

**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, 2018

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  
**Common Stock, \$.05 Par Value**

Name of each exchange  
on which registered  
**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 and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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   
(Do not check if a 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.

The aggregate market value of the registrant's voting common equity held by non-affiliates at July 28, 2017 was approximately \$94,686,969 based on the closing price on the Nasdaq Global Market on that date.

As of March 28, 2018 there were 6,799,166 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 2018 Annual Meeting of Shareholders are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated.

**ASTRONOVA, INC.**  
**FORM 10-K ANNUAL REPORT**  
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## ASTRONOVA, INC.

### Forward-Looking Statements

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.

AstroNova designs, develops, manufactures and distributes a broad range of specialty printers and data acquisition and analysis systems, including both hardware and software, which incorporate advanced technologies in order to acquire, store, analyze, and present data in multiple formats. Target markets for hardware and software products of the Company include aerospace, apparel, automotive, avionics, chemicals, computer peripherals, communications, distribution, food and beverage, general manufacturing, packaging and transportation.

The Company’s products are distributed through its own sales force and authorized dealers in the United States. We sell to customers outside of the United States primarily through our branch offices in Canada, Europe, and Asia as well as through independent dealers and representatives. In fiscal 2018, 38% of the Company’s revenue was from customers located outside the United States.

We operate the business through two operating segments, Product Identification (PI) and Test & Measurement (T&M). Financial information by business segment and geographic area appears in Note 15 to our audited consolidated financial statements included elsewhere in this report.

On September 28, 2017, AstroNova, Inc. entered into an Asset Purchase and License Agreement with Honeywell International, Inc. pursuant to which it acquired an exclusive perpetual world-wide license to manufacture Honeywell’s narrow-format flight deck printers for the Boeing 737 and Airbus 320 aircraft. Revenue related to that transaction has been included as part of the aerospace printer product line of the T&M segment since the acquisition date. On February 1, 2017, AstroNova completed its acquisition of TrojanLabel ApS (TrojanLabel) a European manufacturer of digital color label presses and specialty printing systems for a broad range of end user markets. TrojanLabel is reported as part of our PI segment beginning with the first quarter of fiscal year 2018. Additionally, on June 19, 2015, we completed the acquisition of the aerospace printer product line from Rugged Information Technology Equipment Corporation (RITEC). Our aerospace printer product line is part of the T&M product group and is reported as part of the T&M segment. We began shipment of the RITEC products in the third quarter of fiscal 2016. 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” on pages 19 through 29 of this Annual Report on Form 10-K.

## Description of Business

### Product Overview

AstroNova leverages its expertise in data visualization technologies to design, manufacture and market specialty printing systems, test and measurement systems and related services for select growing markets on a global basis. The business consists of two segments, Product Identification (PI), which includes specialty printing systems sold under the brand name QuickLabel<sup>®</sup> and TrojanLabel<sup>®</sup>; and Test & Measurement (T&M), which includes test and measurement systems sold under the AstroNova<sup>®</sup> brand name. Refer to Note 15, “Nature of Operations, Segment Reporting and Geographical Information,” in our audited consolidated financial statements elsewhere in this report for financial information regarding the Company’s segments.

Products sold under the QuickLabel and TrojanLabel brands are used in industrial and commercial product packaging, branding and labeling applications to digitally print custom labels and corresponding visual content in house. Products sold under the AstroNova brand 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 and analyzed and then stored and presented in various visual output formats. In the aerospace market, the Company has a long history of using its data visualization technologies to provide high-resolution light-weight flight deck and cabin printers.

#### *Product Identification*

QuickLabel brand products include tabletop and work cell-ready digital color label printers and specialty OEM printing systems as well as a full line of supplies including labels, tags, inks, toner and thermal transfer ribbons. QuickLabel products are primarily sold to manufacturers, processors, and retailers who label products on a short-run basis. QuickLabel customers benefit from the efficiency, flexibility and cost-savings of digitally printing their own labels in house and on demand. Industry segments that commonly benefit from short-run digital label printing include chemicals, cosmetics, food and beverage, medical products, and pharmaceuticals, among many others.

Current QuickLabel models include the Kiaro! family of high-speed inkjet color label printers, the QL-111 industrial color label printer and the QL-800 wide format color label printer, as well as a family of high-end monochrome printers.

TrojanLabel brand products include tabletop and digital color label presses and specialty printing systems, as well as overprinting solutions. This highly innovative line of presses offers customers the ability to execute smaller runs with an affordable digital solution. It is commonly sold to larger brand owners, label converters, commercial printers and packaging manufacturers.

Current TrojanLabel models include the T2-C, an inkjet table top label press; the T2, the full size parent of the T2-C, allowing larger volumes and with a full-size PC display for comfortable use and fast turnaround; the T4, a complete label finisher which enables print, die cut and lamination all in one machine; and the T3, a highly customizable all-in-one label production and finishing press offered in multiple OEM integration options.

The Product Identification segment also offers a full line of supplies including labels, tags, inks, toner and thermal transfer ribbons. In addition, the Product Identification segment sells various specialized software used to operate the printers and presses, design labels and manage printing on an automated basis and provides worldwide training and support.

#### *T&M*

Products sold under the AstroNova T&M brand acquire and record visual data from local and networked data streams and sensors. The recorded data is processed and analyzed and then stored and presented in various visual output formats. The Company supplies a range of products and services that include hardware, software and supplies to customers in a variety of industries.

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Our T&M products include the Daxus<sup>®</sup> distributed data acquisition system; TMX<sup>®</sup> high-speed data acquisition system; DDX100 SmartCorder<sup>®</sup> portable data acquisition system; EV-500 digital strip chart recording system; ToughWriter<sup>®</sup>, Miltope-brand and RITEC-brand airborne printers; the PTA-45B cockpit printer that is subject to the Asset Purchase and Licenses Agreement with Honeywell and ToughSwitch<sup>®</sup> ruggedized Ethernet switches.

AstroNova airborne printers are used in the flight deck and in the cabin of military, commercial and business aircraft to print hard copies of data required for the safe and efficient operation of aircraft, including navigation maps, arrival and departure procedures, flight itineraries, weather maps, performance data, passenger data, and various air traffic control data. ToughSwitch Ethernet switches are used in military aircraft and military vehicles to connect multiple computers or Ethernet devices. The airborne printers and Ethernet switches are ruggedized to comply with rigorous military and commercial flightworthiness standards for operation under extreme environmental conditions. The Company is currently furnishing ToughWriter airborne printers for numerous aircraft made by Airbus, Boeing, Embraer, Bombardier, Lockheed, Gulfstream and others.

The Company's family of portable data acquisition systems is used in research and development (R&D), field testing, production and maintenance applications in a wide range of industries including aerospace and defense, energy, industrial and transportation. The TMX data acquisition system is an all-in-one solution for applications in which the ability to monitor high channel counts and view a wide variety of input signals, including time-stamped and synchronized video capture data and audio notation is essential. The DDX100 SmartCorder is an ultra-portable all-in-one solution for facilities maintenance and field testing. The Daxus is a distributed data acquisition platform that can be connected to the DDX100 SmartCorder to increase channel count or networked as part of a distributed measurement system spanning large distances.

### **Technology**

Our core technologies are data visualization technologies that relate to (1) acquiring data, (2) conditioning the data, (3) displaying the data on hard copy, monitor or electronic storage media, and (4) analyzing the data.

### **Patents and Copyrights**

We hold a number of product patents in the United States and in foreign countries. 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 name. While we consider our intellectual property to be important to the operation of our business, we do not believe that any existing patent, license, trademark or other intellectual property right is of such importance that its loss or termination would have a material adverse effect on the Company's 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 of the sub-assemblies and parts in-house including printed circuit board assemblies, harnesses, machined parts and general final assembly. Many not manufactured in-house parts are standard electronic items available from multiple sources. Other parts are designed by us and manufactured by outside vendors. We purchase certain components, assembled products and supplies used in the manufacture of our products from a single source or limited supplier source, but these components, products and supplies could be sourced elsewhere with appropriate changes in the design of our products.

### **Product Development**

We maintain an active program of product research and development. During fiscal 2018, 2017 and 2016, we spent \$7.5 million, \$6.3 million and \$6.9 million, respectively, 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 2019 and beyond.

## **Marketing and Competition**

The Company competes worldwide in multiple markets. In the specialty printing field, we believe we are a market leader in tabletop digital color label printing technology and in aerospace printers. In the data acquisition area, we believe that we are one of the leaders in portable high speed data acquisition systems.

We retain a leadership position by virtue of proprietary technology, product reputation, delivery, technical assistance, and service to customers. The number of competitors varies by product line. Our management believes that we have a market leadership position in many of the markets we serve. 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 products are sold by direct field salespersons as well as independent dealers and representatives. In the United States, the Company has factory-trained direct field salespeople located in major cities from coast to coast specializing in either Product Identification or AstroNova T&M products. We also have direct field sales or service centers in Canada, China, Denmark, France, Germany, India, Malaysia, Mexico, Singapore, Spain and the United Kingdom staffed by our own employees and dedicated third party contractors. Additionally, we utilize over 200 independent dealers and representatives selling and marketing our products in over 75 countries.

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

## **International Sales**

In fiscal 2018, 2017 and 2016, revenue from customers in various geographic areas outside the United States, primarily in Canada and Western Europe, amounted to \$43.6 million, \$28.6 million and \$26.3 million, respectively. Refer to Note 15, "Nature of Operations, Segment Reporting and Geographical Information," in our audited consolidated financial statements elsewhere in this report for further financial information by geographic areas.

## **Order Backlog**

Our backlog varies regularly. It consists of a blend of orders for end-user customers as well as original equipment manufacturer customers. Manufacturing production is designed to meet forecasted demands and customer requirements. Accordingly, the amount of order backlog may not indicate future sales trends. Backlog at January 31, 2018, 2017 and 2016 was \$21.4 million, \$17.6 million and \$18.2 million, respectively.

## **Employees**

As of January 31, 2018, we employed 352 people. We are generally able to satisfy our employment requirements. No employees are represented by a union. We believe that employee relations are good.

## **Other Information**

The Company's business is not seasonal in nature. However, our revenue is impacted by the size of certain individual transactions, which can cause fluctuations in revenue from quarter to quarter.

## **Available Information**

We make available on our website ([www.astronovainc.com](http://www.astronovainc.com)) the Company's 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 the Company electronically files such material with, or furnishes it to, the Securities and Exchange Commission (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.

***AstroNova's 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 in their general economic conditions would likely result in a reduction in demand for our products. For example, although we have continued to experience measured progress, as sales have increased steadily from prior years, we are still affected by the continued global economic uncertainty. Some of our customers may be reluctant to make capital equipment purchases or may defer certain of these purchases to future quarters. Some of our customers may also limit consumable product purchases to quantities necessary to satisfy immediate needs with no provisions to stock supplies for future use. Also, if our customers' markets decline, we may not be able to collect on outstanding amounts due to us. Such declines could harm our results of operations, financial position and cash flows and could limit our ability to continue to remain profitable.

***AstroNova's 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 rapidly changing technologies and accelerating 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. AstroNova spends a significant amount of time and effort related to the development of our airborne and color printer products as well as our Test and Measurement data recorder products. Failure 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 AstroNova's 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.

***AstroNova is 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:

- Limited control over the manufacturing process;
- Potential absence of adequate production capacity;
- Potential delays in production lead times;
- Unavailability of certain process technologies; and
- Reduced control over delivery schedules, manufacturing yields, quality and costs.

If one of our significant subcontractors becomes unable or unwilling to continue to manufacture these products in required volumes or fails to meet our quality standards, we will have to identify qualified alternate subcontractors or we will have to take over the manufacturing ourselves. Additional qualified subcontractors may not be available, or may not be available on a timely or cost competitive basis. Any interruption in the supply or increase in the cost of the products manufactured by third party subcontractors 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, AstroNova is 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. 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. Additionally, if any single or limited source supplier becomes unable or unwilling to continue to supply these components, assembled products or supplies in required volumes, 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. 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.

***AstroNova faces 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, 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 on the basis of 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 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, we could lose market share and important customers to our competitors which could materially adversely affect our business, results of operations and financial position.

***AstroNova's 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 which provides a reasonable return to our shareholders. Depending on competitive market factors, future prices we obtain for our products and services may decline from previous levels. In addition, pricing actions to offset the effect of currency devaluations may not prove sufficient to offset further devaluations or 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 continually reviewing our operations with a view towards reducing our cost structure, including but not limited to downsizing our employee base, improving process and system efficiencies and outsourcing some internal functions. From time to time we also engage in restructuring actions to reduce our cost structure. If we are unable to maintain process and systems changes resulting from cost reduction and prior restructuring actions, our results of operations and financial position could be materially adversely affected.

***AstroNova has significant inventories on hand.***

We maintain a significant amount of inventory. Although we have provided an allowance for slow-moving and obsolete inventory, any significant unanticipated changes in future product demand or market conditions, including obsolescence or the uncertainty in the global market, could have an impact on the value of inventory and adversely impact our business, operating results and financial condition.

***Economic, political and other risks associated with international sales and operations could adversely affect AstroNova's 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 38% of our total revenue for fiscal year 2018, and we anticipate that international sales will continue to account for a significant portion of our revenue. In addition, we have employees, suppliers, job functions 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;

- Differing protection of intellectual property;
- Unexpected changes in regulatory requirements; and
- Geopolitical turmoil, including terrorism and war.

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

AstroNova has incurred and could incur additional liabilities as a result of installed product failures due to design or manufacturing defects. Our products may have defects despite testing internally or by current or potential customers. These defects could result in among other things, a delay in recognition of sales, loss of sales, loss of market share, failure to achieve market acceptance or substantial damage to our reputation. We could be subject to material claims by customers, and may incur substantial expenses to correct any product defects.

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 have not been subjected to the same level of product development, testing and quality control processes used by us, and may have known or undetected errors. Some types of errors may not be detected until the product is installed in a user environment. This may cause AstroNova to incur significant warranty and repair or re-engineering costs, may divert the attention of engineering personnel from product development efforts, and may cause significant customer relations problems such as reputational problems with customers resulting in increased costs and lower profitability.

***Certain of our products require certifications by 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 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.

***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.***

On December 22, 2017, the Tax Cuts and Jobs Act (“TCJA” or “Tax Act”) was signed into law. The Tax Act significantly revises the U.S. federal corporate income tax law and includes a broad range of tax reform measures affecting business including among other things, the reduction of the corporate income tax rate from 35% to 21%, the loss of certain business deductions, the acceleration of first-year expensing of certain capital expenditures and a one-time tax imposed on unremitted cumulative non-U.S. earnings of foreign subsidiaries. The U.S. Treasury Department and IRS have not yet issued regulations with respect to the Tax Act.

Changes to tax laws and regulations or changes to the interpretation thereof (including regulations and interpretations pertaining to the Tax Act), 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 the effective tax rate and deferred tax assets and liabilities. For example, our estimate of the net one-time charge we have incurred related to the Tax Act could differ materially from our actual liability, due to, among other things, further refinement of our calculations, changes in interpretations and assumptions that we have made, additional guidance that may be issued by the U.S. Treasury Department and IRS, and actions we may take as a result of the Tax Act. The impact of the factors referenced in the first sentence of this paragraph 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.

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

The agreement governing our current credit facility contains, and any future debt agreements may include, a number of 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.

Such agreements also require us to satisfy other requirements, including maintaining certain financial ratios and condition tests. Our ability to meet these requirements can be affected by events beyond our control, and we may be unable to meet them. To the extent we fail to meet any such requirements and are in default under our debt obligations, our financial condition may be materially adversely affected. These restrictions may limit our ability to engage in activities that could otherwise benefit us. To the extent that we are unable to engage in activities that support the growth, profitability and competitiveness of our business, our business, results of operations and financial condition could be adversely affected.

***AstroNova 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 AstroNova's overall business.***

We have made strategic investments in other companies, products and technologies, including our September 2017 Asset Purchase and License Agreement with Honeywell International, Inc.; our February 2017 acquisition of the digital color label press and specialty printing systems business of the Danish company, TrojanLabel and the June 2015 acquisition of the aerospace printer business from RITEC. We may 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 effect on operating results or other aspects of our business;
- Delays or unexpected costs related to the acquisition will not have a detrimental effect on our business, operating results and financial condition;
- Customer dissatisfaction with, or performance problems at, an acquired company will not have an adverse effect on our reputation; and
- Respective operations, management and personnel will be compatible.

In certain instances as permitted by applicable law and NASDAQ rules, acquisitions 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 a particular 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 expected benefits of our acquisitions, divestitures or strategic partnerships, AstroNova's business, results of operations and financial condition could be adversely affected.

***Adverse conditions in the global banking industry and credit markets may adversely impact the value of our investments or impair our liquidity.***

At the end of fiscal 2018, we had approximately \$11.7 million of cash, cash equivalents and investments held for sale. Our cash and cash equivalents are held in a mix of money market funds, 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. Our investment portfolio consists of state and municipal securities with various maturity dates, all of which have a credit rating of AA or above at the original purchase date; however, defaults by the issuers of any of these securities may result in an adverse impact on our portfolio.

***AstroNova could experience disruptions in, or breach in security of our information technology system or fail to implement new systems or software successfully which could harm our business and adversely affect our results of operations.***

We employ information technology systems to support our business. Any security breaches or other disruptions to our information technology infrastructure could interfere with operations, compromise our information and that of our customers and suppliers, and expose us to liability which could adversely impact our business and reputation. In the ordinary course of business, we rely on information technology networks and systems, some of which are managed by third parties, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. While we continually work to safeguard our systems and mitigate potential risks, there is no assurance that such actions will be sufficient to prevent cyber attacks or security breaches and our information technology networks and infrastructure may still be vulnerable to damage, disruptions or shutdowns due to attack by hackers or breaches, employee error, power outages, computer viruses, telecommunication or utility failures, systems failures, natural disasters, catastrophic events or other unforeseen events. 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. Any

such events could result in legal claims or proceedings, liability or penalties under privacy laws, disruption in operations, and damage to the Company's brand and reputation, which could adversely affect our business, operating results and financial condition.

***AstroNova depends 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 could compromise our future success and our business could be harmed.***

Our future success depends upon our ability to attract and retain professional and executive employees, including sales, operating, marketing, and financial management personnel. There is substantial competition for skilled personnel, and the failure to attract, develop, retain and motivate qualified personnel could negatively impact our business, financial condition, results of operations and future prospects. In order to retain or replace our key personnel, we may be required to increase compensation, which would decrease net income. Additionally, a number of key employees have special knowledge of customers, supplier relationships, business processes, manufacturing operations, and financial management issues and the loss of any of these employees could harm the company's 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.

***AstroNova is 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.

***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. We have used and continue to use various substances in our products and manufacturing operations, and have generated and continue to generate wastes, which have been or may be deemed to be hazardous or dangerous. As such, our business is subject to and may be materially and adversely affected by compliance obligations and other liabilities under environmental, health and safety laws and regulations. These laws and regulations affect ongoing operations and require capital costs and operating expenditures in order to achieve and maintain compliance.

***Our operations are subject to anti-corruption laws, including the U.S. Foreign Corrupt Practices Act, and any determination that the Company or any of its 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 of 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.***

AstroNova collects and stores 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 laws in the countries in which we operate 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, and new laws of this nature are adopted from time to time. For example, in 2016 the European Commission adopted the General Data Protection Regulation, a comprehensive privacy and data protection reform that becomes enforceable in May 2018. At the same time, certain developing countries in which we do business are also currently considering adopting privacy and data protection laws and regulations and legislative proposals concerning privacy and the protection of user information are often pending before the U.S. Congress and various U.S. state legislatures.

While we believe that we comply with industry standards and applicable laws and industry codes of conduct relating to privacy and data protection in all material respects, 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 of non-compliance.

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.

***We may record future goodwill impairment charges or other intangible asset impairment charges related to one or more of our reporting units, 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, in evaluating the potential for impairment of goodwill, we make assumptions regarding estimated revenue projections, growth rates, cash flows and discount rates. We 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. Relatively small 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 small 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.

***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, leases, and litigation, 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.

