)	94	334
Distributor Relations	937	(686)	30	281	937	(588)	27	376
Honeywell:								
Customer Contract Relationships	27,773	(12,795)	—	14,978	27,773	(11,913)	—	15,860
Astro Machine:								
Customer Contract Relationships	3,060	(918)	—	2,142	3,060	(306)	—	2,754
Trademarks	420	(126)	—	294	420	(42)	—	378
Intangible Assets, net	$ 40,447	$ (21,734)	$ 123	$ 18,836	$ 40,447	$ (19,336)	$ 121	$ 21,232

There were no impairments to intangible assets during the periods ended January 31, 2024 and 2023. Amortization expense of \$2.4 million, \$1.9 million, and \$2.2 million with regard to acquired intangibles has been included in the consolidated statements of income for the years ended January 31, 2024, 2023 and 2022, respectively.

Estimated amortization expense for the next five fiscal years is as follows:

(In thousands)	2025	2026	2027	2028	2029
Estimated amortization expense	$ 1,723	$ 1,723	$ 1,723	$ 1,723	$ 1,281

Note 5—Inventories

The components of inventories are as follows:

	January 31, 2024	January 31, 2023
(In thousands)		
Materials and Supplies	$ 39,078	$ 38,387
Work-in-Progress	1,054	1,146
Finished Goods	15,645	23,221
	55,777	62,754
Inventory Reserve	(9,406)	(11,430)
	$ 46,371	$ 51,324

Note 6—Property, Plant and Equipment

Property, plant and equipment consist of the following:

	January 31, 2024	January 31, 2023
(In thousands)		
Land and Land Improvements	$ 2,304	$ 2,304
Buildings and Leasehold Improvements	14,381	14,158
Machinery and Equipment	26,123	24,960
Computer Equipment and Software	14,238	13,972
Gross Property, Plant and Equipment	57,046	55,394
Accumulated Depreciation	(42,861)	(41,106)
Net Property Plant and Equipment	$ 14,185	$ 14,288

Depreciation expense on property, plant and equipment was \$1.8 million, \$2.0 million and \$1.7 million for the years ended January 31, 2024, 2023 and 2022, respectively.

During fiscal 2022, we wrote-off our Oracle EnterpriseOne enterprise resource planning (“ERP”) system due to the full implementation of a new ERP system in our US operations. The book value and related accumulated depreciation of the ERP system along with the balance of the related prepaid service and maintenance contracts were removed from the accompanying consolidated balance sheet at January 31, 2022, and we recorded a net loss on the disposal of \$0.7 million, which is included in other income (expense) in the accompanying consolidated income statement for the year ended January 31, 2022.

Note 7—Accrued Expenses

Accrued expenses consist of the following:

	January 31,	
(In thousands)	2024	2023
Warranty	$ 711	$ 1,072
Professional Fees	375	311
Current portion of Lease Liability	233	275
Accrued Property & Sales Tax	209	187
Stockholder Relation Fees	94	86
Dealer Commissions	64	78
Other Accrued Expenses	1,020	1,299
	$ 2,706	$ 3,308

Note 8—Credit Agreement and Long-Term Debt

Credit Agreement

In connection with the purchase of Astro Machine, on August 4, 2022, we entered into a Second Amendment to Amended and Restated Credit Agreement (the "Second Amendment") with Bank of America, N.A., as lender (the "Lender"). The Second Amendment amended the Amended and Restated Credit Agreement dated as of July 30, 2020, as amended by the First Amendment to Amended and Restated Credit Agreement, dated as of March 24, 2021, and the LIBOR Transition Amendment, dated as of December 24, 2021 (the "Existing Credit Agreement," and the Existing Credit Agreement as amended by the Second Amendment, the "Amended Credit Agreement"), between the Company and the Lender.

The Amended Credit Agreement provides for (i) a new term loan in the principal amount of $6.0 million, which term loan was in addition to the existing term loan outstanding under the Existing Credit Agreement in the principal amount of $9.0 million as of the effective date of the Second Amendment, and (ii) an increase in the aggregate principal amount of the revolving credit facility available thereunder from $22.5 million to $25.0 million. At the closing of the Second Amendment, we borrowed the entire $6.0 million term loan and $12.4 million under the revolving credit facility, and the proceeds of such borrowings were used in part to pay the purchase price payable under the Purchase Agreement and certain related transaction costs. The revolving credit facility may otherwise be used for corporate purposes.

The Amended Credit Agreement requires that the term loan be paid in quarterly installments on the last day of each of our fiscal quarters over the term of the Amended Credit Agreement on the following repayment schedule: the principal amount of each quarterly installment required to be paid on the last day of each of our fiscal quarters ending on or about October 31, 2022 through July 31, 2023 is $375,000; and the principal amount of each quarterly installment required to be paid on the last day of each of our fiscal quarters ending on or about October 31, 2023 through April 30, 2027 is $675,000. The entire remaining principal balance of the term loan is required to be paid on August 4, 2027. We may voluntarily prepay the term loan, in whole or in part, from time to time without premium or penalty (other than customary breakage costs, if applicable). We may repay borrowings under the revolving credit facility at any time without premium or penalty (other than customary breakage costs, if applicable), but in any event no later than August 4, 2027, and any outstanding revolving loans thereunder will be due and payable in full, and the revolving credit facility will terminate on such date. We may reduce or terminate the revolving credit facility at any time, subject to certain thresholds and conditions, without premium or penalty.