***Compliance with rules governing “conflict minerals” could adversely affect the availability of certain product components and our costs and results of operations could be materially harmed.***

SEC rules require disclosures regarding the use of “conflict minerals” mined from the Democratic Republic of the Congo and adjoining countries necessary to the functionality or production of products manufactured or contracted to be manufactured. We have determined that we use gold, tin and tantalum, each of which is considered a “conflict mineral” under the SEC rules, as they occur in electronic components supplied to us in the manufacture of our products. Because of this finding, we are required to conduct inquiries designed to determine whether any of the conflict minerals contained in our products originated or may have originated in the conflict region or come from recycled or scrap sources. There are costs associated with complying with these disclosure requirements, including performing due diligence in regards to the source of any conflict minerals used in our products, in addition to the cost of remediation or other changes to products, processes or services of supplies that may be necessary as a consequence of such verification activities. As we use contract manufacturers for some of our products, we may not be able to sufficiently verify the origins of the relevant minerals used in our products through the due diligence procedures that we implement. We may also encounter challenges to satisfy those customers who require that all of the components of our products be certified as conflict-free, which could place us at a competitive disadvantage if we are unable to do so. As a result, our business, operating results and financial condition could be harmed.

***The decision by British voters to exit the European Union may negatively impact our operations.***

In June 2016 the United Kingdom held a referendum in which the British voted in favor of exiting the European Union. This referendum has caused and may continue to cause political and economic uncertainty, including significant volatility in global stock markets and currency exchange rate fluctuations. Although it is unknown what the full terms of the United Kingdom’s future relationship with the EU will be, it is possible that there will be greater restrictions on imports and exports between the United Kingdom and other countries, including the United States, and increased regulatory complexities. Any of these factors could adversely affect customer demand, our relationships with customers and suppliers and our business and financial statements.

**Item 1B. Unresolved Staff Comments**

None.

**Item 2. Properties**

The following table sets forth information regarding the Company's principal owned properties, all of which are included in the consolidated balance sheet appearing elsewhere in this annual report.

Location	Approximate Square Footage	Principal Use
West Warwick, Rhode Island, USA	135,500	Corporate headquarters, research and development, manufacturing, sales and service

AstroNova also leases 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
Brossard, Quebec, Canada	4,500	Manufacturing, sales and service
Elancourt, France	4,500	Sales and service
Copenhagen, Denmark	4,000	R&D and sales
Maidenhead, England	1,000	Sales and service
Schaumburg, Illinois, USA	3,428	Sales (Product Identification only)
Shanghai, China	461	Sales (Product Identification only)
Newport Beach, California, USA	150	Sales (Product Identification only)
Tambauam Chennai, India	70	Sales (Product Identification only)
Mexico City, Mexico	65	Sales (Product Identification only)

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

**Item 3. Legal Proceedings**

There are no pending or threatened legal proceedings against the Company believed to be material to the financial position or results of operations of the Company.

**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**

AstroNova common stock trades on the NASDAQ Global Market under the symbol "ALOT." The following table sets forth the range of high and low sales prices and dividend data, as furnished by NASDAQ, for each quarter in the years ended January 31:

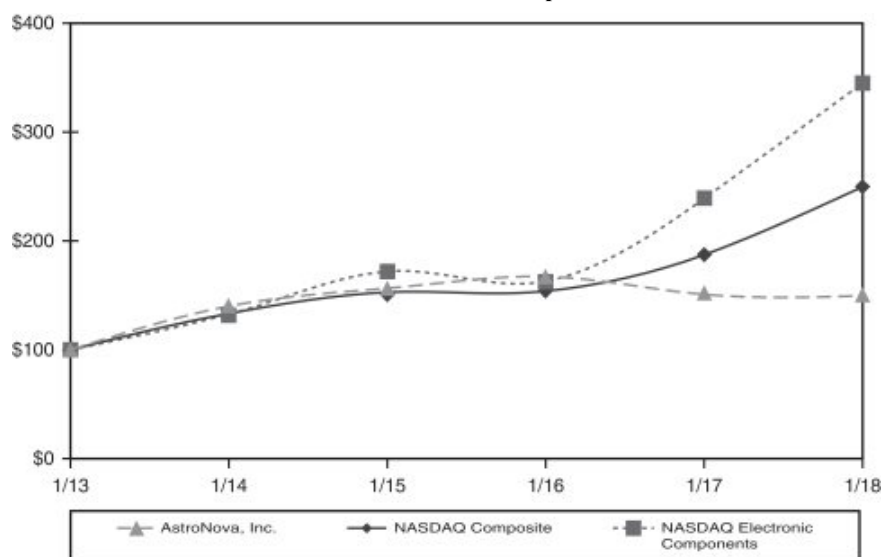
	<u>High</u>	<u>Low</u>	<u>Dividends Per Share</u>
<b>2018</b>			
First Quarter	\$ 15.65	\$ 12.85	\$ 0.07
Second Quarter	\$ 15.15	\$ 12.69	\$ 0.07
Third Quarter	\$ 14.05	\$ 11.00	\$ 0.07
Fourth Quarter	\$ 15.00	\$ 11.96	\$ 0.07
<b>2017</b>			
First Quarter	\$ 15.69	\$ 11.18	\$ 0.07
Second Quarter	\$ 16.17	\$ 13.49	\$ 0.07
Third Quarter	\$ 16.41	\$ 14.40	\$ 0.07
Fourth Quarter	\$ 14.60	\$ 12.50	\$ 0.07

AstroNova had approximately 277 shareholders of record as of March 28, 2018, which does not reflect shareholders with beneficial ownership in shares held in nominee name.

### Stock Performance Graph

The graph below shows a comparison of the cumulative total return on the Company’s common stock against the cumulative total returns for the NASDAQ Composite Index and the NASDAQ Electronic Components Index for the period of five fiscal years ended January 31, 2018. The NASDAQ Total Return Composite Index is calculated using all companies trading on the NASDAQ Global Select, NASDAQ Global Market and the NASDAQ Capital Markets. The Index is weighted by the current shares outstanding and assumes dividends are reinvested. The NASDAQ Electronic Components Index, designated as the Company’s peer group index, is comprised of companies classified as electronic equipment manufacturers.

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\*  
Among AstroNova, Inc., the NASDAQ Composite Index  
and the NASDAQ Electronic Components Index**



	Cumulative Total Returns*					
	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
AstroNova, Inc.	\$ 100.00	\$ 139.95	\$ 156.23	\$ 167.27	\$ 150.65	\$ 149.66
NASDAQ Composite	\$ 100.00	\$ 133.35	\$ 152.66	\$ 153.70	\$ 187.33	\$ 249.85
NASDAQ Electronic Components	\$ 100.00	\$ 132.48	\$ 172.07	\$ 162.80	\$ 239.21	\$ 344.98

\* \$100 invested on 1/31/13 in stock or index, including reinvestment of dividends. Fiscal year ending January 31.

### Dividend Policy

AstroNova began a program of paying quarterly cash dividends in fiscal 1992 and has paid a dividend for 106 consecutive quarters. During fiscal 2018, 2017 and 2016, we paid a dividend of \$0.07 per share in each quarter and anticipate that we will continue to pay comparable cash dividends on a quarterly basis.

### Stock Repurchases

Pursuant to an authorization approved by AstroNova’s Board of Directors in August 2011, the Company is currently authorized to repurchase up to 390,000 shares of common stock, subject to any increase or decrease by the Board of Directors at any time. This is an ongoing authorization without any expiration date.

There were no stock repurchases during the quarter ended January 31, 2018.

## Item 6. Selected Financial Data

### Historical Financial Summary

#### Income Statement Data

(In thousands, except per share data)

	For the Fiscal Years Ended January 31,				
	2018	2017	2016	2015	2014
Revenue	\$ 113,401	\$98,448	\$94,658	\$88,347	\$68,592
Gross profit	44,002	39,489	38,158	36,977	26,983
Operating income	5,412	6,281	5,934	7,231	1,533
Income from continuing operations before taxes	5,157	6,605	6,909	6,932	1,412
Taxes on continuing operations	1,871	2,377	2,384	2,270	175
Income from discontinued operations, net of taxes	—	—	—	—	1,975
Net income	3,286	4,228	4,525	4,662	3,212
Net income per Common Share—Basic :					
Continuing operations	\$ 0.48	\$ 0.57	\$ 0.62	\$ 0.61	\$ 0.17
Discontinued operations	—	—	—	—	0.26
Net income per Common Share – Basic	<u>\$ 0.48</u>	<u>\$ 0.57</u>	<u>\$ 0.62</u>	<u>\$ 0.61</u>	<u>\$ 0.43</u>
Net income per Common Share – Diluted :					
Continuing operations	\$ 0.47	\$ 0.56	\$ 0.61	\$ 0.60	\$ 0.16
Discontinued operations	—	—	—	—	0.26
Net income per Common Share—Diluted	<u>\$ 0.47</u>	<u>\$ 0.56</u>	<u>\$ 0.61</u>	<u>\$ 0.60</u>	<u>\$ 0.42</u>
Dividends Declared per Common Share	<u>\$ 0.28</u>	<u>\$ 0.28</u>	<u>\$ 0.28</u>	<u>\$ 0.28</u>	<u>\$ 0.28</u>

#### Balance Sheet Data

(In thousands)

	As of January 31,				
	2018	2017	2016	2015	2014
Cash and Marketable Securities	\$ 11,688	\$24,821	\$20,419	\$23,132	\$27,107
Current Assets	63,780	61,423	54,514	59,289	65,034
Total assets	122,313	83,665	77,963	74,330	77,964
Current liabilities	25,912	11,985	9,548	9,569	9,892
Debt, including short term portion	23,146	—	—	—	—
Shareholders' equity	63,647	70,537	67,373	63,511	66,614

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

### Overview

AstroNova is a multi-national enterprise that leverages its 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. The Company organizes its structure around a core set of competencies, including research and development, manufacturing, service, marketing and distribution. It markets and sells its products and services through the following two segments:

- Product Identification – offers product identification and digital label printer hardware, software, servicing contracts, and supplies.
- Test and Measurement Product Group (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 recorded data is processed and analyzed and then stored and presented in various visual output formats. The T&M segment also includes a line of aerospace printers that are used to print hard copies of data

required for the safe and efficient operation of aircraft including navigation maps, arrival and departure procedures, flight itineraries, weather maps, performance data, passenger data, and various air traffic control data. Aerospace products also include Ethernet switches which are used in military aircraft and military vehicles to connect multiple computers or Ethernet devices.

The Company markets and sells its products and services globally through a diverse distribution structure of direct sales personnel, manufacturers' representatives 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. Research and development activities were funded and expensed by the Company at approximately 6.6% of annual revenue for fiscal 2018. We also continue to invest in sales and marketing initiatives by expanding the existing sales force and using various marketing campaigns to achieve our goals of sales growth and increased profitability notwithstanding today's challenging economic environment.

On September 28, 2017, AstroNova entered into an Asset Purchase and License Agreement with Honeywell International, Inc. pursuant to which it acquired the exclusive perpetual world-wide license to manufacture Honeywell's narrow format flight deck printers for the Boeing 737 and Airbus 320 aircraft. Revenue from the sales of these printers is reported as part of our Test & Measurement segment beginning in the third quarter of fiscal year 2018. Refer to Note 2, "Acquisitions," in the audited consolidated financial statements included elsewhere in this report.

On February 1, 2017, AstroNova completed its acquisition of TrojanLabel ApS (TrojanLabel), a European manufacturer of digital color label presses and specialty printing systems for a broad range of end user markets. TrojanLabel is reported as part of our Product Identification segment beginning with the first quarter of fiscal year 2018. Refer to Note 2, "Acquisitions," in the audited consolidated financial statements included elsewhere in this report.

On June 19, 2015, AstroNova completed the acquisition of the aerospace printer product line from RITEC. AstroNova's aerospace printer product line is part of the T&M product group and is reported as part of the T&M segment. The Company began shipment of the RITEC products in the third quarter of fiscal year 2016. Refer to Note 2, "Acquisitions," in the audited consolidated financial statements included elsewhere in this report.

## Results of Operations

### Fiscal 2018 compared to Fiscal 2017

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

(\$ in thousands)

	2018			2017	
	Revenue	As a % of Total Revenue	% Change Over Prior Year	Revenue	As a % of Total Revenue
Product Identification	\$ 81,681	72.0%	16.9%	\$69,862	71.0%
T&M	31,720	28.0%	11.0%	28,586	29.0%
Total	\$113,401	100.0%	15.2%	\$98,448	100.0%

Net revenue in fiscal 2018 was \$113.4 million, a 15.2% increase compared to prior year revenue of \$98.4 million. Revenue through domestic channels of \$69.8 million was consistent with prior year domestic revenue of \$69.8 million. International revenue of \$43.6 million increased 52.4% over prior year international revenue of \$28.6 million primarily due to the impact on revenue from the Honeywell and TrojanLabel acquisitions. The current year's international revenue includes a favorable foreign exchange rate impact of \$0.6 million.

Hardware revenue in fiscal 2018 was \$37.5 million, a 10.9% increase compared to prior year's revenue of \$33.8 million. Hardware revenue in the Product Identification segment increased 23.5% compared to prior year

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due to the integration of TrojanLabel, but was tempered by lower OEM bar code printer sales. Hardware revenue in the T&M segment increased 4.6% primarily due to the Honeywell acquisition and the introduction of the EV-5000 data recorder. These revenue increases were partially offset by lower sales from the Aerospace ToughWriter 4 product line.

Revenue from supplies in fiscal 2018 was \$65.3 million, representing a 16.2% increase compared to prior year revenue of \$56.2 million. This increase is primarily attributable to double-digit growth from Product Identification inkjet printer inks and labels. Also contributing to the revenue increase were the impact of Honeywell and TrojanLabel paper and ink sales.

Service and other revenue in fiscal 2018 was \$10.6 million, a 26.2% increase compared to prior year revenue of \$8.4 million. Product Identification and Test & Measurement segments both generated double-digit growth in service and other revenue as a result of the TrojanLabel and Honeywell acquisitions.

The Company achieved gross profit of \$44.0 million for fiscal 2018, reflecting an 11.4% improvement compared to the prior year's gross profit of \$39.5 million. The Company's gross profit margin of 38.8% in the current year reflects a decrease from the prior year's gross profit margin of 40.1%. The higher gross profit for the current year compared to the prior year is primarily attributable to increased revenue; the current year's decrease in gross margin is due to product mix and higher manufacturing and period costs.

Operating expenses for the current year were \$38.6 million, representing a 16.2% increase from the prior year's operating expenses of \$33.2 million. Specifically, selling and marketing expenses of \$22.2 million in fiscal 2018 increased 17.3% from prior year's amount of \$19.0 million. The increase in selling and marketing expenses for the current year primarily relates to increases in wages and amortization related to the TrojanLabel and Honeywell acquisitions. Selling and marketing expenses represent 19.6% and 19.3% of net revenue for fiscal 2018 and 2017, respectively. Current year general and administrative (G&A) expenses increased by 12.1% from prior year to \$8.9 million primarily as a result of an increase in share-based compensation expenses, as well as outside and professional service costs, including non-recurring costs related to expenses incurred pursuant to a transition service agreement we entered into with Honeywell. The increase in G&A was offset by income of \$1.4 million due to the change in the fair value of the Company's contingent earn out liability related to the TrojanLabel acquisition. Research & development (R&D) costs in fiscal 2018 of \$7.5 million increased 18.0% from \$6.3 million in fiscal 2017, primarily due to the increase related to the absorption of the TrojanLabel R&D team, as well as an increase in wages. This increase was slightly tempered by a decrease in outside service costs and prototype expenses. The R&D spending level for fiscal 2018 represents 6.6% of net revenue, an increase compared to the prior year's level of 6.4%.

Other expense in fiscal 2018 was \$0.3 million compared to other income of \$0.3 million in fiscal 2017. Current year other expense includes interest expense on debt of \$0.4 million and foreign exchange loss of \$0.2 million, offset by investment income of \$0.2 and income related to a settlement of a trademark infringement litigation. Other income in fiscal 2017 includes a gain on sale of a property we owned in England of \$0.4 million and \$0.1 million related to an amount retained from the RITEC escrow partially offset by foreign exchange loss of \$0.2 million.

Net income for fiscal 2018 was \$3.3 million, or \$0.47 per diluted share, a decrease from \$4.2 million, or \$0.56 per diluted share in fiscal 2017. Current year results were impacted by income of \$1.4 million (\$1.1 million net of tax or \$0.16 per diluted share) related to change in the fair value of the Company's contingent earn out liability and \$1.1 million, or \$0.16 per diluted share, in taxes as a result of the enactment of the Tax Act. The \$1.1 million increase in tax provision includes \$1.0 million related to revaluation of our deferred tax assets at the new lower corporate tax rate and \$0.1 million related to the transition tax on the un-repatriated earnings of our foreign subsidiaries also included in the Tax Act. During fiscal 2017 the Company recognized a \$2.4 million income tax expense and had an effective tax rate of 36.0%. Fiscal 2017 income tax expense included a \$0.2 million tax expense related to non-deductible transaction costs for the TrojanLabel acquisition and a \$0.2 million tax expense related to the increase for unrecognized tax benefits.

**Fiscal 2017 compared to Fiscal 2016**

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

(\$ in thousands)

	2017			2016	
	Revenue	As a % of Total Revenue	% Change Over Prior Year	Revenue	As a % of Total Revenue
Product Identification	\$69,862	71.0%	4.1%	\$67,127	70.9%
T&M	28,586	29.0%	3.8%	27,531	29.1%
<b>Total</b>	<b>\$98,448</b>	<b>100.0%</b>	<b>4.0%</b>	<b>\$94,658</b>	<b>100.0%</b>

Net revenue in fiscal 2017 was \$98.4 million, a 4.0% increase compared to prior year revenue of \$94.7 million. Revenue through domestic channels of \$69.9 million was a slight increase compared to prior year domestic revenue of \$68.3 million. International revenue of \$28.6 million increased 8.6% over prior year international revenue of \$26.4 million somewhat as a result of the earlier release of new QuickLabel products. Fiscal 2017 international revenue includes an unfavorable foreign exchange rate impact of \$0.5 million.

Hardware revenue in fiscal 2017 was \$33.8 million, a 2.9% decrease compared to prior year's revenue of \$34.8 million. Hardware revenue in the Product Identification segment decreased 8.8% compared to prior year due to the anticipation of the introduction of new products in the third quarter of the fiscal 2017 and delayed traction for new products introduced. Hardware revenue in the T&M segment for fiscal 2017 increased slightly to \$22.5 million from \$22.4 million in the prior year, as the overall decline in sales of data recorders was offset by a 6.0% increase in sales of the Aerospace product line due to fulfillment during fiscal 2017 of orders received in previous years.

Revenue from supplies in fiscal 2017 was \$56.2 million, representing an 8.5% increase compared to prior year revenue of \$51.8 million. The increase was primarily attributable to the increase in label and tag product sales, as well as digital color printer supplies in the Product Identification segment. The double-digit increase in sales of T&M's chart paper products also made a contribution to the overall increase in supplies revenue for the current year.

Service and other revenue in fiscal 2017 was \$8.4 million, a 3.7% increase compared to prior year revenue of \$8.1 million as the increase in parts revenue during the year was offset by declines in revenue from repairs service and freight.

The Company achieved gross profit of \$39.5 million for fiscal 2017, reflecting a 3.5% improvement compared to the prior year's gross profit of \$38.2 million. The Company's gross profit margin of 40.1% in fiscal 2017 reflects a decrease from the prior year's gross profit margin of 40.3% due to product mix and higher manufacturing and period costs.

Operating expenses for fiscal 2017 were \$33.2 million, representing a 3.1% increase from the prior year's operating expenses of \$32.2 million. Specifically, selling and marketing expenses of \$19.0 million in fiscal 2017 increased 3.9% from prior year's amount of \$18.2 million. Selling and marketing expense for both fiscal 2017 and 2016 represent 19.3% of net revenue. Fiscal 2017 G&A expenses increased by 12.9% from prior year to \$7.9 million primarily attributable to an increase in professional and outside service fees related to non-recurring costs associated with the TrojanLabel acquisition. The increases in selling, marketing and G&A expenses for fiscal 2017 were somewhat offset by a decrease in R&D costs. R&D costs in fiscal 2017 of \$6.3 million decreased 9.1% from \$6.9 million in fiscal 2016, primarily due to a decrease in outside service costs related to the development and integration of the RITEC products. The R&D spending level for fiscal 2017 represents 6.4% of net revenue, a decrease compared to prior year's level of 7.3%.

Other income in fiscal 2017 was \$0.3 million compared to \$1.0 million in the prior year. In addition to interest income, other income for fiscal 2017 includes a \$0.4 million gain on sale of a property we owned in England

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and \$0.1 million related to an amount retained from the RITEC escrow, offset by \$0.2 million of foreign exchange loss for the year. Other income in fiscal 2016 included \$0.2 million of income recognized from a settlement in an escrow account related to our 2014 acquisition of the aerospace printer line from the Miltope Corporation.