The interest rates under the Amended Credit Agreement are as follows: the term loan and revolving credit loans bear interest at a rate per annum equal to, at our option, either (a) the BSBY Rate as defined in the Amended Credit Agreement (or, in the case of revolving credit loans denominated in a currency other than U.S. Dollars, the applicable quoted rate), plus a margin that varies within a range of 1.60% to 2.50% based on our consolidated leverage ratio, or (b) a fluctuating reference rate equal to the highest of (i) the federal fund rate plus 0.50%, (ii) Bank of America's publicly announced prime rate, (iii) the BSBY Rate plus 1.00%, or (iv) 0.50%, plus a margin that varies within a range of 0.60% to 1.50% based on our consolidated leverage ratio. During fiscal 2024, the weighted average interest rate on our variable rate debt was 7.54%. In addition to certain other fees and expenses that we are required to pay to the Lender, we are required to pay a commitment fee on the undrawn portion of the revolving credit facility that varies within a range of 0.15% and 0.35% based on our consolidated leverage ratio. The loans under the Amended Credit Agreement are subject to certain mandatory prepayments, subject to various exceptions, from (a) net cash proceeds from certain dispositions of property, (b) net cash proceeds from certain issuances of equity, (c) net cash proceeds from certain issuances of additional debt and (d) net cash proceeds from certain extraordinary receipts.

Amounts repaid under the revolving credit facility may be reborrowed, subject to our continued compliance with the Amended Credit Agreement. No amount of the term loan that is repaid may be reborrowed.

We must comply with various customary financial and non-financial covenants under the Amended Credit Agreement. The financial covenants under the Amended Credit Agreement consist of a maximum consolidated leverage ratio, a minimum consolidated fixed charge coverage ratio and a minimum consolidated asset coverage ratio. The primary non-financial covenants limit our and our subsidiaries' ability to incur future indebtedness, to place liens on assets, to pay dividends or distributions on our or our subsidiaries' capital stock, to repurchase or acquire our or our subsidiaries' capital stock, to conduct mergers or acquisitions, to sell assets, to alter our or our subsidiaries' capital structure, to make investments and loans, to change the nature of our or our subsidiaries' business, and to prepay subordinated indebtedness, in each case subject to certain exceptions and thresholds as set forth in the Amended Credit Agreement, certain of which provisions were modified by the Second Amendment. As of January 31, 2024, we believe we are in compliance with all of the covenants in the Credit Agreement.

The Lender is entitled to accelerate repayment of the loans and to terminate its revolving credit commitment under the Amended Credit Agreement upon the occurrence of any of various customary events of default, which include, among other events, the following (which are subject, in some cases, to certain grace periods): failure to pay when due any principal, interest or other amounts in respect of the loans, breach of any of our covenants or representations under the loan documents, default under any other of our or our subsidiaries' significant indebtedness agreements, a bankruptcy, insolvency or similar event with respect to us or any of our subsidiaries, a significant unsatisfied judgment against us or any of our subsidiaries, or a change of control.

Our obligations under the Amended Credit Agreement continue to be secured by substantially all of our personal property assets (including a pledge of the equity interests we hold in AstroNova Scandinavia ApS, AstroNova GmbH and AstroNova SAS), subject to certain exceptions, and by a mortgage on our owned real property in West Warwick, Rhode Island, and are guaranteed by, and secured by substantially all of the personal property assets of Astro Machine.

Equipment Financing

In January 2024, we entered into a secured equipment loan facility agreement with Banc of America Leasing & Capital, LLC and borrowed a principal amount of $0.8 million thereunder for the purpose of financing our purchase of production equipment. This loan matures on January 23, 2029, and bears interest at a fixed rate of 7.06%. Under this loan agreement, equal monthly payments including principal and interest of $16,296 will commence on February 23, 2024, and will continue through the maturity of the equipment loan facility on January 23, 2029.

Summary of Outstanding Debt

Revolving Credit Facility

At January 31, 2024, we had a principal balance of $8.9 million outstanding on our revolving credit facility. The balance outstanding under the revolving credit facility bore interest at a weighted average rate of 7.70% and 6.35% for the years ended January 31, 2024 and January 31, 2023, respectively, and we incurred $1.2 million and $0.8 million for interest on this obligation during the years ended January 31, 2024 and January 31, 2023, respectively. Commitment fees on the undrawn portion of our revolving credit facility of $30,000 were incurred for each of the years ended January 31, 2024 and January 31, 2023, respectively. Both the interest expense and commitment fees are included as interest expense in the accompanying consolidated income statement for all periods presented. At January 31, 2024, $16.1 million remained available for borrowing under our revolving credit facility.

Long-Term Debt

Long-term debt in the accompanying consolidated balance sheets is as follows:

(In thousands)	January 31, 2024	January 31, 2023
Term Loan (7.56% as of January 31, 2024 and 6.78% as of January 31, 2023); maturity date of August 4, 2027	$12,150	$14,250
Equipment Loan (7.06% Fixed Rate); maturity date of January 23, 2029	822	—
Total Long Term Debt	$12,972	$14,250
Less: Debt Issuance Costs, net of accumulated amortization	80	110
Current Portion of Long Term Debt	2,842	2,100
Long-Term Debt, net of Current Portion	$10,050	$12,040

During the years ended January 31, 2024, 2023 and 2022, we recognized $1.0 million, $0.6 million and $0.3 million of interest expense on our long-term debt, respectively, which was included in interest expense in the accompanying consolidated income statement for all periods presented.

The schedule of required principal payments remaining on our long-term debt outstanding as of January 31, 2024 is as follows:

(In thousands)		
Fiscal 2025	$	2,842
Fiscal 2026		2,852
Fiscal 2027		2,864
Fiscal 2028		4,226
Fiscal 2029		188
	$	12,972

Note 9—Paycheck Protection Program Loan

On May 6, 2020, we entered into a loan agreement in which we borrowed $4.4 million (the "PPP Loan") from Greenwood Credit Union under the Paycheck Protection Program administered by the SBA and authorized by the CARES Act.

The PPP Loan, originally scheduled to mature on May 6, 2022, was unsecured and bore interest at a rate of 1.0% per annum, accruing from the loan date.

On June 15, 2021, Greenwood notified us that the SBA approved our application for forgiveness of the entire $4.4 million principal balance of our PPP Loan and all accrued interest thereon. As a result, in the second quarter of fiscal 2022, we recorded a $4.5 million gain on extinguishment of debt, which is included in the accompanying consolidated income statement for the period ended January 31, 2022.

Note 10—Royalty Obligation

In fiscal 2018, we entered into an Asset Purchase and License Agreement with Honeywell International, Inc. to acquire an exclusive, perpetual, world-wide license to manufacture Honeywell's narrow-format flight deck printers for two aircraft families along with certain inventory used in the manufacturing of the licensed printers. The purchase price included a guaranteed minimum royalty payment of $15.0 million, to be paid in quarterly installments over a ten-year period. This ten-year period ends on September 30, 2028. Royalty payments are based on gross revenues from the sales of the printers, paper and repair services of the licensed products. The royalty rates vary based on the year in which they are paid or earned and product sold or service provided, and range from single-digit to mid double-digit percentages of gross revenue.

The guaranteed minimum royalty payment obligation was recorded at the present value of the minimum annual royalty payments. As of January 31, 2024, we had paid an aggregate of $11.5 million of the guaranteed minimum royalty obligation. At January 31, 2024, the current portion of the outstanding guaranteed minimum royalty obligation of $1.5 million is to be paid over the next twelve months and is reported as a current liability and the remainder of $1.7 million is reported as a long-term liability on our consolidated balance sheet. In addition to the guaranteed minimum royalty payments, for the periods ended January 31, 2024, 2023 and 2022, we also incurred excess royalty expense of $2.3 million, $1.3 million and $0.5 million, respectively, which is included in cost of revenue in our consolidated statements of income for those periods. A total of $0.9 million of excess royalty is payable and reported as a current liability on our consolidated balance sheet at January 31, 2024.

In fiscal 2023, we entered into a second Asset Purchase and License Agreement with Honeywell International, Inc. as further discussed in Note 2.

Note 11—Leases

We enter into lease contracts for certain of our facilities at various locations worldwide. Our leases have remaining lease terms of one to six years, some of which include options to extend the lease term for periods of up to five years when it is reasonably certain that we will exercise such options.

Balance sheet and other information related to our leases is as follows:

Operating Leases (In thousands)	**Balance Sheet Classification**		**January 31, 2024**		**January 31, 2023**
Lease Assets	Right of Use Assets	$	603	$	794
Lease Liabilities—Current	Other Accrued Expenses	$	233	$	275
Lease Liabilities—Long Term	Lease Liabilities	$	415	$	555

Lease cost information is as follows:

Operating Leases (In thousands)	**Statement of Income Classification**	**2024**	**2023**
Operating Lease Costs	General and Administrative Expense	$ 470	$ 460

At January 31, 2024, maturities of operating lease liabilities are as follows:

(In thousands)	
2025	$ 256
2026	197
2027	148
2028	92
2029	—
Thereafter	—
Total Lease Payments	693
Less: Imputed Interest	(45)
Total Lease Liabilities	$ 648

As of January 31, 2024, the weighted-average remaining lease term and weighted-average discount rate for our operating leases are 3.1 years and 4.38%, respectively. We calculated the weighted-average discount rate using incremental borrowing rates, which equal the rates of interest that we would pay to borrow funds on a fully collateralized basis over a similar term.

Supplemental cash flow information related to leases is as follows:

(In thousands)	**2024**	**2023**
Cash paid for operating lease liabilities	$ 350	$ 314

Note 12—Accumulated Other Comprehensive Loss

The changes in the balance of accumulated other comprehensive loss by component are as follows:

(In thousands)	**Foreign Currency Translation Adjustments**	**Net Unrealized Gain (Losses) on Cash Flow Hedges**	**Total**
Balance at January 31, 2021	$ (275)	$ (109)	$ (384)
Other Comprehensive Loss before reclassification	(1,426)	—	(1,426)
Amounts Reclassified from AOCI to Earnings	—	62	62
Other Comprehensive Income (Loss)	(1,426)	62	(1,364)
Balance at January 31, 2022	$ (1,701)	$ (47)	$ (1,748)
Other Comprehensive Income (Loss) before reclassification	(537)	—	(537)
Amounts reclassified from AOCI to Earnings	—	47	47
Other Comprehensive Income (Loss)	(537)	47	(490)
Balance at January 31, 2023	$ (2,238)	$ —	$ (2,238)
Other Comprehensive Income (Loss) before reclassification	19	—	19
Amounts reclassified from AOCI to Earnings	—	—	—
Other Comprehensive Income (Loss)	19	—	19
Balance at January 31, 2024	$ (2,219)	$ —	$ (2,219)

The amounts presented above in other comprehensive income (loss) are net of taxes except for translation adjustments associated with our German, Danish and Shanghai subsidiaries.

Note 13—Shareholders' Equity

During fiscal years 2024 and 2023, certain of our employees delivered a total of 26,731 and 17,752 shares, respectively, of our common stock to satisfy the exercise price and related taxes for stock options exercised and restricted stock vesting. The shares delivered were valued at a total of $0.4 million and $0.3 million, respectively, and are included in treasury stock in the accompanying consolidated balance sheets at January 31, 2024 and 2023. These transactions did not impact the number of shares authorized for repurchase under our current repurchase program.