During fiscal 2017 the Company recognized a \$2.4 million income tax expense and had an effective tax rate of 36.0%. Income tax expense for fiscal 2017 included a \$0.2 million tax expense related to non-deductible transaction costs for the TrojanLabel acquisition and a \$0.2 million tax expense related to the increase for unrecognized tax benefits. This compares to an income tax expense of \$2.4 million in fiscal 2016 and related effective tax rate of 34.5%. Fiscal 2016 income tax expense included a \$0.1 million tax expense related to an increase in valuation allowance.

Net income for fiscal 2017 was \$4.2 million, providing a return of 4.3% on revenue and earnings of \$0.56 per diluted share. On a comparable basis, net income for fiscal 2016 was \$4.5 million, a return on revenue of 4.8% and earnings of \$0.61 per diluted share.

### Segment Analysis

We report two segments consistent with our product revenue groups: Product Identification and Test & Measurement (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		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Product Identification	\$ 81,681	\$69,862	\$67,127	\$10,561	\$ 9,821	\$ 9,300	12.9%	14.1%	13.9%
T&M	31,720	28,586	27,531	3,754	4,399	3,664	11.8%	15.4%	13.3%
Total	<u>\$ 113,401</u>	<u>\$98,448</u>	<u>\$94,658</u>	14,315	14,220	12,964	<u>12.6%</u>	<u>14.4%</u>	<u>13.7%</u>
Corporate Expenses				8,903	7,939	7,030			
Operating Income				5,412	6,281	5,934			
Other Income (Expense), Net				(255)	324	975			
Income Before Income Taxes				5,157	6,605	6,909			
Income Tax Provision				1,871	2,377	2,384			
Net Income				<u>\$ 3,286</u>	<u>\$ 4,228</u>	<u>\$ 4,525</u>			

#### Product Identification

Revenue from the Product Identification segment increased 16.9% in fiscal 2018 with revenue of \$81.7 million compared to revenue of \$69.9 million in the prior year. Both the hardware and supplies product lines saw strong growth in fiscal 2018, with increases of 23.5% and 15.2%, respectively, as compared to the prior year. The increase in hardware revenue for the current year was primarily due to the contribution from the TrojanLabel line of presses. The supplies revenue increase in the current year was a result of supplies revenue from the newly acquired TrojanLabel business and continued strong demand for digital color printer ink as well as label and tag products supplies. Product Identification current year segment operating profit was \$10.6 million, reflecting a profit margin of 12.9%, compared to prior year segment profit of \$9.8 million and related profit margin of 14.1%. The decrease in Product Identification current year segment operating profit margin is due to unfavorable product mix and increased operating costs.

Revenue from the Product Identification segment increased 4.1% in fiscal 2017 with revenue of \$69.9 million compared to revenue of \$67.1 million in the prior year. Fiscal 2017 revenue reflected the continued

growth from the Product Identification supplies products line which posted a 7.2% growth rate over the prior year due to the strong demand for label and tag products as well as digital color printer ink supplies products. Product Identification fiscal 2017 segment operating profit was \$9.8 million, reflecting a profit margin of 14.1%, a 5.6% increase from prior year segment profit of \$9.3 million and related profit margin of 13.9%. The increase in Product Identification segment operating profit and related margin for fiscal 2017 as compared to fiscal 2016 is due to higher revenue and product mix.

#### *Test & Measurement*

Revenue from the T&M product group was \$31.7 million for fiscal 2018, an 11.0% increase compared to revenue of \$28.6 million in the prior year. Both the hardware and supplies product lines saw sustained growth in fiscal 2018, with the overall increase primarily attributable to the contribution of revenue from the entry into the arrangement with Honeywell in September of the current year. T&M's segment operating profit for the current fiscal year was \$3.8 million which resulted in a 11.8% profit margin compared to the prior year's segment operating profit of \$4.4 million and related operating margin of 15.4%. The lower segment operating profit and related margin were due to product mix and higher operating costs.

Revenue from the T&M product group was \$28.6 million for fiscal 2017, a 3.8% increase compared to revenue of \$27.5 million in the prior year. The increase is primarily attributable to the increase in revenue of aerospace printer sales due to fulfillment of orders received in previous years. Revenue growth for fiscal 2017 was tempered by lower sales in the data acquisition product line. T&M's fiscal 2017 segment operating profit was \$4.4 million which resulted in a 15.4% profit margin compared to the prior year's segment operating profit of \$3.7 million and related operating margin of 13.3%. The higher segment operating profit and related margin in fiscal 2017 were due to product mix.

#### **Liquidity and Capital Resources**

Based upon our current working capital position, current operating plans and expected business conditions, we expect to fund our short and long-term working capital needs and capital expenditures primarily using internal funds, and we believe that cash provided by operations will be sufficient to meet our operating and capital needs for at least the next 12 months.

We may also utilize amounts available under our secured credit facility, as described below, to fund a portion of our capital expenditures, contractual contingent consideration obligations, and future acquisitions.

On February 28, 2017, we entered into a credit agreement with Bank of America, N.A., which provided for a secured credit facility consisting of a \$9.2 million term loan to our wholly owned Danish subsidiary, "ANI ApS," and a \$10.0 million revolving credit facility for the Company. On September 28, 2017, the Company entered into the First Amendment to the Credit Agreement to permit the Honeywell Asset Purchase and License Agreement and temporarily increase the amount available for borrowing under the revolving credit line from \$10.0 million to \$15.0 million. The Company used \$14.6 million of the revolving credit line to complete the Honeywell Asset Purchase and License Agreement.

On November 30, 2017, the Company entered into the Second Amendment to the Credit Agreement which, in addition to the revolving credit facility and the term loan previously borrowed by ANI ApS under the original Credit Agreement, provided for a term loan to the Company in the principal amount of \$15.0 million. Upon the closing of the Second Amendment, the Company used the proceeds from the \$15.0 million term loan to repay the entire \$14.6 million principal balance of the revolving loan outstanding under the revolving credit facility as of October 28, 2017, with the remaining proceeds retained by the Company to be used for general corporate purposes. The principal amount of the revolving credit facility under the Credit Agreement, which had been temporarily increased to \$15.0 million pursuant to the First Amendment, was reduced to \$10.0 million effective upon the closing of the Second Amendment, and the revolving credit facility termination and maturity date was extended from January 31, 2022 to November 22, 2022. As of January 31, 2018, no amounts have been drawn under the existing \$10.0 million revolving credit facility. Refer to Note 7 "Revolving Credit Line" and Note 8 "Debt" in the audited consolidated financial statements included elsewhere in this report for further details.



Both term loans bear interest at a rate per annum equal to the LIBOR rate plus a margin that varies within a range of 1.0% to 1.5% based on the Company's consolidated leverage ratio. In connection with our entry into the original Credit Agreement, ANI ApS entered into a hedging agreement to manage the variable interest rate risk and currency risk associated with its payments in respect to the term loan. Under this combined arrangement, payments of principal and interest with respect to approximately \$8.9 million of the principal of the term loan will be made in Danish Krone, and interest on such principal amount will be payable at a fixed rate of 0.67% per annum for the entire term, subject only to potential changes based on the Company's consolidated leverage ratio. In connection with our entry into the Second Amendment of the Credit Agreement, effective November 30, 2017, the Company entered into a hedging agreement to manage the variable interest rate risk associated with its payments in respect to the \$15.0 million term loan. Under this combined arrangement, interest will be payable at a fixed rate of 2.04% per annum for the entire term, plus an incremental margin of 1.0% to 1.5%, based on the Company's consolidated leverage ratio. Refer to Note 8 "Debt" and Note 9, "Derivative Financial Instruments and Risk Management," in the audited consolidated financial statements included elsewhere in this report for further details regarding our debt and hedging arrangements.

The statements of cash flows for the years ended January 31, 2018, 2017 and 2016 are included on page 46 of this Form 10-K. Net cash provided by operating activities was \$3.8 million in fiscal 2018 compared to net cash provided by operating activities of \$7.0 million in the previous year. The decrease in net cash from operations for the current year is primarily due to the decrease in net income and the increase in working capital accounts, particularly inventory and accounts receivables. Excluding the impact of the TrojanLabel acquisition, inventory increased \$6.8 million to \$27.6 in fiscal 2018 compared to \$19.5 million in fiscal 2017, and accounts receivable increased \$5.9 million to \$22.4 million in fiscal 2018 from \$15.7 million in fiscal 2017. The increase in inventory for fiscal 2018 is due to increased purchasing volume and decreased inventory turn, as inventory days on hand increased to 124 days at the end of the current fiscal year from 114 days at the prior year end. The increase in accounts receivable for the current fiscal year is due to increased revenue and increase in the accounts receivable collection cycle to 55 days at January 31, 2018 compared to 49 days at the prior year end.

Net cash provided by operating activities was \$7.0 million in fiscal 2017 compared to net cash provided by operating activities of \$7.7 million in fiscal 2016. The decrease in net cash from operations for fiscal 2017 is primarily due to increased net income and increased cash used for working capital. The combination of changes in accounts receivable, inventory, and accounts payable and accrued expenses decreased cash by \$3.6 million in fiscal 2017, compared to a decrease of \$0.5 million in fiscal 2016. The year-over-year decline was due to increased inventory and purchasing volume in fiscal 2017. The accounts receivable collection cycle decreased to 49 days of revenue at January 31, 2017 compared to 50 days of revenue at the prior year end. Inventory days on hand increased to 114 days at the end of the 2017 fiscal year from 92 days at the prior year end.

Net cash used by investing activities for fiscal 2018 was \$20.8 million, which included \$23.9 million of cash paid for the TrojanLabel acquisition and the Honeywell asset purchase and licenses agreement, partially offset by \$5.5 million of proceeds from sales and maturities of securities available for sale. Cash used for investing activities for fiscal 2018 included capital expenditures of \$2.2 million, consisting of \$0.7 million for land and building improvements; \$0.7 million for information technology; \$0.5 million for machinery and equipment; \$0.2 million for tools and dies; and \$0.1 million for furniture, fixtures and other capital expenditures.

Net cash provided by investing activities for fiscal 2017 was \$3.1 million, which included \$4.0 million of proceeds from maturities of securities available for sale and proceeds of \$0.5 million related to the sale of the UK property. Cash used for investing activities for fiscal 2017 included capital expenditures of \$1.2 million, consisting of \$0.4 million for land and building improvements; \$0.3 million for information technology; \$0.3 million for machinery and equipment; \$0.1 million for tools and dies; and \$0.1 million for furniture, fixtures and other capital expenditures.

Net cash provided by financing activities for fiscal 2018 was \$9.1 million and includes \$24.2 million of proceeds related to the issuance of debt under the Company's credit facility with Bank of America. Offsetting the cash provided by financing activities in fiscal 2018 is the \$11.2 million of cash used to repurchase 826,305 shares of the Company's common stock at a per share price of \$13.60. The purchase of these shares was from a trust

established by the former founder and chief executive officer of the Company and did not impact the shares available as part of the Company's stock buyback program. The Company did not repurchase any shares of its common stock in fiscal 2017 and 2016. At January 31, 2018, there is an ongoing authorization by the Company's Board of Directors for the purchase of 390,000 shares of the Company's common stock. Cash provided or used by financing activities also included cash used to pay dividends of \$1.9 million, \$2.1 million, and \$2.0 million in fiscal 2018, 2017 and 2016, respectively.

Net cash used by investing activities for fiscal 2016 was \$3.5 million, which included \$10.0 million of proceeds from the sales and maturities of securities available for sale, which was partially offset by \$5.2 million of cash used to purchase securities available for sale, and \$7.4 million of cash used to purchase the RITEC aerospace printer business. Cash used for investing activities in fiscal 2016 also included cash used for capital expenditures of \$3.1 million, consisting of \$0.9 million for land and building improvements; \$0.7 million for information technology primarily related to the purchase and implementation of the Company's new Enterprise Resource Planning system; \$0.7 million for machinery and equipment; \$0.6 million for tools and dies; and \$0.2 million for furniture, fixtures and other capital expenditures.

### Contractual Obligations, Commitments and Contingencies

At January 31, 2018, the Company's contractual obligations with initial remaining terms in excess of one year were as follows:

(In thousands)	<u>Total</u>	<u>Less than 1 Year</u>	<u>1-3 Years</u>	<u>3-5 Years</u>	<u>More than 5 Years</u>
Purchase Commitments (1)	\$21,907	\$19,598	\$ 2,287	\$ —	\$ 22
Debt	23,372	5,498	10,048	7,826	—
Interest on Debt (2)	2,115	587	887	641	—
Royalty Obligation (3)	15,000	1,625	3,875	4,000	5,500
Operating Lease Obligations	4,034	726	1,137	854	1,317
	<u>\$66,428</u>	<u>\$28,034</u>	<u>\$18,234</u>	<u>\$13,321</u>	<u>\$ 6,839</u>

- (1) Purchase obligations include undiscounted amounts committed under legally enforceable contracts or purchase orders for goods and services with defined terms as to price, quantity and delivery dates.
- (2) Interest rate on variable rate debt is provided at the effective fixed rate paid by the Company per the hedging arrangements plus the maximum additional margin payable based on the Company's consolidated leverage ratio of 1.5%.
- (3) The Company is subject to a guaranteed minimum royalty payment obligation of \$15.0 million over the next ten years pursuant to Honeywell Asset Purchase and License Agreement. Refer to Note 2, "Acquisitions," in the audited consolidated financial statements included elsewhere in this report for further details.

The Company is also subject to contingencies, including legal proceedings and claims arising out of its businesses 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 results of operations for any particular future period could be materially affected by changes in our assumptions or strategies related to these contingencies or changes out of the Company's control.

### Critical Accounting Policies and Estimates

Our discussion and analysis of financial condition and results of operations are based upon the Company's 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 the Company's historical experience, current trends and information available from other sources, as appropriate. If different conditions result from those assumptions used in our judgments, the 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* : Our product revenue is recognized when all of the following criteria have been met: persuasive evidence of an arrangement exists; price to the buyer is fixed or determinable; delivery has occurred and legal title and risk of loss have passed to the customer; and collectability is reasonably assured. When other significant obligations remain after products are delivered, revenue is recognized only after such obligations are fulfilled. Returns and customer credits are infrequent and are recorded as a reduction to revenue. Rights of return are not included in revenue arrangements. Revenue associated with products that contain specific customer acceptance criteria is not recognized before the customer acceptance criteria are satisfied. When a sale arrangement involves training or installation, the deliverables in the arrangement are evaluated to determine whether they represent multiple element arrangements. This evaluation occurs at inception of the arrangement and as each item in the arrangement is delivered. The total fee from the arrangement is allocated to each unit of accounting based on its relative fair value. Fair value for each element is established generally based on the revenue price charged when the same or similar element is sold separately. We allocate revenue to each element in our multiple-element arrangements based upon their relative selling prices. We determine the selling price for each deliverable based on a selling price hierarchy. The selling price for a deliverable is based on our vendor specific objective evidence (VSOE) if available, third-party evidence (TPE) if VSOE is not available, or estimated selling price (ESP) if neither VSOE nor TPE is available. Revenue allocated to each element is then recognized when the basic revenue recognition criteria for that element has been met. The amount of product revenue recognized is affected by our judgments as to whether an arrangement includes multiple elements.

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, the Company receives requests from customers to hold product being purchased from us for the customers' convenience. We recognize revenue for such bill and hold arrangements provided the transaction meets the following criteria: a valid business purpose for the arrangement exists; risk of ownership of the purchased product has transferred to the buyer; there is a fixed delivery date that is reasonable and consistent with the buyer's business purpose; the product is ready for shipment; the payment terms are customary; we have no continuing performance obligation in regards to the product; and the product has been segregated from our inventories.

The majority of our equipment contains embedded operating systems and data management software which are included in the purchase price of the equipment. The software is deemed incidental to the systems as a whole as it is not sold separately or marketed separately and its production costs are minor as compared to those of the hardware system. Therefore, the Company's hardware appliances are considered non-software elements and are not subject to the industry-specific software revenue recognition guidance.

*Warranty Claims and Bad Debts*: Provisions for the estimated costs for future product warranty claims and bad debts are recorded in cost of revenue and general and administrative expense, respectively. The amounts recorded are generally based upon historically derived percentages while also factoring in any new business conditions that might impact the historical analysis such as new product introduction for warranty and bankruptcies of particular customers for bad debts. We also periodically evaluate the adequacy of reserves for

warranty and bad debts recorded in our consolidated balance sheet as a further test to ensure the adequacy of the recorded provisions. Warranty and bad debt analysis often involves subjective analysis of a particular customer's ability to pay. As a result, significant judgment is required in determining the appropriate amounts to record, and such judgments may prove to be incorrect in the future. 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 the actual amounts.

*Inventories:* Inventories are stated at the lower of cost (first-in, first-out) 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, 2018, the Company has provided valuation allowances for future state tax benefits resulting from certain R&D tax credits which could 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.

On December 22, 2017, the 2017 Tax Cuts and Jobs Act ("Tax Act") was enacted into law and the new legislation contains several key tax provisions that affected us, including a one-time mandatory transition tax on accumulated foreign earnings and a reduction of the corporate income tax rate to 21% effective January 1, 2018, among others. We are required to recognize the effect of the tax law changes in the period of enactment, such as determining the transition tax, remeasuring our U.S. deferred tax assets and liabilities as well as reassessing the net realizability of our deferred tax assets and liabilities. In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118"), which allows us to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. Since the Tax Act was passed late in the fourth quarter of fiscal 2018, and ongoing guidance and accounting interpretation are expected over the next 12 months, we consider the accounting of the transition tax, deferred tax re-measurements, and other items to be incomplete due to the forthcoming guidance and our ongoing analysis of final year-end data and tax positions. We expect to complete our analysis within the measurement period in accordance with SAB 118. Refer to Note 14 "Income Taxes" in the audited consolidated financial statements included elsewhere in this report for further details

*Intangible and Long-Lived Assets:* Long-lived assets, such as definite-lived intangible assets and property, plant and equipment, 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.

*Goodwill:* 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. 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.

*Share-Based Compensation:* Share-based compensation expense is measured based on the estimated fair value of the share-based award when granted and is recognized as an expense over the requisite service period (generally the vesting period of the equity grant). We have estimated the fair value of each option on the date of grant using the Black-Scholes option-pricing model. Our estimate of share-based compensation requires a number of complex and subjective assumptions including our stock price volatility, employee exercise patterns (expected life of the options), the risk-free interest rate and the Company's dividend yield. The stock price volatility assumption is based on the historical weekly price data of our common stock over a period equivalent to the weighted-average expected life of our options. Management evaluated whether there were factors during that period which were unusual and would distort the volatility figure if used to estimate future volatility and concluded that there were no such factors. In determining the expected life of the option grants, the Company has observed the actual terms of prior grants with similar characteristics and the actual vesting schedule of the grants and assessed the expected risk tolerance of different option groups. The risk-free interest rate used in the model is based on the actual U.S. Treasury zero coupon rates for bonds matching the expected term of the option as of the option grant date. The dividend assumption is based upon the prior year's average dividend yield. No compensation expense is recognized for options that are forfeited for which the employee does not render the requisite service. Our accounting for share-based compensation for restricted stock awards (RSA) and restricted stock units (RSU) is also based on the fair value method. The fair value of the RSUs and RSAs is based on the closing market price of the Company's common stock on the date of grant. Reductions in compensation expense associated with forfeited awards are estimated at the date of grant, and this estimated forfeiture rate is adjusted periodically based on actual forfeiture experience.

#### **Recent Accounting Pronouncements**

Reference is made to Note 1 of our audited consolidated financial statements included elsewhere in this report.

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

We have exposure to financial market risks, including changes in foreign currency exchange rates and interest rates.

### *Financial Exchange Risk*

The functional currencies of our foreign subsidiaries and branches are the local currencies – the British Pound in the UK, the Canadian Dollar in Canada, the Danish Krone 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 Euro. A hypothetical 10% adverse 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 approximately \$0.3 million for the year ended January 31, 2018.

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. Realized and unrealized foreign exchange losses resulting from transactional exposure were \$0.2 million for the year ended January 31, 2018.

The Company is also subject to risk from the effects of exchange rate movements in foreign currency through its borrowings, specifically our U.S. dollar borrowing at our Danish Krone functional currency subsidiary. We entered into a cross-currency interest rate swap to hedge the foreign currency cash flow and interest rate exposures related to the U.S. Dollar floating-rate debt included on the books of our Danish subsidiary (functional currency is Danish Krone). A 10% increase in the rate of exchange of Danish Krone to U.S. Dollars would result in an increase in our indebtedness of approximately \$0.1 million, and a 10% decrease in the rate of exchange of Danish Krone to U.S. Dollars would result in a decrease of our indebtedness of approximately \$0.1 million. This impact is mitigated through our cross-currency interest rate swap.