Note 14—Share-Based Compensation

The Company maintains the following share-based compensation plans:

Stock Plans:

We have one equity incentive plan from which we are authorized to grant equity awards, the AstroNova, Inc. 2018 Equity Incentive Plan (the "2018 Plan"). The 2018 Plan provides for, among other things, the issuance of awards, including incentive stock options, non-qualified stock options, stock appreciation rights, time-based restricted stock units ("RSUs"), or performance-based restricted stock units ("PSUs") and restricted stock awards ("RSAs"). The 2018 Plan authorizes the issuance of up to 950,000 shares of common stock, plus an additional number of shares equal to the number of shares subject to awards granted under the previous equity incentive plans that are forfeited, cancelled, satisfied without the issuance of stock, otherwise terminated (other than by exercise), or, for shares of stock issued pursuant to any unvested award, that are reacquired by us at not more than the grantee's purchase price (other than by exercise). Under the 2018 Plan, all awards to employees generally have a minimum vesting period of one year. Options granted under the 2018 Plan must be issued at an exercise price of not less than the fair market value of our common stock on the date of grant and expire after ten years. Under the 2018 Plan, there were 115,970 unvested RSUs; 184,735 unvested PSUs; and options to purchase an aggregate of 135,500 shares outstanding as of January 31, 2024.

In addition to the 2018 Plan, we previously granted equity awards under our 2015 Equity Incentive Plan (the "2015 Plan") and our 2007 Equity Incentive Plan (the "2007 Plan"). No new awards may be issued under either the 2007 or 2015 Plans, but outstanding awards will continue to be governed by those plans. As of January 31, 2024, options to purchase an aggregate of 260,249 shares were outstanding under the 2007 Plan and options to purchase an aggregate of 127,600 shares were outstanding under the 2015 Plan.

We also have a Non-Employee Director Annual Compensation Program (the "Program") under which each non-employee director receives an automatic grant of RSAs on the date of the regular full meeting of the Board of Directors held each fiscal quarter. Under the Program, the number of whole shares to be granted each quarter is equal to 25% of the number calculated by dividing the director's annual compensation amount by the fair market value of the Company's stock on such day. On June 5, 2023, each director's annual compensation amount was adjusted to be $70,000. All RSAs granted under this Program vest immediately.

Share-Based Compensation:

Share-based compensation expense has been recognized as follows:

	Years Ended January 31		
(In thousands)	2024	2023	2022
Stock Options	$ —	$ 7	$ 210
Restricted Stock Awards and Restricted Stock Units	1,322	1,271	1,266
Employee Stock Purchase Plan	25	12	17
Total	$ 1,347	$ 1,290	$ 1,493

Stock Options:

Aggregated information regarding stock options granted under the plans is summarized below:

	Number of Shares	Weighted-Average Exercise Price Per Share
Options Outstanding, January 31, 2021	622,083	$ 14.63
Options Granted	—	—
Options Exercised	(6,425)	9.34
Options Forfeited	(17,615)	15.09
Options Cancelled	—	—
Options Outstanding, January 31, 2022	598,043	$ 14.67
Options Granted	—	—
Options Exercised	(42,944)	8.74
Options Forfeited	(5,500)	15.42
Options Cancelled	(2,400)	8.09
Options Outstanding, January 31, 2023	547,199	$ 15.16
Options Granted	—	—
Options Exercised	(9,100)	11.54
Options Forfeited	(10,525)	15.20
Options Cancelled	(4,225)	10.50
Options Outstanding, January 31, 2024	523,349	$ 15.26

Set forth below is a summary of options outstanding at January 31, 2024:

	Outstanding			Exercisable		
Range of Exercise prices	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Number of Shares	Weighted-Average Exercise Price	Weighted Average Remaining Contractual Life
$10.01-15.00	311,874	$ 13.78	2.0	311,874	$ 13.78	2.0
$15.01-20.00	211,475	17.44	3.8	211,475	17.44	3.8
	523,349	$ 15.26	2.7	523,349	$ 15.26	2.7

No options were granted during fiscal 2024 or fiscal 2023. As of January 31, 2024, there was no unrecognized compensation expense related to the unvested stock options granted under the plans.

As of January 31, 2024, the aggregate intrinsic value (the aggregate difference between the closing stock price of our common stock on January 31, 2024, and the exercise price of the outstanding options) that would have been received by the option holders if all options had been exercised was $1.3 million for all exercisable options and all options outstanding. The total aggregate intrinsic value of options exercised during fiscal 2024, 2023 and 2022 was $32,000, $200,000, and $26,000, respectively.

Restricted Stock Units, Performance-Based Restricted Stock Units and Restricted Stock Awards:

Aggregated information regarding RSUs, PSUs and RSAs granted under the Plan is summarized below:

	RSUs, PSUs & RSAs	Weighted-Average Grant Date Fair Value
Outstanding at January 31, 2021	197,413	$ 9.96
Granted	151,406	14.51
Vested	(126,939)	10.43
Forfeited	(900)	14.26
Outstanding at January 31, 2022	220,980	$ 13.23
Granted	141,371	12.70
Vested	(85,324)	13.45
Forfeited	(2,100)	13.25
Outstanding at January 31, 2023	274,927	$ 12.82
Granted	157,643	12.64
Vested	(116,288)	12.29
Forfeited	(15,577)	13.37
Outstanding at January 31, 2024	300,705	$ 12.90

As of January 31, 2024, there was $2.1 million of unrecognized compensation expense related to unvested RSUs, PSUs and RSAs. This expense is expected to be recognized over a weighted average period of 1.5 years.

Employee Stock Purchase Plan (ESPP):

On June 7, 2022, we adopted the AstroNova Inc. 2022 Employee Stock Purchase Plan ("2022 ESPP") to replace our previous Employee Stock Purchase Plan (the "Prior ESPP"). The 2022 ESPP allows eligible employees to purchase shares of common stock at a 15% discount from fair value on the first or last day of an offering period, whichever is less. A total of 40,000 shares were reserved for issuance under this plan and 9,897 and 5,045 shares were purchased under the 2022 ESSP during the years ended January 31, 2024 and 2023, respectively. During the period ended January 31, 2023, there were 1,550 shares purchased under the Prior ESPP, and no additional purchases may be made under the Prior ESPP. As of January 31, 2024, 25,058 shares remain available for purchase under the 2022 ESPP.

Note 15—Income Taxes

The components of income before income taxes are as follows:

(In thousands)	2024	2023	2022
Domestic	$ 5,448	$ 1,773	$ 5,046
Foreign	625	1,637	1,988
	$ 6,073	$ 3,410	$ 7,034

The components of the provision for income taxes are as follows:

(In thousands)	2024	2023	2022
Current:			
Federal	$ 966	$ 902	$ (183)
State	71	313	76
Foreign	420	870	501
	1,457	2,085	394
Deferred:			
Federal	$ (32)	$ (1,053)	$ 180
State	2	(315)	177
Foreign	(48)	32	(146)
	(78)	(1,336)	211
	$ 1,379	$ 749	$ 605

Total income tax provision differs from the expected tax provision as a result of the following:

(In thousands)	2024	2023	2022
Income Tax Provision at Statutory Rate	$ 1,275	$ 716	$ 1,477
Foreign Rate Differential	197	157	61
Change in Valuation Allowance	73	182	57
Change in Reserves Related to ASC 740 Liability	60	93	(245)
State Taxes, Net of Federal Tax Effect	56	(2)	143
Meals and Entertainment	14	—	9
Return to Provision Adjustment	12	(22)	368
R&D Credits	(160)	(160)	(180)
Foreign Derived Intangible Income	(98)	(180)	(55)
Share Based Compensation	(43)	(52)	(95)
PPP Loan Forgiveness	—	—	(937)
Other	(7)	17	2
	$ 1,379	$ 749	$ 605

Our effective tax rate for fiscal 2024 was 22.7% compared to 22.0% in fiscal 2023 and 8.6% in fiscal 2022. The increase in the effective tax rate in fiscal 2024 from fiscal 2023 is primarily related to the impact of the valuation allowance recorded on China net operating losses, the increase in the current provision for state and local taxes, and the change in the foreign rate differential. This increase was partially offset by other factors decreasing the effective tax rate such as foreign derived intangible income (“FDII”) deduction, share based compensation, and the R&D tax credit.

The increase in the effective tax rate in fiscal 2023 from fiscal 2022 is primarily related to the absence of the PPP loan forgiveness which is tax-exempt income that was a one-time item that reduced the rate in fiscal 2022. Specific items increasing the effective tax rate in fiscal 2023 include the change in reserves related to ASC 740 liability and the increase in the valuation allowance recorded on China net operating losses. This increase was partially offset by state taxes, return to provision adjustments, share-based compensation, R&D tax credits, and foreign derived intangible income FDII deduction.

The components of deferred income tax expense arise from various temporary differences and relate to items included in the statement of income. The tax effects of temporary differences that gave rise to significant portions of the deferred tax assets and liabilities are as follows:

	January 31,	
(In thousands)	2024	2023
Deferred Tax Assets:		
Inventory	$ 2,242	$ 2,710
Honeywell Royalty Liability	3,561	3,008
State R&D Credits	2,160	1,851
Share-Based Compensation	590	620
Bad Debt	134	180
Warranty Reserve	171	258
Compensation Accrual	276	248
Net Operating Loss	199	135
ASC 842 Adjustment – Lease Liability	38	53
Unrecognized State Tax Benefits	49	58
Foreign Tax Credit	154	154
Deferred Service Contract Revenue	100	90
Section 174 Capitalization*	1,981	1,175
Other	381	281
	12,036	10,821
Deferred Tax Liabilities:		
Accumulated Tax Depreciation in Excess of Book Depreciation	1,491	1,037
Intangibles	989	694
ASC 842 Adjustment – Lease Liability	33	50
Other	206	180
	2,719	1,961
Subtotal	9,317	8,860
Valuation Allowance	(2,534)	(2,120)
Net Deferred Tax Assets	$ 6,783	$ 6,740

* Beginning in fiscal 2023, changes to Section 174 of the Internal Revenue Code made by the Tax Cuts and Jobs Act of 2017 ("TCJA") no longer permit an immediate deduction for research and development expenditures in the tax year that such costs are incurred. These costs are capitalized resulting in an increase in deferred tax assets of $0.8 million from fiscal 2023 to fiscal 2024.

Deferred taxes are reflected in the consolidated balance sheet as follows:

	January 31,	
(In thousands)	2024	2023
Deferred Tax Assets	6,882	6,907
Deferred Tax Liabilities	(99)	(167)
Total Net Deferred Tax Assets	$ 6,783	$ 6,740

The valuation allowances of $2.5 million at January 31, 2024 and $2.1 million at January 31, 2023, relate to Rhode Island research and development tax credit carryforwards, foreign tax credit carryforwards, and China's net operating losses that are expected to expire unutilized.

At January 31, 2024, we had net operating loss carryforwards of $0.2 million in China, which expire in 2024 through 2028.

At January 31, 2024, we had state research credit carryforwards of approximately $2.2 million which expire in 2025 through 2031. Additionally, we had $0.2 million of foreign tax credits. We maintain a full valuation allowance against these credits as we expect these credits to expire unused.

We believe that it is reasonably possible that some unrecognized tax benefits, accrued interest and penalties could decrease income tax expense in the next year due to either the review of previously filed tax returns or the expiration of certain statutes of limitation. The changes in the balances of unrecognized tax benefits, excluding interest and penalties are as follows:

(In thousands)	2024	2023	2022
Balance, beginning of the year	$ 414	$ 303	$ 384
Increases in prior period tax positions	—	24	63
Increases in current period tax positions	162	136	67
Reductions related to lapse of statutes of limitations	(71)	(49)	(211)
Balance, end of the year	$ 505	$ 414	$ 303

During fiscal 2024 and 2023, we released $71,000 and $49,000, respectively, of uncertain tax positions including accrued interest and penalties relating to a change in various unrecognized tax positions. We have accrued potential interest and penalties of $46,000 included in income taxes payable in the accompanying consolidated balance sheet at January 31, 2024.