### *Interest Rate Risk*

The Company has exposure to interest rate risk from its variable rate long-term debt. We entered into interest rate swaps to hedge the interest rate exposure related to our variable rate debt. Generally, the fair market value of fixed interest rate debt will increase as interest rates fall and decrease as interest rates rise. If interest rates were to decrease by 50 basis points, the fair value of the Company's debt would increase by approximately \$0.3 million. If interest rates were to increase by 50 basis points, the fair value of the Company's debt would decrease by approximately \$0.3 million.

At January 31, 2018, we had cash and cash equivalents of \$10.2 million, of which \$4.2 million is held for working capital, \$3.9 million is held in foreign bank accounts and \$2.1 million is held in highly liquid money market funds with original maturities of 90 days or less. We also have \$1.5 million of securities available for sale which include state and municipal securities with maturities ranging from one to thirteen months. We do not enter into investments for trading or speculative purposes. We do not believe that we have material exposure to changes in fair value of these investments as a result of changes in interest rates due to the short-term nature of these investments.

**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 Chief Executive Officer and Chief 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 (Exchange Act). Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures were effective at January 31, 2018 to ensure that the information required to be disclosed in our Exchange Act reports is (1) recorded, processed, summarized and reported in a timely manner and (2) accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

*Management's Annual Report on Internal Control over Financial Reporting*

The Company's 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). The Company's 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, 2018. 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, the principal executive officer and principal financial officer believe that as of January 31, 2018, the Company's internal control over financial reporting was effective based on criteria set forth by COSO in "Internal Control-Integrated Framework."

Management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of TrojanLabel acquired on February 1, 2017 which is included in our January 31, 2018 consolidated financial statements and constituted approximately \$15.0 million of our total assets as of January 31, 2018 and \$7.5 million of our revenues for the year then ended.

The attestation report of the Company's registered public accounting firm regarding internal control over financial reporting appears in Part IV, Item 15 of this Form 10-K and is incorporated herein by reference.

*Changes in Internal Controls over Financial Reporting*

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

**Item 9B. Other Information**

None.

## PART III

### Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated herein by reference to the Company's definitive proxy statement for the 2018 Annual Meeting of Shareholders.

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	59	President, Chief Executive Officer and Director
David S. Smith	61	Vice President, Chief Financial Officer and Treasurer
Michael M. Morawetz	58	Vice President—Europe
Stephen M. Petrarca	55	Vice President—Operations
Michael J. Natalizia	54	Vice President and Chief Technology Officer

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. Prior to joining the Company, Mr. Woods served from January 2010 to August 2012 as Managing Director of Medfield Advisors, LLC, an advisory firm located in Medfield, Massachusetts focused on providing corporate development and strategy guidance to technology driven manufacturing firms. From 2008 to 2010, Mr. Woods served as President of Performance Motion Devices, a specialty semiconductor and electronics manufacturer located in Lincoln, Massachusetts.

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. Smith has also held a variety of senior finance positions at semiconductor and manufacturing companies, including Senior Vice President and Chief Financial Officer of Standard Microsystems Corporation, a global semiconductor company, from 2005 to 2008 and Vice President, Finance and Chief Financial Officer of both Dover Corporation, a diversified global manufacturing company, from 2000 to 2002 and Crane Company, a diversified manufacturing company from 1994 to 2000.

Mr. Morawetz was appointed Vice President International Branches in 2006. He was previously the General Manager of Branch Operations for the Company's German subsidiary, having joined the Company in 1989.

Mr. Petrarca was appointed Vice President of 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 held the position of Director of Product Development of the Company since 2005.

#### Code of Ethics

The Company has adopted a Code of Conduct which applies to all directors, officers and employees of the Company, including the 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 the Company's website, ([www.astronovainc.com](http://www.astronovainc.com)), under the heading "Investors—Corporate Governance—Governance Documents." The Company intends to disclose any amendment to, or waiver of, a provision of the Code of Conduct for the CEO, CFO, principal accounting officer or controller, or persons performing similar functions by posting such information on its website.



**Item 11. Executive Compensation**

The information required by this item is incorporated herein by reference to the Company’s definitive Proxy Statement for the 2018 Annual Meeting of Shareholders.

The information set forth under the heading “Compensation Committee Report” in the Company’s definitive 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 the Company’s definitive Proxy Statement for the 2018 Annual Meeting of Shareholders.

*Equity Compensation Plan Information*

The following table sets forth information about the Company’s equity compensation plans as of January 31, 2018:

<u>Plan Category</u>	<u>Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights</u>	<u>Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights</u>	<u>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans</u>
Equity Compensation Plans Approved by Shareholders	912,690(1)	\$ 12.52(2)	54,916(3)
Equity Compensation Plans Not Approved by Shareholders	—	—	—
<b>Total</b>	<b>912,690(1)</b>	<b>\$ 12.52(2)</b>	<b>54,916(3)</b>

- (1) Includes 554,870 shares issuable upon exercise of outstanding options granted under the Company’s 2007 Equity Incentive Plan; and 190,400 shares issuable upon exercise of outstanding options granted and 167,420 restricted stock units outstanding under the Company’s 2015 Equity Incentive Plan.
- (2) Does not include restricted stock units.
- (3) Represents 15,709 shares available for grant under the AstroNova, Inc. 2015 Equity Incentive Plan and 39,207 shares available for purchase under the Employee Stock Purchase Plan. This balance does not include 9,927 shares issued pursuant to outstanding unvested restricted stock awards which are subject to forfeiture.

Additional information regarding these equity compensation plans is contained in Note 13, “Share-Based Compensation,” in the Company’s Consolidated Financial Statements included in Item 15 hereto.

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

The information required by this item is incorporated herein by reference to the Company’s definitive Proxy Statement for the 2018 Annual Meeting of Shareholders.

**Item 14. Principal Accountant Fees and Services**

The information required by this item is incorporated herein by reference to the Company’s definitive Proxy Statement for the 2018 Annual Meeting of Shareholders.

**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:

	<u>Page</u>
<a href="#">Report of Independent Registered Public Accounting Firm</a>	39-40
<a href="#">Consolidated Balance Sheets as of January 31, 2018 and 2017</a>	41
<a href="#">Consolidated Statements of Income—Years Ended January 31, 2018, 2017 and 2016</a>	42
<a href="#">Consolidated Statements of Comprehensive Income—Years Ended January 31, 2018, 2017 and 2016</a>	43
<a href="#">Consolidated Statements of Changes in Shareholders' Equity—Years Ended January 31, 2018, 2017 and 2016</a>	44
<a href="#">Consolidated Statements of Cash Flows—Years Ended January 31, 2018, 2017 and 2016</a>	45
<a href="#">Notes to Consolidated Financial Statements</a>	46-75

*(a)(2) Financial Statement Schedule:*

<a href="#">Schedule II—Valuation and Qualifying Accounts and Reserves—Years Ended January 31, 2018, 2017 and 2016</a>	76
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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.

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### *(a)(3) Exhibits:*

<u>Exhibit Number</u>	
(2.1)	<a href="#"><u>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 the Company's Annual Report on Form 10-K for the year ended January 31, 2017 and incorporated by reference herein*</u></a>
(3A)	<a href="#"><u>Restated Articles of Incorporation of the Company and all amendments thereto filed as Exhibit 3A to the Company's Quarterly Report on Form 10-Q for the quarter ended April 30, 2016 and incorporated by reference herein.</u></a>
(3B)	<a href="#"><u>By-laws of the Company as amended to date filed as Exhibit 3B to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2008 (File No. 000-13200) and incorporated by reference herein.</u></a>
(4)	<a href="#"><u>Specimen form of common stock certificate of the Company filed as Exhibit 4 to the Company's Quarterly Report on Form 10-Q for the quarter ended April 30, 2016 and incorporated by reference herein.</u></a>
(10.1)	<a href="#"><u>AstroNova, 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.**</u></a>
(10.2)	<a href="#"><u>AstroNova, Inc. Management Bonus Plan (Group III) filed as Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the period ended May 3, 2014 incorporated by reference herein.**</u></a>
(10.3)	<a href="#"><u>Form of Performance-Based Restricted Stock Unit Award Agreement filed as Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q for the period ended April 28, 2012 and incorporated by reference herein.**</u></a>
(10.4)	<a href="#"><u>Equity Incentive Award Agreement dated as of November 24, 2014 by and between the Company and Gregory A. Woods filed as Exhibit 10.12 to the Company's Annual Report on Form 10-K for the year ended January 31, 2015 and incorporated by reference herein.**</u></a>
(10.5)	<a href="#"><u>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 the Company's Annual Report on Form 10-K for the year ended January 31, 2015 and incorporated by reference herein.**</u></a>
(10.6)	<a href="#"><u>AstroNova Inc. 2015 Equity Incentive Plan filed as 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.**</u></a>
(10.7)	<a href="#"><u>Senior Executive Short Term Incentive Plan adopted March 27, 2015 filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended May 2, 2015 and incorporated by reference herein.**</u></a>
(10.8)	<a href="#"><u>General Manager Employment Contract dated November 18, 2014 by and among AstroNova, Inc. and Michael Morawetz filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended May 2, 2015 and incorporated by reference herein.**</u></a>
(10.9)	<a href="#"><u>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 31, 2015 and incorporated by reference herein.**</u></a>
(10.10)	<a href="#"><u>Credit Agreement dated February 28, 2017 among AstroNova, Inc., as the U.S. Borrower, ANI APS, as the Danish Borrower, Certain Subsidiaries of the U.S. Borrower, as the Guarantors and Bank of America, N.A. filed as Exhibit 10.16 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2017 and incorporated by reference herein.</u></a>

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<b><u>Exhibit Number</u></b>	
(10.11)	<a href="#"><u>Security and Pledge Agreement dated February 28, 2017 among AstroNova, Inc. as the U.S. Borrower and such other parties that become Grantors hereunder after the date hereof and Bank of America, N.A. filed as Exhibit 10.18 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2017 and incorporated by reference herein.</u></a>
(10.12)	<a href="#"><u>AstroNova, Inc. Amended and Restated Non-Employee Director Annual Compensation Program filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**</u></a>
(10.13)	<a href="#"><u>Form of Restricted Stock Agreement granted under the Amended and Restated Non-Employee Director Annual Compensation Program filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the period ended July 30, 2016 and incorporated by reference herein.**</u></a>
(10.14)	<a href="#"><u>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.**</u></a>
(10.15)	<a href="#"><u>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.**</u></a>
(10.16)	<a href="#"><u>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.**</u></a>
(10.17)	<a href="#"><u>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.**</u></a>
(10.18)	<a href="#"><u>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.**</u></a>
(10.19)	<a href="#"><u>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.**</u></a>
(10.20)	<a href="#"><u>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.**</u></a>
(10.21)	<a href="#"><u>Stock Purchase Agreement, dated as of May 1, 2017, by and among AstroNova, Inc. and the trust established by Albert W. Ondis by Declaration of Trust dated December 4, 2003, as amended filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, event date May 1, 2017, filed with the SEC on May 5, 2017 and incorporated by reference herein.</u></a>
(10.22)	<a href="#"><u>Consent under Credit Agreement, dated as of May 1, 2017, by and among AstroNova, Inc., ANI ApS, Trojanlabel ApS, and Bank of America, N.A. filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, event date May 1, 2017, filed with the SEC on May 5, 2017 and incorporated by reference herein.</u></a>
(10.23)	<a href="#"><u>AstroNova, Inc. Amended and Restated Non-Employee Director Annual Compensation Program, as amended filed as Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the period ended April 29, 2017 and incorporated by reference herein.**</u></a>

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<u>Exhibit Number</u>	
(10.24)	<a href="#"><u>Stock Purchase Agreement, dated as of May 1, 2017, by and among AstroNova, Inc. and the trust established by Albert W. Ondis by Declaration of Trust dated December 4, 2003, as amended filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, event date May 1, 2017, filed with the SEC on May 5, 2017 and incorporated by reference herein.</u></a>
(10.25)	<a href="#"><u>Consent under Credit Agreement, dated as of May 1, 2017, by and among AstroNova, Inc., ANI ApS, Trojanlabel ApS, and Bank of America, N.A. filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, event date May 1, 2017, filed with the SEC on May 5, 2017 and incorporated by reference herein.</u></a>
(10.26)	<a href="#"><u>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.</u></a>
(10.27)	<a href="#"><u>First Amendment to the Credit Agreement, dated September 28, 2017, by and among AstroNova, Inc., ANI ApS, Trojan Label ApS and Bank of America, N.A. filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, event dated September 28, 2017, filed with the SEC on October 4, 2017 and incorporated by reference herein.</u></a>
(10.28)	<a href="#"><u>Second Amendment to the Credit Agreement, dated November 30, 2017, by and among AstroNova, Inc., ANI ApS, Trojan Label ApS and Bank of America, N.A. filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, event dated November 30, 2017, filed with the SEC on December 6, 2017 and incorporated by reference herein.</u></a>
(10.29)	<a href="#"><u>Amended and Restated AstroNova, Inc. Employee Stock Purchase Plan filed as Exhibit 10.1 to the Company's Current Report on Form 8-K/A, event date November 20, 2017, filed with the SEC on December 28, 2017 and incorporated by reference herein.</u></a>
(10.30)	<a href="#"><u>Letter Agreement dated January 12, 2018 between the Company and David Smith.**</u></a>
(21)	<a href="#"><u>List of Subsidiaries of the Company.</u></a>
(23.1)	<a href="#"><u>Consent of Wolf &amp; Company, P.C.</u></a>
(31.1)	<a href="#"><u>Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u></a>
(31.2)	<a href="#"><u>Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u></a>
(32.1)	<a href="#"><u>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.</u></a>
(32.2)	<a href="#"><u>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.</u></a>
(101)	The following materials from Registrant's Annual Report on Form 10-K for the year ended January 31, 2018, formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Changes in Shareholders' Equity, (v) the Consolidated Statements of Cash Flows, and (vi) the Notes to Consolidated Financial Statements. Filed electronically herein.

\* 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.



## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of  
AstroNova, Inc.

### Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of AstroNova, Inc. (the “Company”) as of January 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in shareholders’ equity and cash flows for each of the years in the three-year period ended January 31, 2018, and the related notes and the financial statement schedule listed in Item 15(a)(2)(collectively, the financial statements). We also have audited AstroNova, Inc.’s internal control over financial reporting as of January 31, 2018, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of January 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended January 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 31, 2018, based on criteria established in Internal Control—Integrated Framework (2013) issued by the COSO.

### Basis for Opinion

The Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management’s Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s financial statements and an opinion on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements 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. Our audit of internal control over financial reporting 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management’s Annual Report on Internal Control over Financial Reporting, management has excluded TrojanLabel from its assessment of internal control over financial reporting as of January 31, 2018, because it was acquired by the Company in a purchase business combination in the first quarter of 2018. We have also excluded TrojanLabel from our audit of internal control over financial reporting. TrojanLabel is a wholly-owned subsidiary whose total assets and total revenues excluded from management’s assessment and our

audit of internal control over financial reporting represent \$15 million and \$7.5 million, respectively, of the related consolidated financial statement amounts as of and for the year ended January 31, 2018.

*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 10, 2018



**ASTRONOVA, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
**As of January 31**  
**(In Thousands, Except Share Data)**

	<u>2018</u>	<u>2017</u>
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and Cash Equivalents	\$ 10,177	\$ 18,098
Securities Available for Sale	1,511	6,723
Accounts Receivable, net of reserves of \$377 in 2018 and \$266 in 2017	22,400	15,702
Inventories	27,609	19,506
Prepaid Expenses and Other Current Assets	2,083	1,394
Total Current Assets	<u>63,780</u>	<u>61,423</u>
<b>PROPERTY, PLANT AND EQUIPMENT</b>		
Land and Improvements	967	967
Buildings and Improvements	12,056	11,266
Machinery and Equipment	29,854	28,145
	42,877	40,378
Less Accumulated Depreciation	<u>(33,125)</u>	<u>(31,098)</u>
Total Property, Plant and Equipment, net	9,752	9,280
<b>OTHER ASSETS</b>		
Identifiable Intangibles, net	33,633	5,264
Goodwill	13,004	4,521
Deferred Tax Assets	1,829	2,811
Other	315	366
Total Other Assets	<u>48,781</u>	<u>12,962</u>
<b>TOTAL ASSETS</b>	<u>\$ 122,313</u>	<u>\$ 83,665</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts Payable	\$ 11,808	\$ 4,957
Accrued Compensation	2,901	2,936
Other Accrued Expenses	2,414	2,171
Current Portion of Long-Term Debt	5,498	—
Current Liability —Royalty Obligation	1,625	—
Current Liability —Excess Royalty Payment Due	615	—
Income Taxes Payable	684	1,449
Deferred Revenue	367	472
Total Current Liabilities	<u>25,912</u>	<u>11,985</u>
<b>NON CURRENT LIABILITIES</b>		
Long-Term Debt, net of current portion	17,648	—
Royalty Obligation, net of current portion	11,760	—
Deferred Tax Liabilities	698	11
Other Long Term Liabilities	2,648	1,132
<b>TOTAL LIABILITIES</b>	<u>58,666</u>	<u>13,128</u>
Commitments and Contingencies (See Note 19)		
<b>SHAREHOLDERS' EQUITY</b>		
Preferred Stock, \$10 Par Value, Authorized 100,000 shares, None Issued	—	—
Common Stock, \$0.05 Par Value, Authorized 13,000,000 shares; Issued 9,996,120 shares in 2018 and 9,834,906 shares in 2017	500	492
Additional Paid-in Capital	50,016	47,524
Retained Earnings	45,700	44,358
Treasury Stock, at Cost, 3,227,942 shares in 2018 and 2,375,076 shares in 2017	(32,397)	(20,781)
Accumulated Other Comprehensive Loss, Net of Tax	(172)	(1,056)
<b>TOTAL SHAREHOLDERS' EQUITY</b>	<u>63,647</u>	<u>70,537</u>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<u>\$ 122,313</u>	<u>\$ 83,665</u>

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)**

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Revenue	\$ 113,401	\$ 98,448	\$ 94,658
Cost of Revenue	69,399	58,959	56,500
Gross Profit	44,002	39,489	38,158
Costs and Expenses:			
Selling and Marketing	22,234	18,955	18,249
Research and Development	7,453	6,314	6,945
General and Administrative	8,903	7,939	7,030
Operating Expenses	38,590	33,208	32,224
Operating Income	5,412	6,281	5,934
Other Income (Expense):			
Investment Income	168	78	72
Interest Expense	(402)	—	—
Other, Net	(21)	246	903
	(255)	324	975
Income before Income Taxes	5,157	6,605	6,909
Income Tax Provision	1,871	2,377	2,384
Net Income	<u>\$ 3,286</u>	<u>\$ 4,228</u>	<u>\$ 4,525</u>
Net Income Per Common Share—Basic	<u>\$ 0.48</u>	<u>\$ 0.57</u>	<u>\$ 0.62</u>
Net Income Per Common Share—Diluted	<u>\$ 0.47</u>	<u>\$ 0.56</u>	<u>\$ 0.61</u>
Weighted Average Number of Common Shares Outstanding—Basic	6,911	7,421	7,288
Dilutive Effect of Common Stock Equivalents	104	151	183
Weighted Average Number of Common Shares Outstanding—Diluted	7,015	7,572	7,471
Dividends Declared Per Common Share	<u>\$ 0.28</u>	<u>\$ 0.28</u>	<u>\$ 0.28</u>

See Notes to the Consolidated Financial Statements.

**ASTRONOVA, INC.**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
**For the years ended January 31**  
**(In Thousands)**

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Net Income	\$ 3,286	\$4,228	\$4,525
Other Comprehensive Income (Loss), net of taxes and reclassification adjustments:			
Foreign currency translation adjustments	870	(65)	(269)
Change in value of derivatives designated as cash flow hedge	(1,036)	—	—
Gain from cash flow hedges reclassified to income statement	1,048	—	—
Unrealized gain (loss) on securities available for sale	<u>2</u>	<u>(16)</u>	<u>(7)</u>
Other Comprehensive Income (Loss)	884	(81)	(276)
Comprehensive Income	<u>\$ 4,170</u>	<u>\$4,147</u>	<u>\$4,249</u>

See Notes to the Consolidated Financial Statements.