The Company and its subsidiaries file income tax returns in U.S. federal jurisdictions, various state jurisdictions, and various foreign jurisdictions. In fiscal 2024, we released $33,000 related to a federal tax exposure for the fiscal 2020 tax year and $39,000 of state nexus positions as a result of the expiration of the statute of limitations.

U.S. income taxes have not been provided on $10.0 million of undistributed earnings of our foreign subsidiaries since it is our intention to permanently reinvest such earnings offshore. If the earnings were distributed in the form of dividends, we would not be subject to U.S. tax as a result of the TCJA but, could be subject to foreign income and withholding taxes. Determination of the amount of this unrecognized deferred income tax liability is not practical.

Note 16—Nature of Operations, Segment Reporting and Geographical Information

Our operations consist of the design, development, manufacture and sale of specialty printers and data acquisition and analysis systems, including both hardware and software and related consumable supplies. We organize and manage our business as a portfolio of products and services designed around a common theme of data acquisition and information output. We have two reporting segments consistent with our revenue product groups: Product Identification (“PI”) and Test & Measurement (“T&M”).

Our PI segment produces an array of high-technology digital color and monochrome label printers and mini presses, labeling software and supplies for a variety of commercial industries worldwide and includes our fiscal 2023 acquisition of Astro Machine. Our T&M segment produces data acquisition systems used worldwide for a variety of recording, monitoring and troubleshooting applications for many industries including aerospace, automotive, defense, rail, energy, industrial and general manufacturing. The T&M segment also includes our line of aerospace flight deck and cabin printers.

Business is conducted in the United States and through foreign branch offices and subsidiaries in Canada, Europe, China, Southeast Asia and Mexico. Manufacturing activities are primarily conducted in the United States. Revenue and service activities outside the United States are conducted through wholly owned entities and, to a lesser extent, through authorized distributors and agents. Transfer prices are intended to produce gross profit margins as would be associated with an arms-length transaction.

The accounting policies of the reporting segments are the same as those described in the summary of significant accounting policies herein. We evaluate segment performance based on the segment profit before corporate and financial administration expenses.

Summarized below are the revenue and segment operating profit (both in dollars and as a percentage of revenue) for each reporting segment:

	Revenue			Segment Operating Profit			Segment Operating Profit as a % of Revenue		
($ in thousands)	2024	2023	2022	2024	2023	2022	2024	2023	2022
Product Identification	$ 104,041	$ 103,089	$ 90,915	$ 10,087	$ 7,889	$ 10,411	9.7%	7.7%	11.5%
T&M	44,045	39,438	26,565	10,200	8,989	3,398	23.2%	22.8%	12.8%
Total	$ 148,086	$ 142,527	$ 117,480	20,287	16,878	13,809	13.7%	11.8%	11.8%
Corporate Expenses				11,491	11,435	9,553			
Operating Income				8,796	5,443	4,256			
Other Income (Expense), Net				(2,723)	(2,033)	2,778			
Income Before Income Taxes				6,073	3,410	7,034			
Income Tax Provision				1,379	749	605			
Net Income				$ 4,694	$ 2,661	$ 6,429			

No customer accounted for greater than 10% of net revenue in fiscal 2024, 2023 or 2022.

Other information by segment is presented below:

(In thousands)	Assets January 31, 2024	2023
Product Identification	$ 64,686	$ 69,607
T&M	61,125	60,730
Corporate*	7,440	8,870
Total	$ 133,251	$ 139,207

* Corporate assets consist principally of cash, cash equivalents, deferred tax assets and refunds, and certain prepaid corporate assets.

	Depreciation and Amortization			Capital Expenditures		
(In thousands)	2024	2023	2022	2024	2023	2022
Product Identification	$ 2,572	$ 2,219	$ 1,157	$ 1,686	$ 121	$ 847
T&M	1,694	1,697	2,837	10	108	949
Total	$ 4,266	$ 3,916	$ 3,994	$ 1,696	$ 229	$ 1,796

Geographical Data

Presented below is selected financial information by geographic area:

	Revenue (1)			Long-Lived Assets (2) January 31,	
(In thousands)	2024	2023	2022	2024	2023
United States	$ 84,757	$ 83,559	$ 68,185	$ 32,090	$ 34,277
Europe	41,761	38,859	31,922	754	1,230
Canada	8,742	8,690	6,519	171	4
Asia	7,216	5,547	5,926	6	9
Central and South America	4,221	4,589	3,271	—	—
Other	1,389	1,283	1,657	—	—
Total	$ 148,086	$ 142,527	$ 117,480	$ 33,021	$ 35,520

(1) Certain amounts have been reclassified to conform to the current year's presentation.

(2) Long-lived assets exclude goodwill assigned to the T&M segment of $4.5 million at both January 31, 2024 and 2023 and $10.1 million assigned to the PI segment at both January 31, 2024 and 2023.

Note 17—Employee Benefit Plans

We sponsor a Profit-Sharing Plan (the "Plan") which provides retirement benefits to all eligible domestic employees. The Plan allows participants to defer a portion of their cash compensation and contribute such deferral to the Plan through payroll deductions. The Company makes matching contributions up to specified levels. The deferrals are made within the limits prescribed by Section 401(k) of the Internal Revenue Code.

All contributions are deposited into trust funds. It is our policy to fund any contributions accrued. Our annual contribution amounts are determined by the Board of Directors. Contributions paid or accrued amounted to $0.5 million in each of fiscal 2024, fiscal 2023 and fiscal 2022.