**ASTRONOVA, INC.**  
**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY**  
**(\$ In Thousands)**

	Common Stock		Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
	Shares	Amount					
Balance January 31, 2015	9,544,864	\$ 477	\$ 43,600	\$39,735	\$(19,602)	\$ (699)	\$ 63,511
Share-based compensation	—	—	1,209	—	—	—	1,209
Employee option exercises	98,734	5	802	—	(371)	—	436
Tax benefit of employee stock options	—	—	65	—	—	—	65
Restricted stock awards vested, net	22,692	1	(1)	—	(49)	—	(49)
Dividends paid	—	—	—	(2,048)	—	—	(2,048)
Net income	—	—	—	4,525	—	—	4,525
Other comprehensive loss	—	—	—	—	—	(276)	(276)
Balance January 31, 2016	9,666,290	\$ 483	\$ 45,675	\$42,212	\$(20,022)	\$ (975)	\$ 67,373
Share-based compensation	—	—	1,019	—	—	—	1,019
Employee option exercises	93,483	5	834	—	(451)	—	388
Restricted stock awards vested, net	75,133	4	(4)	—	(308)	—	(308)
Dividends paid	—	—	—	(2,082)	—	—	(2,082)
Net income	—	—	—	4,228	—	—	4,228
Other comprehensive loss	—	—	—	—	—	(81)	(81)
Balance January 31, 2017	9,834,906	\$ 492	\$ 47,524	\$44,358	\$(20,781)	\$ (1,056)	\$ 70,537
Share-based compensation	—	—	1,583	—	—	—	1,583
Employee option exercises	90,042	4	913	—	(275)	—	642
Restricted stock awards vested, net	71,172	4	(4)	—	(103)	—	(103)
Repurchase of Common Stock	—	—	—	—	(11,238)	—	(11,238)
Dividends paid	—	—	—	(1,944)	—	—	(1,944)
Net income	—	—	—	3,286	—	—	3,286
Other comprehensive income	—	—	—	—	—	884	884
Balance January 31, 2018	<u>9,996,120</u>	<u>\$ 500</u>	<u>\$ 50,016</u>	<u>\$45,700</u>	<u>\$(32,397)</u>	<u>\$ (172)</u>	<u>\$ 63,647</u>

See Notes to the Consolidated Financial Statements.

**ASTRONOVA, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**For the years ended January 31**  
**(In Thousands)**

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<b>Cash Flows from Operating Activities:</b>			
Net Income	\$ 3,286	\$ 4,228	\$ 4,525
<b>Adjustments to Reconcile Net Income to Net Cash Provided By Operating Activities:</b>			
Depreciation and Amortization	3,994	2,431	2,065
Amortization of Debt Issuance Costs	34	—	—
Share-Based Compensation	1,583	1,019	1,209
Deferred Income Tax Provision (Benefit)	744	174	(292)
Excess Tax Benefit From Share-Based Compensation	—	—	(65)
Gain on Sale of UK Property	—	(419)	—
<b>Changes in Assets and Liabilities, Net of Impact of Acquisitions:</b>			
Accounts Receivable	(4,722)	(416)	(1,285)
Inventories	(5,509)	(4,659)	600
Accounts Payable and Accrued Expenses	5,207	1,426	151
Income Taxes Payable	(801)	2,187	412
Other	(92)	982	407
Net Cash Provided by Operating Activities	<u>3,724</u>	<u>6,953</u>	<u>7,727</u>
<b>Cash Flows from Investing Activities:</b>			
Proceeds from Sales/Maturities of Securities Available for Sale	5,539	4,029	9,978
Purchases of Securities Available for Sale	(321)	(400)	(5,192)
Proceeds from Sale of UK Property	—	474	—
Acquisition of RITEC's Aerospace Printer Business	—	—	(7,360)
Cash Paid for TrojanLabel Acquisition, net of cash acquired	(9,007)	—	—
Cash Paid for Honeywell Asset Purchase and License Agreement	(14,873)	—	—
Net Proceeds Received for Sale of Asset Held for Sale	—	—	1,698
Payments Received on Line of Credit and Note Receivable	85	256	395
Additions to Property, Plant and Equipment	(2,204)	(1,238)	(3,061)
Net Cash Provided (Used) by Investing Activities	<u>(20,781)</u>	<u>3,121</u>	<u>(3,542)</u>
<b>Cash Flows from Financing Activities:</b>			
Net Proceeds from Common Shares Issued Under Employee Benefit Plans and Employee Stock Option Plans, Net of Payment of Minimum Tax Withholdings	539	79	387
Purchase of Treasury Stock	(11,238)	—	—
Proceeds from Issuance of Long-Term Debt	24,200	—	—
Change in TrojanLabel Earn Out Liability	(1,438)	—	—
Principle Payments on Long-Term Debt	(828)	—	—
Payments of Debt Issuance Costs	(234)	—	—
Excess Tax Benefit from Share-Based Compensation	—	—	65
Dividends Paid	(1,944)	(2,082)	(2,048)
Net Cash (Used) Provided by Financing Activities	<u>9,057</u>	<u>(2,003)</u>	<u>(1,596)</u>
Effect of Foreign Exchange Rate Changes on Cash and Cash Equivalents	79	(16)	(504)
Net (Decrease) Increase in Cash and Cash Equivalents	(7,921)	8,055	2,085
Cash and Cash Equivalents, Beginning of Year	18,098	10,043	7,958
Cash and Cash Equivalents, End of Year	<u>\$ 10,177</u>	<u>\$ 18,098</u>	<u>\$ 10,043</u>
<b>Supplemental Information:</b>			
<b>Cash Paid (Received) During the Period for:</b>			
Interest	\$ 246	\$ —	\$ —
Income Taxes, Net of Refunds	\$ 1,940	\$ (84)	\$ 2,257
<b>Schedule of non-cash financing activities:</b>			
Value of Shares Received in Satisfaction of Option Exercise Price	\$ 275	\$ 451	\$ 371

See Notes to the Consolidated Financial Statements.

**ASTRONOVA, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**January 31, 2018, 2017 and 2016**

**Note 1—Summary of Significant Accounting Policies**

*Basis of Presentation:* The accompanying financial data 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.

*Correction of an Accounting Error:* The Company has identified an immaterial error in its previously issued financial statements on Form 10-Q for the period ended October 28, 2017. The error related to the recording of the Honeywell asset purchase and license agreement transaction and as a result, both the intangible assets acquired and royalty obligation incurred were understated by \$4.7 million at October 28, 2017. The impact of the error also resulted in an overstatement of the Company's net income of approximately \$42,000 for the three and six month periods ended October 28, 2017 related to the additional intangible amortization that should have been recognized during the period. The Company reviewed this accounting error utilizing SEC Staff Accounting Bulletin No. 99, "Materiality" and SEC Staff Accounting Bulletin No. 108, "Effects of Prior Year Misstatements on Current Year Financial Statements" and determined the impact of the error to be immaterial to any prior period's presentation. The accompanying consolidated financial statements as of January 31, 2018 reflect the correction of the aforementioned immaterial error.

*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. Some of the more significant estimates relate to the allowances for doubtful accounts, inventory valuation, valuation and estimated lives of intangible assets, impairment of long-lived assets, goodwill, income taxes, share-based compensation and warranty reserves. Management's estimates are based on the facts and circumstances available at the time estimates are made, past 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. Similar investments with original maturities beyond three months are classified as securities available for sale. Cash of \$3.9 million and \$5.1 million was held in foreign bank accounts at January 31, 2018 and 2017, respectively.

*Securities Available for Sale:* Securities available for sale are carried at fair value based on quoted market prices, where available. The difference between cost and fair value, net of related tax effects, is recorded as a component of accumulated other comprehensive income (loss) in shareholders' equity.

*Inventories:* Inventories are stated at the lower of cost (first-in, first-out) 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 improvements—10 to 45 years; machinery and equipment—3 to 10 years). Depreciation expense was \$1.8 million for fiscal 2018; \$1.7 million for fiscal 2017 and \$1.6 million for 2016.

*Revenue Recognition:* Product revenue is recognized when all of the following criteria have been met: persuasive evidence of an arrangement exists; price to the buyer is fixed or determinable; delivery has occurred and legal title and risk of loss have passed to the customer; and collectability is reasonably assured. Returns and customer credits are infrequent and are recorded as a reduction to revenue. Rights of return are not included in revenue arrangements. Revenue associated with products that contain specific customer acceptance criteria is not recognized before the customer acceptance criteria are satisfied. Revenue is recorded net of any discounts from list price. Amounts billed to customers for shipping and handling fees are included in revenue, while related shipping and handling costs are included in cost of revenue.

The majority 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. Therefore, the Company's hardware appliances are considered non-software elements and are not subject to industry-specific software revenue recognition guidance.

Our multiple-element arrangements are generally comprised of a combination of equipment, software, installation and/or training services. Hardware and software elements are typically delivered at the same time and revenue is recognized when all the revenue recognition criteria for each unit are met. Delivery of 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. Service revenue is deferred and recognized over the contractual period or as services are rendered and accepted by the customer.

We have evaluated the deliverables in our multiple-element arrangements and concluded that they are separate units of accounting if the delivered item or items have value to the customer on a standalone basis and delivery or performance of the undelivered item(s) is considered probable and substantially in our control. We allocate revenue to each element in our multiple-element arrangements based upon their relative selling prices. We determine the selling price for each deliverable based on a selling price hierarchy. The selling price for a deliverable is based on vendor specific objective evidence (VSOE) if available, third-party evidence (TPE) if VSOE is not available, or estimated selling price (ESP) if neither VSOE nor TPE is available. Revenue allocated to each element is then recognized when the basic revenue recognition criteria for that element have been met.

Infrequently, we recognize revenue for non-recurring engineering (NRE) fees 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. NRE fees have not been significant in the periods presented herein.

We also receive infrequent requests from customers to hold product purchased from us for the customer's convenience. Revenue is recognized for such bill and hold arrangements in accordance with the requirements of SEC Staff Accounting Bulletin No. 104 which requires, among other things, the existence of a valid business purpose for the arrangement; the transfer of ownership of the purchased product; a fixed delivery date that is reasonable and consistent with the buyer's business purpose; the readiness of the product for shipment; the use of customary payment terms; no continuing performance obligation by us; and segregation of the product from our inventories.

*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. Our net foreign exchange losses were \$0.2 million for both fiscal 2018 and 2017 and \$0.3 million in fiscal 2016.

*Advertising:* The Company expenses 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 \$1.6 million in fiscal 2018, 2017 and 2016, 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. For 2018, 2017 and 2016, there were no impairment charges for long-lived assets.

*Intangible Assets:* Intangible assets include the value of customer and distributor relationships, existing technology and non-competition agreements 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. For 2018, 2017 and 2016, there were no impairment charges for intangible assets.

*Goodwill:* 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 and 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. The quantitative assessment compares the fair value of the reporting unit with its carrying value. 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, the Company uses 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.

We performed a qualitative assessment for our fiscal 2018 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, as management believes that there are no impairment issues in regards to goodwill at this time.

*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. The Company's 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 January 31, 2018 and 2017, a valuation allowance was provided for deferred tax assets attributable to certain state R&D credit carryforwards.

AstroNova accounts 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.

In December 2017, the Tax Cuts and Jobs Act ("Tax Act") was enacted into law, significantly changing income tax law that affects U.S. corporations. Key changes included a corporate tax rate reduction from 35% to 21% effective January 1, 2018, expensing of certain qualified property, significant changes to the U.S. international tax system such as a one-time transition tax on accumulated foreign earnings, and how foreign earnings are subject to U.S. tax. The Company is required to recognize the effects of the tax law changes in the period of enactment, including the determination of the transition tax and the re-measurement of deferred taxes as well as to re-assess the realizability of the deferred tax assets. Subsequent to the enactment of the Tax Act, the SEC staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118"), which allows companies to record provisional amounts related to the effects of the Tax Act during a measurement period not to extend beyond one year from the enactment date. Due to the timing of the Tax Act and additional guidance and interpretations that may be issued by the U.S. Treasury Department, the Internal Revenue Service and other standard-setting bodies in the future, the Company has not completed its analysis of the income tax effects of the Tax Act. The provisional estimates will be adjusted during the measurement period defined under SAB 118, based upon the Company's ongoing analysis of its data and tax positions along with new guidance from regulators and interpretations of the law.

*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 2018, 2017 and 2016, there were 675,600, 459,700 and 425,200, respectively, of common equivalent shares that were not included in the computation of diluted net income per common share because their inclusion would be anti-dilutive.

*Allowance for Doubtful Accounts:* In circumstances where we are aware of a customer's inability to meet its financial obligations, an allowance is established. Accounts are individually evaluated on a regular basis and allowances are established to state such receivables at their net realizable value. The remainder of the allowance is based upon historical write-off experience and current market assessments.

*Fair Value Measurement:* We measure our financial assets at fair value on a 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.

*Share-Based Compensation:* Share-based compensation expense is measured based on the estimated fair value of the share-based award when granted and is recognized as an expense over the requisite service period (generally the vesting period of the equity grant). We have estimated the fair value of each option on the date of grant using the Black-Scholes option-pricing model. Our estimate of share-based compensation requires a number of complex and subjective assumptions including our stock price volatility, employee exercise patterns (expected life of the options), the risk-free interest rate and the Company's dividend yield. The stock price volatility assumption is based on the historical weekly price data of our common stock over a period equivalent to the weighted average expected life of our options. Management evaluated whether there were factors during that period which were unusual and would distort the volatility figure if used to estimate future volatility and concluded that there were no such factors. In determining the expected life of the option grants, the Company has observed the actual terms of prior grants with similar characteristics and the actual vesting schedule of the grant and has assessed the expected risk tolerance of different option groups. The risk-free interest rate is based on the actual U.S. Treasury zero coupon rates for bonds matching the expected term of the option as of the option grant date. The dividend assumption is based upon the prior year's average dividend yield. No compensation expense is recognized for options that are forfeited for which the employee does not render the requisite service. Our accounting for share-based compensation for restricted stock awards (RSA) and restricted stock units (RSU) is also based on the fair value method. The fair value of the RSUs and RSAs is based on the closing market price of the Company's common stock on the grant date. Reductions in compensation expense associated with forfeited awards are estimated at the date of grant, and this estimated forfeiture rate is adjusted periodically based on actual forfeiture experience.

In the first quarter of fiscal 2017, the Company prospectively adopted the provisions of ASU 2016-09, and, as such, the cash flow from tax benefits that are a result of tax deductions in excess of the compensation cost recognized for those options (excess tax benefits) is classified with other income tax cash flows as an operating activity for the years ended January 31, 2018 and 2017. Tax deductions from certain stock option exercises are treated as being realized when they reduce tax expense and taxes payable in accordance with relevant tax law.

*Derivative Financial Instruments:* The Company uses derivative instruments as part of its overall strategy to manage its 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 effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income (OCI) 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 (i.e., the ineffectiveness portion), or hedge components excluded from the assessment of effectiveness, are recognized in the statement of income during the current period.

*Recent Accounting Pronouncements:*

*Derivatives and Hedging*

In August 2017, the Financial Accounting Standards Board (FASB) issued ASU 2017-12, “Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities.” The objective of this new guidance is to improve the financial reporting of hedging relationships by, among other things, eliminating the requirement to separately measure and record hedge ineffectiveness. ASU 2017-12 is effective for public companies for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years (Q1 fiscal 2019 for AstroNova). Early application is permitted using a modified retrospective method effective as of the beginning of the fiscal year. The Company does not believe that the adoption of this guidance will have a material impact on the Company’s consolidated financial statements.

*Goodwill*

In January 2017, the FASB issued ASU 2017-04, “Intangibles—Goodwill and Other (Topic 350).” ASU 2017-14 simplifies the subsequent measurement of goodwill impairment. The new guidance eliminates the two-step process that required identification of potential impairment and a separate measure of the actual impairment. Goodwill impairment charges, if any, would be determined by reducing the goodwill balance by the difference between the carrying value and the reporting unit’s fair value (impairment loss is limited to the carrying value). This standard is effective for annual or any interim goodwill impairment tests beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company adopted ASU 2017-04 effective February 1, 2017. The adoption of this guidance did not have a material impact on the Company’s consolidated financial statements.

*Business Combinations*

In January 2017, the FASB issued ASU 2017-01, “Business Combinations (Topic 805): Clarifying the Definition of a Business, ” which clarifies the definition of a business to assist entities with determining whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The standard introduces a screen for determining when assets acquired are not a business (if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets, then under ASU 2017-01, the asset or group of assets is not a business) and clarifies that a business must include, at a minimum, an input and a substantive process that contribute to an output to be considered a business. This standard is effective for fiscal years beginning after December 15, 2017, including interim periods within that reporting period, with early adoption permitted in certain circumstances. The Company elected to adopt ASU 2017-01 in the third quarter of the fiscal 2018 as a result of the Honeywell acquisition and has accounted for this transaction as a purchase of an asset in its condensed consolidated financial statements for the period ending January 31, 2018.

### *Statement of Cash Flows*

In August 2016, the FASB issued ASU 2016-15, “Classification of Certain Cash Receipts and Cash Payments (Topic 230).” ASU 2016-15 addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice for certain cash receipts and cash payments. The standard is effective for annual reporting periods beginning after December 15, 2017 and interim periods within those years (Q1 fiscal 2019 for AstroNova), with early adoption permitted. The Company does not believe the adoption of this guidance will have a material impact on the Company’s consolidated financial statements.

### *Revenue Recognition*

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers (Topic 606).” ASU 2014-09 completes the joint effort by the FASB and International Accounting Standards Board to improve financial reporting by creating common revenue recognition guidance for U.S. GAAP and International Financial Reporting Standards. ASU 2014-09 applies to all companies that enter into contracts with customers to transfer goods or services. Under the standard, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration the entity expects to receive in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (modified retrospective method). We adopted this standard effective February 1, 2018 using the modified retrospective method. The adoption of this guidance will not have a material impact on the Company’s consolidated financial statements.

### *Leases*

In February 2016, the FASB issued ASU 2016-02, “Leases (Topic 842).” ASU 2016-02 supersedes current guidance related to accounting for leases and is intended to increase transparency and comparability among organizations by requiring lessees to recognize assets and liabilities in the balance sheet for operating leases with lease terms greater than twelve months. The update also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. ASU 2016-02 will be effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years (Q1 fiscal 2020 for AstroNova), with early adoption permitted. At adoption, this update will be applied using a modified retrospective approach. The Company is currently evaluating the effect of this new guidance on the Company’s consolidated financial statements.

No other new accounting pronouncements, issued or effective during the current year, have had or are expected to have a material impact on our consolidated financial statements.

## **Note 2—Acquisitions**

### *Honeywell Asset Purchase and License Agreement*

On September 28, 2017, AstroNova, Inc. entered into an Asset Purchase and License Agreement (the “Honeywell 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. The purchase price consisted of an initial upfront payment of \$14.6 million in cash. The Honeywell Agreement also provides for guaranteed minimum royalty payments of \$15.0 million, to be paid over the next ten years, 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.

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The Company has evaluated this transaction under Accounting Standard Update (ASU) 2017-01, “Business Combinations (Topic 805): Clarifying the Definition of a Business,” and determined that this transaction should be accounted for as an asset acquisition. Refer to Note 1, “Summary of Significant Accounting Policies,” for further details on ASU 2017-01.

The initial upfront payment of \$14.6 million was paid at the closing of this transaction using borrowings from the Company’s revolving credit facility under its amended Credit Agreement with Bank of America, N.A. Refer to Note 7, “Revolving Credit Facility” for further details.

The minimum royalty payment obligation of \$15.0 million was recorded at the present value of the minimum annual royalty payments using a present value factor of 2.8%, which is based on the estimated after tax cost of debt for similar companies. The current portion of the royalty obligation of \$1.625 million is to be paid over the next twelve months and is reported as a current liability and the remainder of \$11.760 million is reported as a long-term liability on the Company’s consolidated balance sheet at January 31, 2018. In fiscal 2018, the Company incurred \$0.6 million in excess royalty expense, which is included in cost of goods sold in the Company’s consolidated statement of income for the year ended January 31, 2018 and reported as a current liability on the Company’s consolidated balance sheet at January 31, 2018.

Transaction costs incurred for this acquisition were \$0.3 million and have been included as part of the purchase price.

In connection with the Honeywell Agreement, the Company also entered into a Transition Services Agreement (“TSA”) with Honeywell related to the transfer of the manufacturing and repair of the licensed printers from their current locations to AstroNova’s plant in West Warwick, Rhode Island. Subject to the completion of the terms of the TSA by Honeywell International, the Company may make an additional payment of \$0.4 million. In addition, under the terms of the TSA, the Company is required to pay for certain product costs and operating expenses incurred by Honeywell during the period in which product manufacturing is transferred to the Company’s facilities. During 2018, these expenses totaled \$1.1 million and are recorded in general and administrative expenses in the Company’s consolidated income statement for the period ended January 31, 2018.

The assets acquired in connection with the acquisition were recorded by the Company at their estimated relative fair values as of the acquisition date as follows:

(In thousands)	
Inventory	\$ 1,411
Identifiable Intangible Assets	26,843
Total Purchase Price	<u>\$28,254</u>

The purchase price, including the initial payment, the minimum royalty payment obligation and the transaction costs, was allocated based on the relative fair value of the assets acquired. The fair value of the intangible assets acquired was estimated by applying the income approach. These fair value measurements are based on significant inputs that are not observable in the market and therefore represent a Level 3 measurement as defined in Accounting Standards Codification (ASC) 820, “Fair Value Measurement and Disclosure.” Key assumptions in estimating the fair value of the intangibles include (1) the remaining life of the intangibles based on the term of the Honeywell Asset Purchase and License Agreement of 10 years, (2) a range of annual earnings projections from \$3.9 million – \$5.4 million and (3) the Company’s internal rate of return of 21.0%.

The acquired identifiable intangible assets are as follows:

(In thousands)	<u>Fair Value</u>	<u>Useful Life (Years)</u>
Customer Contract Relationships	<u>\$26,843</u>	10

*Trojan Label*

On February 1, 2017, our newly-formed wholly-owned Danish subsidiary, ANI ApS, completed the acquisition of the issued and outstanding equity interests of TrojanLabel ApS (TrojanLabel), a Danish private limited liability company, pursuant to the terms of a Share Purchase Agreement dated January 7, 2017. Based in Copenhagen, Denmark, TrojanLabel was a manufacturer of products including digital color label presses and specialty printing systems for a broad range of end markets. Upon consummation of the acquisition, TrojanLabel became an indirect wholly-owned subsidiary of AstroNova.

The purchase price of this acquisition was 62.9 million Danish Krone (approximately \$9.1 million), net of cash acquired of 976,000 Danish Krone (approximately \$0.1 million), of which 6.4 million Danish Krone (approximately \$0.9 million) was placed in escrow to secure certain post-closing working capital adjustments and indemnification obligations of the sellers. The acquisition was funded using available cash and investment securities.

The sellers of TrojanLabel may be entitled to additional contingent consideration if 80% of specified earnings targets are achieved by the TrojanLabel business during the seven years following the closing, subject to certain closing working capital adjustments and potential offsets to satisfy the sellers' indemnification obligations. The contingent consideration consists of potential earn-out payments to the sellers of between 32.5 million Danish Krone (approximately \$5.0 million) if 80% of the specified earnings targets are achieved, 40.6 million Danish Krone (approximately \$5.8 million) if 100% of the specified earnings targets are achieved, and a maximum of 48.7 million Danish Krone (approximately \$7 million) if 120% of the specified earnings targets are achieved. The fair value of contingent consideration is re-evaluated each reporting period and changes are adjusted through earnings.

Subsequent to the acquisition, the Company restructured the operating model for the TrojanLabel business such that most of the sales and some of the expenses of the business would be transferred to other legal entities of the Company. This caused the expected earnings targets in the Danish entity, which was the basis upon which the contingent consideration was structured, to become unlikely to be met. As a result, during fiscal 2018, the estimated fair value of the contingent consideration was reduced resulting in the Company recognizing an additional \$1.4 million of income for the year which is offset in general and administrative expense on the Company's Consolidated Income Statement for the period ended January 31, 2018.

Total acquisition-related costs were approximately \$0.7 million, of which \$0.1 million and \$0.6 million are included in the general and administrative expenses in the Company's consolidated statements of income for the years ending January 31, 2018 and January 31, 2017, respectively. The acquisition was accounted for as a purchase of a business under the acquisition method in accordance with the guidance provided by FASB ASC 805, "Business Combinations."

The US dollar purchase price of the acquisition has been allocated on the basis of fair value as follows:

(In thousands)	
Accounts Receivable	\$ 1,322
Inventory	796
Other Current Assets	166
Property, Plant and Equipment	15
Identifiable Intangible Assets	3,264
Goodwill	7,388
Accounts Payable and Other Current Liabilities	(1,821)
Other Liability	(114)
Contingent Liability (Earnout)	(1,314)
Deferred Tax Liability	(695)
Total Purchase Price	<u>\$ 9,007</u>

The fair value of the intangible assets acquired was estimated by applying the income approach, and the fair value of the contingent consideration liability was estimated by applying the real options method. These fair value measurements are 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 and Disclosure." Key assumptions in estimating the fair value of the intangibles include (1) remaining life of existing technology acquired based on estimate of percentage of revenue from 0% – 100% for each product, (2) the Company's internal rate of return of 19.0% and (3) a range of earnings projections from \$121,000 – \$1,070,000. Key assumptions in estimating the fair value of the contingent consideration liability (earnout) include (1) the estimated earnout targets over the next seven years of \$407,000–\$1,280,000, (2) the probability of success (achievement of the various contingent events) from 1.6%–87.2% and (3) a risk-adjusted discount rate of approximately 1.77%–3.35% used to adjust the probability-weighted earnout payments to their present value. The fair value of the contingent liability is revalued every reporting period based on updated assumptions. Refer above and to Note 20 "Fair Value Measurements" for further details.

Goodwill of \$7.4 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 TrojanLabel. The goodwill recognized is attributable to synergies which are expected to enhance and expand the Company's overall product portfolio and opportunities in new and existing markets, future technologies that have yet to be determined and TrojanLabel's assembled work force. The carrying amount of the goodwill was allocated to the Product Identification segment of the Company.

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

(In thousands)	Fair Value	Useful Life (Years)
Existing Technology	\$2,327	7
Distributor Relations	937	10
Total	<u>\$3,264</u>	

The Existing Technology intangible asset acquired represents the various technologies TrojanLabel has developed related to its series of printing presses, including hardware components of the presses and the software utilized to optimize their performance.

Beginning February 1, 2017, the results of operations for TrojanLabel have been included in the Company's statement of income for period ended January 31, 2018 and are reported as part of the Product Identification segment. Assuming the acquisition of TrojanLabel had occurred on February 1, 2015, the impact would not have had a material effect on the Company's results for periods ended January 31, 2017 and 2016, as the acquisition was not considered a significant subsidiary.

#### *RITEC*

On June 19, 2015, we completed the acquisition of the aerospace printer product line for civil and commercial aircraft from Rugged Information Technology Equipment Corporation (RITEC) under the terms of an Asset Purchase Agreement dated June 18, 2015. The products of RITEC consist of aerospace printers for use in commercial aircraft sold primarily to aircraft manufacturers, tier one contractors and directly to airlines around the world. Our aerospace printer product line is part of the Test & Measurement (T&M) product group and is reported as part of the T&M segment. The Company began shipment of the RITEC products in the third quarter of fiscal 2016.

The purchase price of the acquisition was \$7.4 million which was funded using available cash and investment securities. The Company withheld \$0.8 million of the purchase price in escrow for twelve months following the acquisition date to support the sellers' indemnifications in the event of any breach in the

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representations, warranties or covenants of RITEC. The Company retained \$0.1 million from the escrow, which was recorded as other income in the consolidated statement of income for the period ended January 31, 2017.

The assets acquired consist principally of accounts receivable and certain intangible assets. Acquisition related costs of approximately \$0.1 million are included in the general and administrative expenses in the Company's consolidated statements of income for fiscal year ended 2016. The acquisition was accounted for under the acquisition method in accordance with the guidance provided by FASB ASC 805, "Business Combinations."

The Company also entered into a Transition Services Agreement, under which RITEC provided transition services and continued to manufacture products in the acquired product line until the Company transitioned the manufacturing to its West Warwick, Rhode Island facility. The TSA concluded in the third quarter of fiscal 2017 and AstroNova purchased the remaining inventory held by RITEC for \$0.2 million.

Also as part of the Asset Purchase Agreement, the Company entered into a License Agreement, which grants RITEC certain rights to use the intellectual property acquired by the Company in the design, development, marketing, manufacture, sale and servicing of aerospace printers for aircraft sold to the military end-user market and printers sold to other non-aircraft market segments. RITEC will pay royalties equal to 7.5% of the revenue price on all products sold into the military end-user aircraft market during the first five years of the License Agreement. No royalty revenue was earned or accrued in fiscal 2018 or 2017.

The purchase price of the acquisition has been allocated on the basis of the fair value as follows:

(In thousands)

Accounts Receivable	\$ 50
Identifiable Intangible Assets	3,780
Goodwill	3,530
Total Purchase Price	<u>\$7,360</u>

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 and Disclosure." Key assumptions include (1) a weighted average cost of capital of 15.5%; (2) a range of earnings projections from \$0.1-\$0.7 million and (3) a range of contract renewal probability from 30%-100%.

Goodwill of \$3.5 million, which is 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 from RITEC. The carrying amount of the goodwill was allocated to the T&M segment of the Company.

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

(In thousands)	Fair Value	Useful Life (Years)
Customer Contract Relationships	\$2,830	10
Non-Competition Agreement	950	5
Total	<u>\$3,780</u>	

Assuming the acquisition of RITEC occurred on February 1, 2015, the impact on net revenue, net income and earnings per share would not have been material to the Company for the year ended January 31, 2016, as the acquisition was not considered a significant subsidiary.



**Note 3—Intangible Assets**

Intangible assets are as follows:

(In thousands)	January 31, 2018				January 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Currency Translation Adjustment	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
<b>Miltope:</b>							
Customer Contract Relationships	\$ 3,100	\$ (1,438)	\$ —	\$ 1,662	\$ 3,100	\$ (1,108)	\$ 1,992
<b>RITEC:</b>							
Customer Contract Relationships	2,830	(461)	—	2,369	2,830	(207)	2,623
Non-Competition Agreement	950	(491)	—	459	950	(301)	649
<b>TrojanLabel:</b>							
Existing Technology	2,327	(350)	313	2,290	—	—	—
Distributor Relations	937	(99)	130	968	—	—	—
<b>Honeywell:</b>							
Customer Contract Relationships	26,843	(958)	—	25,885	—	—	—
<b>Intangible Assets, net</b>	<b>\$36,987</b>	<b>\$ (3,797)</b>	<b>\$ 443</b>	<b>\$33,633</b>	<b>\$ 6,880</b>	<b>\$ (1,616)</b>	<b>\$ 5,264</b>

There were no impairments to intangible assets during the periods ended January 31, 2018, 2017 and 2016. Amortization expense of \$2.2 million; \$0.7 million and \$0.5 million with regard to acquired intangibles has been included in the consolidated statements of income for years ended January 31, 2018, 2017 and 2016, respectively.

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

(In thousands)	2019	2020	2021	2022	2023
Estimated amortization expense	\$4,093	\$4,165	\$4,035	\$3,947	\$3,943

**Note 4—Securities Available for Sale**

Pursuant to our investment policy, securities available for sale include state and municipal securities with various contractual or anticipated maturity dates ranging from 1 to 13 months. These securities are carried at fair value, with unrealized gains and losses reported as a component of accumulated other comprehensive income (loss), net of taxes, in shareholders' equity until realized. Realized gains and losses from the sale of available for sale securities, if any, are determined on a specific identification basis. A decline in the fair value of any available for sale security below cost that is determined to be other than temporary will result in a write-down of its carrying amount to fair value. No such impairment charges were recorded for any period presented. All short-term investment securities have original maturities greater than 90 days.

The fair value, amortized cost and gross unrealized gains and losses of the securities are as follows:

(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<b>January 31, 2018</b>				
State and Municipal Obligations	\$ 1,513	\$ —	\$ (2)	\$ 1,511
<b>January 31, 2017</b>				
State and Municipal Obligations	\$ 6,732	\$ —	\$ (9)	\$ 6,723

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The contractual maturity dates of these securities are as follows:

	January 31	
	2018	2017
(In thousands)		
Less than one year	\$1,096	\$3,563
One to two years	415	3,160
	<u>\$1,511</u>	<u>\$6,723</u>

Actual maturities may differ from contractual dates as a result of revenue or earlier issuer redemptions.

**Note 5—Inventories**

The components of inventories are as follows:

	January 31	
	2018	2017
(In thousands)		
Materials and Supplies	\$13,715	\$11,865
Work-in-Progress	1,404	1,216
Finished Goods	17,210	10,270
	32,329	23,351
Inventory Reserve	(4,720)	(3,845)
Balance at January 31	<u>\$27,609</u>	<u>\$19,506</u>

Finished goods inventory includes \$2.0 million and \$1.6 million of demonstration equipment at January 31, 2018 and 2017, respectively.

**Note 6—Accrued Expenses**

Accrued expenses consisted of the following:

	January 31	
	2018	2017
(In thousands)		
Warranty	\$ 575	\$ 515
Professional Fees	392	584
Dealer Commissions	232	180
Accrued Payroll & Sales Tax	191	111
Product Replacement Cost Reserve	158	174
Other	866	607
	<u>\$2,414</u>	<u>\$2,171</u>

**Note 7—Revolving Line of Credit**

On February 28, 2017, the Company and its wholly owned Danish subsidiaries, ANI ApS and TrojanLabel ApS (together, the “Parties”), entered into a Credit Agreement with Bank of America, N.A. (the “Lender”). The Credit Agreement provided for a term loan to ANI ApS in the principal amount of \$9.2 million. The Credit Agreement also provided for a \$10.0 million revolving credit facility available to the Company for general corporate purposes. Upon entry into the Credit Agreement, the Company’s prior credit facility with Wells Fargo Bank was terminated. No loans or other amounts were outstanding or owed under that facility at the time of termination.

In connection with the Honeywell Agreement, on September 28, 2017, the Parties entered into a First Amendment to the Credit Agreement with the Lender. The First Amendment amended the existing Credit

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Agreement to permit the Honeywell Asset Purchase and License Agreement and temporarily increased the amount available for borrowing under the revolving credit facility from \$10.0 million to \$15.0 million. The initial upfront payment of \$14.6 million for the Honeywell Agreement was paid using borrowings under the Company's revolving credit facility.

On November 30, 2017, the Parties entered into a Second Amendment to the Credit Agreement with the Lender. The Second Amendment provided for a term loan to the Company in the principal amount of \$15.0 million, in addition to the revolving credit facility for the Company and the term loan previously borrowed by ANI ApS at the original closing under the Credit Agreement. The proceeds from the term loan were used to repay the entire \$14.6 million principal balance of the revolving loans outstanding under the revolving credit facility. The principal amount of the revolving credit facility which had been temporarily increased to \$15.0 million was reduced to \$10.0 million effective upon closing of Second Amendment and the maturity date was extended to November 30, 2022.

Revolving credit loans may be borrowed, at the Company's option, in U.S. Dollars or, subject to certain conditions, Euros, British Pounds, Canadian Dollars or Danish Krone. Amounts borrowed under the revolving credit facility bear interest at a rate *per annum* equal to, at the Company's option, either (a) the LIBOR rate (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 1.0% to 1.5% based on the Company's consolidated leverage ratio, or (b) a fluctuating reference rate equal to the highest of (i) the federal funds' rate plus 0.50%, (ii) Bank of America's publicly announced prime rate or (iii) the LIBOR rate plus 1.00%, plus a margin that varies within a range of 0.0% to 0.5% based on the Company's consolidated leverage ratio.

As of January 31, 2018, there are no borrowings against the revolving credit facility. The Company is required to pay a commitment fee on the undrawn portion of the revolving credit facility at the rate of 0.25% *per annum*.

**(8) Debt**

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

(In thousands)	January 31	
	2018	2017
USD Term Loan with a rate equal to LIBOR plus a margin of 1.0% to 1.5%, (2.85% as of January 31, 2018), and maturity date of November 30, 2022	\$15,000	\$—
USD Term Loan with a rate equal to LIBOR plus a margin of 1.0% to 1.5%, (3.06% as of January 31, 2018), and maturity date of January 31, 2022	8,372	—
Debt Issuance Costs, net of accumulated amortization	(226)	—
Current Portion of Term Loan	(5,498)	—
<b>Long-Term Debt</b>	<b>\$17,648</b>	<b>\$—</b>

The schedule of required principal payments remaining during the next five years on long-term debt outstanding as of January 31, 2018 is as follows:

(In thousands)	
Fiscal 2019	\$ 5,498
Fiscal 2020	4,840
Fiscal 2021	5,208
Fiscal 2022	5,576
Fiscal 2023	2,250
	<u>\$23,372</u>

On February 28, 2017, the Parties entered into a Credit Agreement with the Lender. The Parties also entered into a related Security and Pledge Agreement with the Lender. The Credit Agreement provided for a term loan to

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ANI ApS in the amount of \$9.2 million. On November 30, 2017, the Parties entered into a Second Amendment to the Credit Agreement with the Lender. The Second Amendment provided for a term loan to the Company in the principal amount of \$15.0 million, in addition to the revolving credit facility for the Company and the term loan previously borrowed by ANI ApS at the original closing under the Credit Agreement. The proceeds from the term loan were used to repay the entire \$14.6 million principal balance of the revolving loan outstanding under the revolving credit facility as of that date.

The term loans bear interest at a rate *per annum* equal to the LIBOR rate plus a margin that varies within a range of 1.0% to 1.5% based on the Company's consolidated leverage ratio.

In connection with the Credit Agreement, AstroNova and ANI ApS entered into certain hedging arrangements with the Lender to manage the variable interest rate risk and currency risk associated with its payments in respect of the \$9.2 million term loan. In connection with the Second Amendment to the Credit Agreement, AstroNova entered into certain hedging arrangements with the Lender to manage the variable interest rate risk and currency exchange risk associated with its payments in respect of the \$15.0 million term loan. Refer to Note 9, "Derivative Financial Instruments and Risk Management" for further information about these arrangements.

The Parties must comply with various customary financial and non-financial covenants under the Credit Agreement. The financial covenants consist of a maximum consolidated leverage ratio and a minimum consolidated fixed charge coverage ratio. The Credit Agreement contains limitations, in each case subject to various exceptions and thresholds, on the Company's and its subsidiaries' ability to incur future indebtedness, to place liens on assets, 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. The Credit Agreement permits the Company to pay cash dividends on and repurchase shares of its common stock, subject to certain limitations.

In connection with the May 1, 2017 stock repurchase (refer to Note 12, "Shareholders' Equity"), the Parties entered into a consent and amendment with the Lender, dated as of May 1, 2017, relating to the Credit Agreement solely for purposes of effecting the stock repurchase. The amendment increased the aggregate amount of certain repurchases of Company equity interests permitted to be made by the Company under the Credit Agreement in the Company's fiscal year ending January 31, 2018, from \$5.0 million to \$12.0 million, subject to certain conditions. The amendment prohibited the Company from making other repurchases of Company equity interests under such permission in the fiscal year ending January 31, 2018. The amendment also provides that the aggregate amount paid in cash by the Company to effect the stock repurchase shall not be deducted from the Company's consolidated EBITDA for the purposes of calculating the consolidated fixed charge coverage ratio covenant to which the Company is subject under the Credit Agreement with respect to any trailing four-fiscal-quarter measurement period through and including the measurement period ending January 31, 2018.

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

The obligations of ANI ApS in respect of the \$9.2 million term loan are guaranteed by the Company and TrojanLabel. The Company's obligations in respect of the \$15.0 million term loan, revolving credit facility and its guarantee in respect of the ANI ApS term loan are secured by substantially all of the assets of the Company (including a pledge of a portion of the equity interests held by the Company in ANI ApS and the Company's wholly-owned German subsidiary Astro-Med GmbH), subject to certain exceptions.

As of January 31, 2018, we believe the Company is in compliance with all of the covenants in the Credit Agreement.

**(9) Derivative Financial Instruments and Risk Management**

The Company has entered into a cross-currency interest rate swap to manage the interest rate risk and foreign currency exchange risk associated with the floating-rate foreign currency-denominated term loan borrowing by our Danish Subsidiary and an interest rate swap to manage the interest rate risk associated with the variable rate \$15.0 million term loan borrowing by the Company. In accordance with the guidance in ASC 815, both swaps have been designated as cash flow hedges of floating-rate borrowings.

The cross-currency interest rate swap agreement utilized by the Company effectively modifies the Company’s exposure to interest rate risk and foreign currency exchange rate risk by converting approximately \$8.9 million of the Company’s floating-rate debt denominated in U.S. Dollars on our Danish subsidiary’s books to a fixed-rate debt denominated in Danish Krone for the term of the loan, thus reducing the impact of interest-rate and foreign currency exchange rate changes on future interest expense and principal repayments. This swap involves the receipt of floating rate amounts in U.S. Dollars in exchange for fixed-rate interest payments in Danish Krone, as well as exchanges of principal at the inception spot rate, over the life of the term loan. As of January 31, 2018, the total notional amount of the Company’s cross-currency interest rate swap was \$7.8 million and is included in other long term liabilities in the Company’s consolidated balance sheet at January 31, 2018, at its fair value amount of \$1.5 million.