Note 18—Product Warranty Liability

We offer a manufacturer's warranty for the majority of our hardware products. The specific terms and conditions of warranty vary depending upon the products sold and the country in which we do business. We estimate the warranty costs based on historical claims experience and record a liability in the amount of such estimates at the time product revenue is recognized. We regularly assess the adequacy of our recorded warranty liabilities and adjust the amounts as necessary. Activity in the product warranty liability, which is included in other accrued expenses in the accompanying consolidated balance sheet, is as follows:

(In thousands)	2024	2023	2022
Balance, beginning of the year	$ 1,072	$ 834	$ 730
Provision for Warranty Expense	1,181	2,077	2,174
Cost of Warranty Repairs	(1,542)	(1,839)	(2,070)
Balance, end of the year	$ 711	$ 1,072	$ 834

During fiscal 2022, we incurred incremental costs because of a product quality issue with one of our vendors. As the result of discussions with the vendor, which was responsible for the product quality issue, we entered into an agreement whereby the vendor paid us $975,000 as partial reimbursement of the costs we incurred in supporting our customers with respect to the product quality issue. For the period ended January 31, 2022, we recorded this payment to offset cost of revenue in our PI segment for the product lines effected to partially reverse the accounting impact when the original costs of the quality issues were incurred.

Note 19—Restructuring

On July 26, 2023, we adopted a restructuring plan for our PI segment that transitioned a portion of the printer manufacturing within that segment from our facility in Rhode Island to our Astro Machine facility located in Illinois. Additionally, we ceased selling certain of our older, lower-margin or low-volume PI segment products and made targeted reductions to our workforce. As part of the restructuring plan, we also consolidated certain of our international PI sales and distribution facilities and streamlined our channel partner network. As of January 31, 2024, we have completed this plan.

As a result of the adoption and implementation of our PI segment restructuring plan, in the second quarter of fiscal 2024 we recognized a pre-tax restructuring charge of $2.7 million, comprised primarily of non-cash charges related to inventory write-offs associated with product curtailment and discontinuation and facility exit related costs, and cash charges related to severance-related costs. The following table is a summary of the restructuring costs by type for the year ended January 31, 2024:

(In thousands)	Inventory Write-Off	Severance and Employee Related Costs	Facility Exit and Other Restructuring Costs	Total
Restructuring Charges	$ 1,991	$ 611	$ 49	$ 2,651
Change in Estimates (1)	—	(75)	—	(75)
Total	$ 1,991	$ 536	$ 49	$ 2,576

(1) During the fourth quarter of fiscal 2024, we recorded a $75,000 net reversal to our restructuring charge, which was attributed to lower than anticipated severance charges due to retaining and re-assigning certain employees.

The following table summarizes restructuring costs included in the accompanying consolidated statement of income as of January 31, 2024:

(In thousands)	
Cost of Revenue	$ 2,064
Operating Expenses:	
Selling & Marketing	400
Research & Development	29
General & Administrative	83
Total	$ 2,576

The following table presents the details of liability for Severance and Employee Related Cost:

(In thousands)		
Balance January 31, 2023	$	—
Restructuring Charges		611
Cash Paid		(524)
Effects of Foreign Exchange		(12)
Change in Estimates		(75)
Balance January 31, 2024	$	—

Product Retrofit Program

In connection with our restructuring plan, we identified the need to address quality and reliability issues in certain models of our PI printers as a result of faulty ink provided by one of our larger suppliers. We identified approximately 150 printers sold to our customers that were affected by the faulty ink. In order to remedy these issues and maintain solid customer relationships, during the second quarter of fiscal 2024, we initiated a program to retrofit all of the printers sold to our customers that were affected by the faulty ink.

The initial estimated costs associated with this program were $0.9 million, which included the cost of parts, labor and travel. During fiscal 2024, we worked with our customers to either repair or replace the affected printers. At the end of the fourth quarter of fiscal 2024, we adjusted our estimate of costs for this program as we determined not all customers wanted to retrofit their printers and consequently the program was concluded. As a result, at the end of the fourth quarter of fiscal 2024, we reversed $0.2 million of charges for this program. Total costs of this program as of January 31, 2024, as summarized below, were $0.6 million and are included in cost of revenue in the accompanying consolidated statement of income for the year ended January 31, 2024.

(In thousands)		
Provision for Product Retrofit Program	$	852
Cost of Repairs and Replacements incurred through January 31, 2024		(642)
Changes in Estimate (1)		(210)
Balance at January 31, 2024	$	—

(1) During the fourth quarter of fiscal 2024, we recorded a $210,000 net reversal to our retrofit program, which was attributed to lower than anticipated participation by customers in this program and ultimate conclusion of the program as of January 31, 2024.

There is no balance in the related liability for this program at January 31, 2024.

Note 20—Concentration of Risk

Credit is generally extended on an uncollateralized basis to almost all customers after review of credit worthiness. Concentration of credit and geographic risk with respect to accounts receivable is limited due to the large number and general dispersion of accounts, which constitute our customer base. We periodically perform on-going credit evaluations of our customers. We have not historically experienced significant credit losses on collection of our accounts receivable.

During the year ended January 31, 2024, we had two vendors that accounted for 23.5% of purchases, and for the years ended January 31, 2023 and 2022, we had one vendor that accounted for 18.7% and 23.3% of purchases, respectively. We had one vendor that accounted for 46.9%, 16.2% and 15.4%, respectively, of accounts payable as of January 31, 2024, 2023 and 2022.

Note 21—Commitments and Contingencies

In order to meet our manufacturing demands and, in some cases, lock in particular pricing structures for specific goods used in manufacturing, we enter into purchase commitments with our suppliers. At January 31, 2024, our purchase commitments totaled $25.8 million, with $23.1 million due within 12 months, some of which are non-cancelable.

We are also subject to contingencies, including legal proceedings and claims arising in the normal course of business that cover a wide range of matters including, among others, contract and employment claims; workers compensation claims; product liability; warranty and modification; and adjustment or replacement of component parts of units sold.

Direct costs associated with the estimated resolution of contingencies are accrued at the earliest date at which it is deemed probable that a liability has been incurred and the amount of such liability can be reasonably estimated. While it is impossible to ascertain the ultimate legal and financial liability with respect to contingent liabilities, including lawsuits, we believe that the aggregate amount of such liabilities, if any, in excess of amounts provided or covered by insurance, will not have a material adverse effect on the consolidated financial position or results of operations. It is possible, however, that results of operations for any future period could be materially affected by changes in our assumptions or strategies related to these contingencies or changes out of our control.

Note 22—Fair Value Measurements

Assets and Liabilities Not Recorded at Fair Value on the Consolidated Balance Sheet

Our long-term debt, including the current portion, not reflected in the financial statements at fair value, is reflected in the table below:

	Fair Value Measurement at January 31, 2024				
(In thousands)	Level 1	Level 2	Level 3	Total	Carrying Value
Long-Term Debt and Related Current Maturities	$ —	$ —	$ 13,026	$ 13,026	$ 12,972

	Fair Value Measurement at January 31, 2023				
(In thousands)	Level 1	Level 2	Level 3	Total	Carrying Value
Long-Term Debt and Related Current Maturities	$ —	$ —	$ 14,310	$ 14,310	$ 14,250

The fair value of our long-term debt, including the current portion, is estimated by discounting the future cash flows using current interest rates at which similar borrowings with the same maturities would be made to borrowers with similar credit ratings and is classified as Level 3.

ASTRONOVA, INC.

SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

Description	Balance at Beginning of Year	Provision/ (Benefit) Charged to Operations	Deductions(2)	Balance at End of Year
Allowance for Doubtful Accounts(1):				
(In thousands)				
Year Ended January 31,				
2024	$ 731	$ (113)	$ —	$ 618
2023	$ 826	$ 100	$ (195)	$ 731
2022	$ 1,054	$ 50	$ (278)	$ 826

(1) The allowance for doubtful accounts has been netted against accounts receivable in the balance sheets as of the respective balance sheet dates.

(2) Uncollectible accounts written off, net of recoveries.

CORPORATE AND SHAREHOLDER INFORMATION

DIRECTORS

Gregory A. Woods
President and Chief Executive Officer, AstroNova, Inc.

Alexis P. Michas
Managing Partner, Juniper Investment Company, LLC

Mitchell I. Quain
Executive Council, American Securities, Inc.

Yvonne E. Schlaeppi
Managing Partner, Stratevise LLC

Richard S. Warzala*
Chairman of the Board, President and
Chief Executive Officer, Allied Motion Technologies, Inc.
* Lead Independent Director

GENERAL COUNSEL

Foley Hoag LLP
Boston, Massachusetts 02210

REGISTERED PUBLIC ACCOUNTING FIRM

Wolf & Company, P.C.
Boston, Massachusetts 02110

TRANSFER AGENT AND REGISTRAR

Computershare Trust Company, N.A.
P.O. Box 43006
Providence, RI 02940
877-373-6374
www.computershare.com

ANNUAL MEETING

The Annual Meeting of Shareholders will be conducted in a virtual-only format on Tuesday, June 11, 2024, at 9:00 a.m. Eastern Daylight time at www.proxydocs/ALOT. The webcast will open for shareholders at approximately 8:45 a.m. Eastern Daylight time and begin promptly at 9:00 a.m. Eastern Daylight time.

CORPORATE HEADQUARTERS

600 East Greenwich Avenue
West Warwick, Rhode Island 02893 USA
800-343-4039

COMMON STOCK

AstroNova, Inc. common stock is listed on the Nasdaq Global Market.
Ticker Symbol: ALOT
The closing price on April 10, 2024 was $17.75

INVESTOR INQUIRIES

Securities analysts, portfolio managers and other interested investors seeking information about the Company may visit our website at: **www.astronovainc.com** or send inquiries to: **investorrelations@astronovainc.com**

PRODUCT INFORMATION

For information about AstroNova products and services, please call us at 800-343-4039 or 401-828-4000

or visit our websites:
www.astronovainc.com
www.astronovaproductid.com
www.tm.astronovainc.com
www.aerospace.astronovainc.com
www.getlabels.com

AstroNova®

WORLD HEADQUARTERS
600 East Greenwich Ave.
West Warwick, RI 02893 USA

EMEA HEADQUARTERS
Waldstraße 70
D-63128 Dietzenbach, Germany

CANADA
3505 Rue Isabelle, Suite O
Brossard, QC J4Y 2R2
Canada

LATIN AMERICA
Lago Alberto 375
Floor 11th – Suite 120
Anáhuac I Secc, Miguel Hidalgo
11320 Ciudad de México, CDMX

CHINA
AstroNova (Shanghai) Trading Co., Ltd.
Part D, Building No. 8 Plot Section
No. 81 Meiyue Road
Pilot Free Trade Zone, Shanghai 200131
China

SINGAPORE
1 Scott Road #24-10
Shaw Centre
Singapore, 228208

FRANCE
10A Rue Blaise Pascal
78990 Elancourt, France

UNITED KINGDOM
167-169 Great Portland Street
5th Floor
London W1W 5PF United Kingdom

DENMARK
Marielundvej 46A, 2.
2730 Herlev, Denmark

MALAYSIA
UOA Business Park
K03-03A-09,
1, Jalan Pengaturcara U1/51A,
Kawasan Perindustrian Temasya,
40150 Shah Alam,
Selangor, Malaysia

UNITED STATES
ASTRO MACHINE
630 Lively Boulevard
Elk Grove Village, IL 60007

For More Information: www.astronovainc.com

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