The interest rate swap agreement utilized by the Company on the \$15.0 million term loan effectively modifies the Company’s exposure to interest rate risk by converting the Company’s floating-rate debt to fixed-rate debt for the next five years, thus reducing the impact of interest-rate changes on future interest expense. This swap involves the receipt of floating rate amounts in U.S. dollars in exchange for fixed rate payments in U.S. dollars over the life of the term loan. As of January 31, 2018, the total notional amount of the Company’s interest rate swap was \$14.3 million and is included in other assets in the Company’s consolidated balance sheet at January 31, 2018 at its fair value amount of \$0.1 million.

The following tables present the impact of the derivative instruments in our condensed consolidated financial statements for the years ended January 31, 2018 and 2017:

	Years Ended				
	Amount of Gain (Loss) Recognized in OCI on Derivative (Effective Portion)		Location of Gain (Loss) Reclassified from Accumulated OCI into Income (Effective Portion)	Amount of Gain (Loss) Reclassified from Accumulated OCI into Income (Effective Portion)	
	January 31, 2018	January 31, 2017		January 31, 2018	January 31, 2017
Cash Flow Hedge (In thousands)					
Swap contracts	\$ (1,330)	\$ —	Other Income (Expense)	\$ (1,344)	\$ —

The swap contracts resulted in no ineffectiveness for the period ended January 31, 2018, and no gains or losses were reclassified into earnings as a result of the discontinuance of the swap contracts due to the original forecasted transaction no longer being probable of occurring. At January 31, 2018, the Company expects to reclassify approximately \$0.2 million of net gains on the swap contracts from accumulated other comprehensive income (loss) to earnings during the next 12 months due to changes in foreign exchange rates and the payment of variable interest associated with the floating-rate debt.

**Note 10—Sale of Property**

In December of 2016, we sold our Slough UK real estate and related machinery, computers and equipment at that location. Proceeds from the sale amounted to \$0.5 million (0.4 million in British Pounds) and a gain of

\$0.4 million was recognized in other income in the Company’s consolidated statement of income for the period ended January 31, 2017. Our UK branch is currently leasing property for its operations in Maidenhead, UK.

**Note 11—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	Unrealized Holding Gain (Loss) on Available for Sale Securities	Net Unrealized Gain (Losses) on Cash Flow Hedges	Total
Balance at January 31, 2015	\$ (714)	\$ 15	\$ —	\$ (699)
Other Comprehensive Loss	(269)	(7)	—	(276)
Amounts Reclassified to Net Income	—	—	—	—
Net Other Comprehensive Loss	(269)	(7)	—	(276)
Balance at January 31, 2016	\$ (983)	\$ 8	—	\$ (975)
Other Comprehensive Loss	(65)	(16)	—	(81)
Amounts Reclassified to Net Income	—	—	—	—
Net Other Comprehensive Loss	(65)	(16)	—	(81)
Balance at January 31, 2017	\$ (1,048)	\$ (8)	\$ —	\$ (1,056)
Other Comprehensive Income (Loss) before reclassification	870	2	(1,036)	(164)
Amounts reclassified from AOCI to Earnings	—	—	1,048	1,048
Other Comprehensive Income	870	2	12	884
Balance at January 31, 2018	\$ (178)	\$ (6)	\$ 12	\$ (172)

The amounts presented above in other comprehensive loss are net of taxes except for translation adjustments associated with our German and Danish subsidiaries

**Note 12—Shareholders’ Equity**

During fiscal 2018, 2017 and 2016, certain of the Company’s employees delivered a total of 26,561, 51,531 and 29,939 shares, respectively, of the Company’s 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, \$0.8 million and \$0.4 million, respectively, and are included in treasury stock in the accompanying consolidated balance sheets at January 31, 2018, 2017 and 2016. These transactions did not impact the number of shares authorized for repurchase under the Company’s current repurchase program.

On May 1, 2017, the Company entered into a stock repurchase agreement to repurchase 826,305 shares of the Company’s common stock held by a trust established by Albert W. Ondis at a per share price of \$13.60, for an aggregate repurchase price of \$11.2 million. This stock repurchase was consummated on May 2, 2017 and was funded using existing cash on hand. Following this stock repurchase, the Ondis trust owns 36,000 shares of the Company’s common stock.

April L. Ondis, a director of the Company, is a beneficiary of the trust. The stock repurchase was authorized and approved by the Company’s Audit Committee as a related party transaction. Prior to entering into the agreement, the Company obtained an opinion from an independent investment banking firm that the consideration to be paid by the Company to the trust pursuant to the stock repurchase agreement would be fair to the public stockholders of the Company, other than the trust, from a financial point of view.

As of January 31, 2018, the Company’s Board of Directors has authorized the purchase of up to an additional 390,000 shares of the Company’s common stock on the open market or in privately negotiated transactions.

### **Note 13—Share-Based Compensation**

The Company maintains the following share-based compensation plans:

#### *Stock Plans:*

We have one equity incentive plan pursuant to which we grant equity awards – the 2015 Equity Incentive Plan (the “2015 Plan”). Under this plan, the Company may grant incentive stock options, non-qualified stock options, stock appreciation rights, time or performance-based restricted stock units (RSUs), restricted stock awards (RSAs), and other stock-based awards to executives, key employees, directors and other eligible individuals. The 2015 Plan will expire in May 2025. Options granted to employees under the plan vest over four years and expire after ten years. The exercise price of each stock option is established at the discretion of the Compensation Committee; however, all options granted under the 2015 Plan must be issued at an exercise price of not less than the fair market value of the Company’s common stock on the date of grant. The 2015 Plan authorizes the issuance of up to 500,000 shares (subject to adjustment for stock dividends and stock splits), and at January 31, 2018, 15,709 shares were available for grant under the 2015 Plan. Subsequent to January 31, 2018 un-earned performance-based shares under the Management Long Term Incentive Plan and certain other awards were forfeited, which increased the number of shares available for grant to 100,463. In addition, as of January 31, 2018, 3,290 unvested shares of restricted stock granted and options to purchase an aggregate of 554,870 shares were outstanding under our 2007 Equity Incentive Plan (the “2007 Plan”). The 2007 Plan expired in May 2017 and no new awards may be issued under that plan, but outstanding awards will continue to be governed by it.

Under the 2015 Plan, each non-employee director receives an automatic annual grant of ten-year options to purchase 5,000 shares of stock upon the adjournment of each annual shareholders meeting. Each such option is exercisable at the fair market value of the Company’s common stock as of the grant date, and vests immediately prior to the next annual shareholders’ meeting. Accordingly, on May 17, 2017, 30,000 options were issued to the non-employee directors.

The Company has a Non-Employee Director Annual Compensation Program (the “Program”) under which each non-employee director receives an automatic grant of RSAs on the first business day of 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 compensation amount by the fair market value of the Company’s stock on such day. The director annual compensation amount was \$55,000 in fiscal year 2017, is \$65,000 in fiscal year 2018 and will be \$75,000 in fiscal year 2019. In addition, the Chairman of the Board receives RSAs with an aggregate value of \$6,000, and the Chairs of the Audit and Compensation Committees each receive RSAs with an aggregate value of \$4,000, also issued in quarterly installments and calculated in the same manner as the directors’ RSA grants. RSAs granted prior to March 30, 2017 become fully vested on the first anniversary of the date of grant. RSAs granted subsequent to March 30, 2017 become vested three months after the date of grant. A total of 28,062 and 11,379 shares were awarded to the non-employee directors as compensation under the Program in fiscal 2018 and 2017, respectively.

In April 2013 (fiscal year 2014), the Company granted options and RSUs to officers (“2014 RSUs”). The 2014 RSUs vested as follows: twenty-five percent vested on the third anniversary of the grant date, fifty percent vested upon the Company achieving its cumulative budgeted net revenue target for fiscal years 2014 through 2016 (the “Measurement Period”), and twenty-five percent vested upon the Company achieving a target average annual ORONA (operating income return on net assets as calculated under the Domestic Management Bonus Plan) for the Measurement Period. The grantee may not sell, transfer or otherwise dispose of more than fifty percent of the common stock issued upon vesting of the 2014 RSUs until the first anniversary of the vesting date. In April 2016, 9,300 of the 2014 RSUs vested, as the Company achieved the targeted average annual ORONA, as defined in the plan, for the Measurement Period and another 9,300 vested as a result of the third year anniversary date of the grant. Additionally, on February 1, 2014, the Company accelerated the vesting of 4,166 of the 2014 RSUs held by Everett Pizzuti in connection with his retirement.

In March 2015 (fiscal year 2016), the Company granted 50,000 options and 537 RSAs to its Chief Executive Officer pursuant to the CEO Equity Incentive Agreement, and 35,000 options to other key employees.

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In May 2015 (fiscal year 2016), the Company granted an aggregate of 80,000 time-based and 155,000 performance-based RSUs (“2016 RSUs”) to certain officers of the Company. The time-based 2016 RSUs vest in four equal annual installments commencing on the first anniversary of the grant date. The performance-based 2016 RSUs vest over three years based upon the increase in revenue, if any, achieved each fiscal year relative to a three-year revenue increase goal. Performance-based 2016 RSUs that are earned based on organic revenue growth are fully vested when earned, while those earned based on revenue growth via acquisitions vest annually over a three-year period following the fiscal year in which the revenue growth occurs. Any performance-based 2016 RSUs that have not been earned at the end of the three-year performance period will be forfeited. The expense for such shares is recognized in the fiscal year in which the results are achieved, however, the shares are not fully vested until approved by the Compensation Committee in the first quarter of the following fiscal year. Based upon revenue in fiscal 2018, 2017 and 2016, 33,638, 9,025 and 15,810 shares of the performance based RSUs were earned in the first quarter of fiscal 2019, 2018 and 2017, respectively.

In March 2016 (fiscal year 2017), the Company granted 50,000 options and 4,030 RSAs to its Chief Executive Officer pursuant to an Equity Incentive Award Agreement dated as of November 24, 2014 (the “CEO Equity Incentive Agreement”).

In May 2016 (fiscal year 2017) the Company granted 37,000 options to certain key employees. On August 1, 2016 (fiscal year 2017) the Company granted 5,000 options to its Chief Financial Officer.

In March 2017 (fiscal year 2018), the Company granted 50,000 options to the Chief Executive Officer pursuant to the CEO Equity Incentive Agreement. In February and April 2017 the Company granted 52,189 options to certain other key employees. In December 2017, upon election to the Board, the Company granted 5,000 non-qualified options and 675 RSUs to a Board member. In January 2018, the Company granted 50,000 non-qualified options and 15,000 RSUs to the newly appointed Chief Financial Officer.

*Share-Based Compensation:*

Share-based compensation expense has been recognized as follows:

	2018	Years Ended January 31	
		2017	2016
(In thousands)			
Stock Options	\$ 437	\$ 321	\$ 286
Restricted Stock Awards and Restricted Stock Units	1,134	685	912
Employee Stock Purchase Plan	12	13	11
Total	<u>\$ 1,583</u>	<u>\$ 1,019</u>	<u>\$ 1,209</u>



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*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, 2015	656,011	\$ 10.01
Options Granted	115,000	13.95
Options Exercised	(93,344)	7.95
Options Forfeited	(5,550)	12.75
Options Cancelled	(14,181)	8.82
Options Outstanding, January 31, 2016	657,936	\$ 11.00
Options Granted	122,000	14.82
Options Exercised	(87,107)	8.73
Options Forfeited	(4,250)	13.91
Options Cancelled	(3,123)	8.95
Options Outstanding, January 31, 2017	685,456	\$ 11.96
Options Granted	187,189	13.57
Options Exercised	(84,025)	10.08
Options Forfeited	(18,750)	14.49
Options Cancelled	(24,600)	11.76
Options Outstanding, January 31, 2018	<u>745,270</u>	<u>\$ 12.52</u>

Set forth below is a summary of options outstanding at January 31, 2018:

Range of Exercise prices	Outstanding			Exercisable		
	Number of Shares	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Life	Number of Shares	Weighted- Average Exercise Price	Weighted Average Remaining Contractual Life
\$5.00-10.00	154,656	\$ 7.82	2.90	154,656	\$ 7.82	2.90
\$10.01-15.00	540,614	\$ 13.64	7.68	261,575	\$ 13.49	6.66
\$15.01-20.00	50,000	\$ 15.01	8.12	12,500	\$ 15.01	8.12
	<u>745,270</u>	<u>\$ 12.52</u>	<u>6.72</u>	<u>428,731</u>	<u>\$ 11.49</u>	<u>5.35</u>

The fair value of each stock option granted was estimated on the grant date using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	Years Ended January 31		
	2018	2017	2016
Risk-Free Interest Rate	1.9%	1.4%	1.6%
Expected Life (years)	9	5	5
Expected Volatility	39.0%	28.3%	22.7%
Expected Dividend Yield	2.0%	1.9%	2.0%

The weighted-average estimated fair value of options granted during fiscal 2018, 2017 and 2016 was \$4.79, \$3.22 and \$2.43, respectively. As of January 31, 2018, there was \$0.9 million of unrecognized compensation expense related to the unvested stock options granted under the plans. This expense is expected to be recognized over a weighted-average period of 2.7 years.

As of January 31, 2018, the aggregate intrinsic value (the aggregate difference between the closing stock price of the Company's common stock on January 31, 2018, and the exercise price of the outstanding options)

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that would have been received by the option holders if all options had been exercised was \$1.0 million for all exercisable options and \$1.0 million for all options outstanding. The total aggregate intrinsic value of options exercised during 2018, 2017 and 2016 was \$0.4 million, \$0.6 million, and \$0.6 million, respectively

*Restricted Stock Units (RSUs) and Restricted Stock Awards (RSAs):*

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

	<u>RSAs &amp; RSUs</u>	<u>Weighted-Average Grant Date Fair Value</u>
Outstanding at January 31, 2015	72,245	\$ 9.70
Granted	246,335	14.05
Vested	(22,692)	14.02
Forfeited	(2,800)	10.07
Outstanding at January 31, 2016	293,088	\$ 13.02
Granted	24,839	14.89
Vested	(75,133)	12.05
Forfeited	(28,926)	11.49
Outstanding at January 31, 2017	213,868	\$ 14.08
Granted	43,737	13.78
Vested	(71,171)	14.12
Forfeited	(9,087)	14.05
Outstanding at January 31, 2018	<u>177,347</u>	<u>\$ 13.99</u>

As of January 31, 2018, there was \$0.6 million of unrecognized compensation expense related to unvested RSUs and RSAs. This expense is expected to be recognized over a weighted average period of 1.08 years.

*Employee Stock Purchase Plan (ESPP):*

AstroNova's ESPP allows eligible employees to purchase shares of common stock at a 15% discount from fair market value on the date of purchase. A total of 247,500 shares were initially reserved for issuance under this plan. Summarized plan activity is as follows:

	<u>Years Ended January 31</u>		
	<u>2018</u>	<u>2017</u>	<u>2016</u>
Shares Reserved, Beginning	45,224	51,600	57,005
Shares Purchased	(6,017)	(6,376)	(5,405)
Shares Reserved, Ending	<u>39,207</u>	<u>45,224</u>	<u>51,600</u>

**Note 14—Income Taxes**

The components of income before income taxes are as follows:

	<u>2018</u>	<u>January 31 2017</u>	<u>2016</u>
(In thousands)			
Domestic	\$2,110	\$4,026	\$5,982
Foreign	3,047	2,579	927
	<u>\$5,157</u>	<u>\$6,605</u>	<u>\$6,909</u>

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

(In thousands)	<u>2018</u>	<u>January 31 2017</u>	<u>2016</u>
<b>Current:</b>			
Federal	\$ 592	\$ 1,269	\$ 1,930
State	251	209	470
Foreign	284	725	276
	<u>1,127</u>	<u>2,203</u>	<u>2,676</u>
<b>Deferred:</b>			
Federal	\$ 903	\$ 150	\$ (402)
State	(25)	37	126
Foreign	(134)	(13)	(16)
	<u>744</u>	<u>174</u>	<u>(292)</u>
	<u>\$ 1,871</u>	<u>\$ 2,377</u>	<u>\$ 2,384</u>

On December 22, 2017, the President signed the Tax Cuts and Jobs Act (“Tax Act”). The Tax Act, among other things, lowered the U.S. corporate income tax rate from 35% to 21% effective January 1, 2018. Consequently, we wrote down our net deferred tax assets as of January 31, 2018 by \$1.0 million to reflect the estimated impact of the Tax Act. Accordingly, we recorded a corresponding provisional net one-time non-cash charge of \$1.0 million, related to re-measurement of certain net deferred tax assets using the lower U.S. corporate income tax rate. The Company was capable of reasonably estimating the impact of the reduction to the U.S. Corporate tax rate on the deferred tax balances, however, the estimate may be affected by other aspects of the Tax Act.

The Tax Act taxes certain unrepatriated earnings and profits (E&P) of our foreign subsidiaries. In order to determine the Transition Tax, we must determine, along with other information, the amount of our accumulated post-1986 E&P for our foreign subsidiaries, as well as the non U.S. income tax paid by those subsidiaries on such E&P. We were capable of reasonably estimating the one-time deemed repatriation tax and recorded a provisional expense of \$0.1 million.

While we have substantially completed our provisional analysis of the income tax effects of the Tax Act and recorded a reasonable estimate of such effects, the net one-time charge related to the Tax Act may differ, possibly materially, due to, among other things, further refinement of our calculations, changes in interpretations and assumptions that we have made, additional guidance that may be issued by the U.S. Government, and actions and related accounting policy decisions we may take as a result of the Tax Act. We will complete our analysis over a one-year measurement period ending December 22, 2018, and any adjustments during this measurement period will be included in net earnings from continuing operations as an adjustment to income tax expense in the reporting period when such adjustments are determined.

The Company’s effective tax rate for 2018 was 36.3% compared to 36.0% in 2017 and 34.5% in 2016. The increase in 2018 from 2017 is primarily related to provisional Tax Act tax expenses related to the remeasurement of U.S. deferred tax assets and liabilities and the Transition Tax, substantially offset by increased R&D credits resulting from a completed study, a decrease in non-deductible transaction costs, the non-taxable TrojanLabel earn out liability adjustment in TrojanLabel ApS, and a decrease in unrecognized tax benefits. The increase in 2017 from 2016 is primarily related to non-deductible transaction costs and increased unrecognized tax benefits. The provision for income taxes differs from the amount computed by applying the United States federal statutory

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income tax rate of 32.9% (34% for FY16 and FY17) to income before income taxes. The reasons for this difference were due to the following:

	<u>2018</u>	<u>January 31 2017</u>	<u>2016</u>
(In thousands)			
Income Tax Provision at Statutory Rate	\$ 1,697	\$ 2,246	\$ 2,349
U.S Corporate Rate Change	1,010	—	—
State Taxes, Net of Federal Tax Effect	149	162	277
Transition Tax on Repatriated Earnings	104	—	—
Capitalized Transaction Costs	—	179	—
Unrecognized State Tax Benefits	(20)	165	(67)
Domestic Production Deduction	(47)	(103)	(134)
Return to Provision Adjustment	(122)	(75)	—
TrojanLabel Earn Out Liability Adjustment	(316)	—	—
R&D Credits	(537)	(168)	(176)
Other	(47)	(29)	135
	<u>\$ 1,871</u>	<u>\$ 2,377</u>	<u>\$ 2,384</u>

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:

	<u>2018</u>	<u>January 31 2017</u>
(In thousands)		
Deferred Tax Assets:		
Inventory	\$ 1,648	\$ 2,151
Honeywell Royalty Liability	3,382	—
State R&D Credits	1,161	679
Share-Based Compensation	399	546
Compensation Accrual	194	281
Warranty Reserve	139	192
Unrecognized State Tax Benefits	138	241
Deferred Service Contract Revenue	84	176
Foreign Tax Credit	—	508
Other	176	348
	<u>7,321</u>	<u>5,122</u>
Deferred Tax Liabilities:		
Intangibles	3,679	—
Accumulated Tax Depreciation in Excess of Book Depreciation	1,028	1,380
Other	322	263
	<u>5,029</u>	<u>1,643</u>
Subtotal	2,292	3,479
Valuation Allowance	(1,161)	(679)
Net Deferred Tax Assets	<u>\$ 1,131</u>	<u>\$ 2,800</u>

The valuation allowance of \$1.2 million at January 31, 2018 and \$0.7 million at January 31, 2017 related to state research and development tax credit carryforwards which are expected to expire unused. The valuation allowance increased \$0.5 million in 2018 and \$0.1 million in 2017 due to the decrease in the Federal tax effect of state taxes from the Federal rate reduction provided for in the Tax Act and the generation of research and development credits in excess of the Company's ability to currently utilize credits, and the decision to fully

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reserve for the state tax benefits of all R&D tax credit carryforwards, net of the federal benefit. The Company has reached this conclusion after considering the availability of taxable income in prior carryback years, tax planning strategies, and the likelihood of future state taxable income and credits exclusive of reversing temporary differences and carryforwards in the relevant state jurisdiction.

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:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
(In thousands)			
Balance at February 1	\$ 708	\$ 591	\$ 707
Increases in prior period tax positions	—	75	—
Increases in current period tax positions	55	133	49
Reductions related to lapse of statute of limitations	(98)	(91)	(165)
Balance at January 31	<u>\$665</u>	<u>\$708</u>	<u>\$ 591</u>

If the \$0.7 million balance as of January 31, 2018 is recognized, \$0.6 million would decrease the effective tax rate in the period in which each of the benefits is recognized and the remainder would be offset by a reversal of deferred tax assets.

During fiscal 2018, 2017 and 2016, the Company recognized an expense of \$24,000; an expense of \$52,000 and a benefit of \$87,000, respectively, related to a change in interest and penalties, which are included as a component of income tax expense in the accompanying statements of income. The Company has accrued potential interest and penalties of \$0.4 million and \$0.4 million at the end of January 31, 2018 and 2017, respectively.

The Company and its subsidiaries file income tax returns in U.S. federal jurisdictions, various state jurisdictions, and various foreign jurisdictions. The Company is no longer subject to U.S. federal tax examinations for fiscal years ended prior to January 2014.

U.S. income taxes have been provided on deemed repatriated earnings of \$5.2 million related to our non-U.S. companies as of January 31, 2018, as a result of the enactment of the Tax Act. The additional net transition tax of \$104,000 on the deemed repatriated earnings was recorded as a provisional estimate for fiscal 2018. Before the Tax Act, U.S. income taxes and foreign withholding taxes have not been provided on earnings of \$5.2 million that have not been distributed by our non-U.S. companies as of January 31, 2018. Our intention before enactment of the Tax Act was to permanently reinvest these earnings, thereby indefinitely postponing their remittance to the U.S. We are currently evaluating our intention concerning repatriation of foreign earnings in light of the Tax Act.

#### **Note 15—Nature of Operations, Segment Reporting and Geographical Information**

The Company's 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. The Company organizes and manages its business as a portfolio of products and services designed around a common theme of data acquisition and information output. The Company has two reporting segments consistent with its revenue product groups: Product Identification and Test & Measurement (T&M).

The Product Identification segment produces an array of high-technology digital color and monochrome label printers and mini presses, labeling software and consumables for a variety of commercial industries worldwide. AstroNova's 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.

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Business is conducted in the United States and through foreign affiliates 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.

On September 28, 2017, AstroNova entered into the Honeywell Agreement to acquire the exclusive perpetual world-wide license to manufacture Honeywell’s narrow format flight deck printers for two aircraft families. Revenue from the sales of these printers is reported as part of our Product Identification segment beginning in the third quarter of fiscal 2018. Refer to Note 2, “Acquisitions,” for further details.

On February 1, 2017, AstroNova completed its acquisition of TrojanLabel. TrojanLabel is reported as part of our Product Identification segment beginning with the first quarter of fiscal 2018. Refer to Note 2, “Acquisitions,” for further details.

On June 19, 2015, AstroNova completed the asset purchase of the aerospace printer product line from RITEC. AstroNova’s aerospace printer product line is part of the T&M product group and is reported as part of the T&M segment. The Company began shipment of the RITEC products in the third quarter of fiscal 2016. Refer to Note 2, “Acquisitions,” for further details.

The accounting policies of the reporting segments are the same as those described in the summary of significant accounting policies herein. The Company evaluates 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:

(\$ in thousands)	Revenue			Segment Operating Profit			Segment Operating Profit as a % of Revenue		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Product Identification	\$ 81,681	\$ 69,862	\$ 67,127	\$ 10,561	\$ 9,821	\$ 9,300	12.9%	14.1%	13.9%
T&M	31,720	28,586	27,531	3,754	4,399	3,664	11.8%	15.4%	13.3%
<b>Total</b>	<b>\$ 113,401</b>	<b>\$ 98,448</b>	<b>\$ 94,658</b>	<b>14,315</b>	<b>14,220</b>	<b>12,964</b>	<b>12.6%</b>	<b>14.4%</b>	<b>13.7%</b>
Corporate Expenses				8,903	7,939	7,030			
Operating Income				5,412	6,281	5,934			
Other Income (Expense), Net				(255)	324	975			
Income Before Income Taxes				5,157	6,605	6,909			
Income Tax Provision				1,871	2,377	2,384			
<b>Net Income</b>				<b>\$ 3,286</b>	<b>\$ 4,228</b>	<b>\$ 4,525</b>			

No customer accounted for greater than 10% of net revenue in fiscal 2018, 2017 and 2016.

Other information by segment is presented below:

(In thousands)	Assets	
	2018	2017
Product Identification	\$ 49,842	\$ 30,624
T&M	60,579	28,129
Corporate*	11,903	24,912
<b>Total</b>	<b>\$ 122,313</b>	<b>\$ 83,665</b>

\* Corporate assets consist principally of cash, cash equivalents and securities available for sale.

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(In thousands)	Depreciation and Amortization			Capital Expenditures		
	2018	2017	2016	2018	2017	2016
Product Identification	\$ 1,536	\$ 885	\$ 690	\$ 1,497	\$ 767	\$ 2,284
T&M	2,458	1,546	1,375	707	471	777
<b>Total</b>	<b>\$ 3,994</b>	<b>\$ 2,431</b>	<b>\$ 2,065</b>	<b>\$ 2,204</b>	<b>\$ 1,238</b>	<b>\$ 3,061</b>

**Geographical Data**

Presented below is selected financial information by geographic area:

(In thousands)	Revenue			Long-Lived Assets*	
	2018	2017	2016	2018	2017
United States	\$ 69,796	\$ 69,850	\$ 68,316	\$ 39,432	\$ 14,205
Europe	29,947	18,848	16,830	3,808	168
Canada	5,373	5,008	4,487	145	172
Asia	3,808	1,664	1,741	—	—
Central and South America	3,402	3,053	2,436	—	—
Other	1,075	25	848	—	—
<b>Total</b>	<b>\$ 113,401</b>	<b>\$ 98,448</b>	<b>\$ 94,658</b>	<b>\$ 43,385</b>	<b>\$ 14,545</b>

\* Long-lived assets excludes goodwill assigned to the T&M segment of \$4.5 million at both January 31, 2018 and 2017 and \$8.5 million assigned to the PI segment at January 31, 2018.

**Note 16—Employee Benefit Plans**

*Employee Stock Ownership Plan (ESOP):*

AstroNova had an ESOP which provided retirement benefits to all eligible employees. Annual contributions of either cash or stock in amounts determined by the Company’s Board of Directors were invested by the ESOP’s Trustees in shares of common stock of AstroNova. The Company did not make contributions to the ESOP in fiscal years 2017 and 2016. On January 23, 2017, the Compensation Committee of the Board of Directors voted to terminate the ESOP. AstroNova is in the process of allocating all shares owned by the ESOP to the participants; once completed, the ESOP will be terminated.

*Profit-Sharing Plan:*

AstroNova sponsors 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 the policy of the Company to fund any contributions accrued. The Company’s annual contribution amounts are determined by the Board of Directors. Contributions paid or accrued amounted to \$0.5 million in both fiscal 2018 and 2017 and \$0.3 million in 2016.

**Note 17—Product Warranty Liability**

AstroNova offers a manufacturer’s warranty for the majority of its hardware products. The specific terms and conditions of warranty vary depending upon the products sold and country in which the Company does business. For products sold in the United States, the Company provides a basic limited warranty, including parts and labor. The Company estimates the warranty costs based on historical claims experience and records a

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liability in the amount of such estimates at the time product revenue is recognized. The Company regularly assesses the adequacy of its recorded warranty liabilities and adjusts 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)	<u>2018</u>	<u>January 31 2017</u>	<u>2016</u>
Balance, beginning of the year	\$ 515	\$ 400	\$ 375
Provision for Warranty Expense	1,294	971	887
Cost of Warranty Repairs	<u>(1,234)</u>	<u>(856)</u>	<u>(862)</u>
Balance, end of the year	<u>\$ 575</u>	<u>\$ 515</u>	<u>\$ 400</u>

### **Note 18—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 the Company's customer base. The Company periodically performs on-going credit evaluations of its customers. The Company has not historically experienced significant credit losses on collection of its accounts receivable.

Excess cash is invested principally in investment grade government and state municipal securities. The Company has established guidelines relative to diversification and maturities that maintain safety of principal, liquidity and yield. These guidelines are periodically reviewed and modified to reflect changes in market conditions. The Company has not historically experienced any significant losses on its cash equivalents or investments.

During the years ended January 31, 2018, 2017 and 2016, one vendor accounted for 31.3%, 33.2% and 23.7% of purchases, and 26.6%, 42.7% and 16.7% of accounts payable, respectively.

### **Note 19—Commitments and Contingencies**

The Company is 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 future results of operations for any particular future period could be materially affected by changes in our assumptions or strategies related to these contingencies or changes out of the Company's control.

### **Note 20—Fair Value Measurements**

#### **Assets and Liabilities Recorded at Fair Value on a Recurring Basis**

Fair value is applied to our financial assets and liabilities including money market funds, available for sale securities, derivative instruments and a contingent consideration liability relating to an earnout payment on future TrojanLabel operating results.



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The following tables provide a summary of the financial assets and liabilities that are measured at fair value:

<i>Assets measured at fair value:</i> (in thousands)	Fair value measurement at January 31, 2018				Fair value measurement at January 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Money Market Funds (included in Cash and Cash Equivalents)	\$ 1,798	\$ —	\$ —	\$ 1,798	\$ 2	\$ —	\$ —	\$ 2
State and Municipal Obligations (included in Securities Available for Sale)	—	1,511	—	1,511	—	6,723	—	6,723
Swap Contract (include in Other Assets)	—	101	—	101	—	—	—	—
Total assets	<u>\$ 1,798</u>	<u>\$ 1,612</u>	<u>\$ —</u>	<u>\$ 3,410</u>	<u>\$ 2</u>	<u>\$ 6,723</u>	<u>\$ —</u>	<u>\$ 6,725</u>

<i>Liabilities measured at fair value:</i> (in thousands)	Fair value measurement at January 31, 2018				Fair value measurement at January 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Swap Contract (included in Other Liabilities)	\$ —	\$ 1,513	\$ —	\$ 1,513	\$ —	\$ —	\$ —	\$ —
Earnout Liability (included in Other Liabilities)	—	—	15	15	—	—	—	—
Total liabilities	<u>\$ —</u>	<u>\$ 1,513</u>	<u>\$ 15</u>	<u>\$ 1,528</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

For our money market funds and municipal obligations, we utilize the market approach to measure fair value. The market approach is based on using quoted prices for identical or similar assets.

We also use the market approach to measure fair value of our derivative instruments. Our derivative asset is comprised of an interest rate swap and our derivative liability is comprised of a cross-currency interest rate swap. These derivative instruments were measured at fair value using readily observable market inputs, such as quotations on interest rates and foreign exchange rates, and are classified as Level 2 because they are over-the-counter contracts with a bank counterparty that is not traded in an active market.

The following table presents the changes in fair value of our Level 3 financial liability for the year ended January 31, 2018; there were no comparable amounts for fiscal 2017:

(In thousands)	Contingent Earnout Liability	Total Level 3 Liabilities
Beginning balance	\$ —	\$ —
Fair value of contingent consideration acquired	1,314	1,314
Change in fair value of contingent earn out liability included in earnings	(1,438)	(1,438)
CTA	139	139
Balance at January 31, 2018	<u>\$ 15</u>	<u>\$ 15</u>

The fair value of the earnout liability incurred in connection with the Company's acquisition of TrojanLabel was determined using the option approach methodology which includes using significant inputs that are not observable in the market and therefore classified as Level 3. Key assumptions in estimating the fair value of the contingent consideration liability included (1) the estimated earnout targets over the next seven years of \$0.5 million-\$1.4 million, (2) the probability of success (achievement of the various contingent events) from 0.0%-0.9% and (3) a risk-adjusted discount rate of approximately 2.68%-4.9% used to adjust the probability-

weighted earnout payments to their present value. At each reporting period, the contingent consideration liability is recorded at its fair value with changes reflected in general and administrative expense in the condensed consolidated statements of operations.

Subsequent to the acquisition, the Company restructured the operating model for the TrojanLabel business such that most of the sales and some of the expenses of the business would be transferred to other legal entities of the Company. This caused the expected earnings targets in the Danish entity, which was the basis upon which the contingent consideration was structured, to become unlikely to be met. As a result, during fiscal 2018, the value of the contingent consideration was reduced resulting in the Company recognizing an additional \$1.4 million of income for the year which is offset in general and administrative expense on the Company's Consolidated Income Statement for the period ended January 31, 2018.

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

The Company's long-term debt, including the current portion of long-term debt not reflected in the financial statements at fair value, is reflected in the table below:

(In thousands)	Fair Value Measurement at January 31, 2018				Carrying Value
	Level 1	Level 2	Level 3	Total	
Long-Term Debt and Related Current Maturities	\$ —	\$ —	\$24,873	\$24,873	\$23,372

The fair value of the Company's 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.

#### SUPPLEMENTARY DATA

##### Quarterly Financial Information (Unaudited)

	2018				2017			
	Q1	Q2	Q3	Q4 (1)	Q1	Q2	Q3	Q4
<i>(In thousands, except per share data)</i>								
Revenue	\$24,458	\$27,483	\$28,760	\$32,699	\$24,110	\$25,339	\$23,342	\$25,657
Cost of Revenue	15,152	17,224	16,966	20,057	14,637	15,034	13,701	15,586
Gross Profit	9,306	10,259	11,794	12,642	9,473	10,305	9,641	10,071
	38.0%	37.3%	41.0%	38.7%	39.3%	40.7%	41.3%	39.3%
<b>Operating Expenses (2):</b>								
Selling & Marketing	\$ 5,238	\$ 5,315	\$ 5,532	\$ 6,277	\$ 4,831	\$ 4,777	\$ 4,578	\$ 4,770
Research & Development	1,505	1,675	2,033	2,112	1,444	1,755	1,338	1,776
General & Administrative	1,856	2,327	2,597	2,123	1,651	2,025	1,891	2,373
Total Operating Expenses	8,599	9,317	10,162	10,512	7,926	8,557	7,807	8,919
Operating Income	707	942	1,632	2,130	1,547	1,748	1,834	1,152
	2.9%	3.4%	5.7%	6.5%	6.4%	6.9%	7.9%	4.5%
Other Income (Expense), Net	(48)	16	(12)	(210)	(52)	40	(60)	396
Income Before Taxes	659	958	1,620	1,920	1,495	1,788	1,774	1,548
Income Tax Provision	147	231	201	1,292	476	496	623	782
Net income	\$ 512	\$ 727	\$ 1,419	\$ 628	\$ 1,019	\$ 1,292	\$ 1,151	\$ 766
Net Income per Common Share—Basic	\$ 0.07	\$ 0.11	\$ 0.21	\$ 0.09	\$ 0.14	\$ 0.17	\$ 0.15	\$ 0.10
Net Income per Common Share—Diluted	\$ 0.07	\$ 0.11	\$ 0.21	\$ 0.09	\$ 0.14	\$ 0.17	\$ 0.15	\$ 0.10

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Annual totals may not agree to the summation of quarterly information due to insignificant rounding and the required calculation conventions.

- (1) The fourth quarter of fiscal 2018 net income includes (a) income of \$0.9 million (\$0.7 million net of tax or \$0.11 per diluted share) related to the change in fair value of the Company's contingent earn out liability; (b) expense of \$42,000 (\$36,000 net of tax or \$0.1 per diluted share) related to the correction of a prior period error in the recording of the Honeywell transaction in the third quarter fiscal 2018. (Refer to Note 1 for further details) and (c) \$1.1 million, or \$0.16 per diluted share, of tax expense related to the enactment of the Tax Act.
- (2) Certain amounts in the prior quarters have been reclassified to conform to the Company's current presentation at year-end.

**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,				
2018	\$ 266	\$ 119	\$ (8)	\$ 377
2017	\$ 404	\$ (80)	\$ (58)	\$ 266
2016	\$ 343	\$ 112	\$ (51)	\$ 404

- (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.



January 12, 2018

David Smith

Dear David:

We are very pleased to offer you the position of Vice President, Treasurer and Chief Financial Officer for AstroNova, Inc. (the Company”). In this capacity, you will report directly to Greg Woods, President & CEO. Your employment will begin on **January 22, 2018**, contingent upon approval of the compensation terms by the Compensation Committee of the Company as well as approval of your appointment and election to such offices by the Board of Directors of the Company.

By signing this letter, you represent and warrant to the Company that you are under no contractual commitments inconsistent with your obligations to the Company. This offer letter supersedes any prior understandings or agreements, whether oral or written, between you and the Company.

You will be paid at a starting base salary annualized at USD \$265,000/Yr. in accordance with the Company’s standard payroll practices. You will be eligible to participate in the Company’s Executive Short Term Incentive Plan (the Executive “STIP”) (the “Plan”), to the extent the Company continues to offer the Plan, at 40% target of base salary. The Plan is based on the Company and/or applicable Business Unit achieving its annual financial objectives and your eligibility is subject to change in accordance with amendments to the Plan. All forms of compensation referred to in this letter are subject to reduction to reflect applicable withholding and payroll taxes.

**A more specific itemization of the compensation elements of this offer are as follows:**

1. **\$265,000 annual base salary**
2. **\$1,500 per month car allowance**
3. **A housing allowance sufficient on an after-tax basis to provide acceptable accommodations as discussed and agreed not to exceed \$2,400 per month**
4. **Annual (Executive STIP) target bonus of 40% of base salary under the Plan**
5. **Grant of nonstatutory options to purchase 50,000 shares of the Company’s common stock that will vest in equal installments over four years**
6. **Participation in the Executive LTIP equity program (contingent upon approval of the program by the Compensation Committee)**

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**7. Grant of 15,000 restricted stock units to vest in equal installments over four years**

**8. Other standard company benefit offerings as they may change from time to time**

Following your election to the offices set forth above, the Company will enter into an indemnification agreement with you in its customary form.

You will begin your employment term with a **Paid-Time-Off (PTO) accrual of twenty-three (23) days** per year, and then increasing in accordance with Company policy. All future PTO allowances will be in accordance with the company's stated PTO policy.

The Company contributes towards the premium cost for insurance benefits as further described in the benefits rate sheet. Additionally, you will be eligible to participate in the 401 (k) Company Retirement Savings Plan with an employer match under the 401(k) Plan (the current match is up to 3.5%). You will be eligible to participate in the Company's Amended and Restated Employee Stock Purchase Plan upon completion of 90 days of service.

This offer and your employment with the Company is contingent on verification of (1) your prior employment, education, and license credentials, (2) a criminal background check, a pre-employment drug test, and a physical examination, (3) information you provide to prove your identity and authorization to work in the USA and (4) approval of the compensation terms by the Compensation Committee of the Company and approval of your appointment and your election by the Board of Directors of the Company. As a condition of your employment, you will be required, to sign a Confidentiality, Non-Compete and Proprietary Rights Agreement, a copy of which is enclosed for your review.

Your employment with the Company will be "at will," meaning that either you or the Company will be entitled to terminate your employment at any time and for any reason, with or without cause. Although your job duties, title, compensation and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by an authorized representative of the Company. Acceptance of this offer does not constitute an employment agreement and this letter is not to be construed as a guarantee of employment by the Company for any specific period or length of time.

The Company does not discriminate on the basis of gender, race, color, national origin, religion, age, disability, sexual orientation, marital status or ancestry in any of its policies, practices, procedures and employment.

While you render services to the Company, you will not engage in any other gainful employment, business or activity without the written consent of the Company.

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We hope you find the terms of this offer acceptable. Please indicate your agreement with these terms and accept our offer by signing and dating the enclosed duplicate original of the letter and returning to me. All of us at the Company look forward to welcoming you and we are confident of your potential as a valued and respected member of the Company to assist in the execution of our growth strategy. If you have any questions regarding the position, please do not hesitate to contact me.

Sincerely,

/s/ Gregory A. Woods

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Gregory A. Woods

President & CEO

Accepted: /s/ David Smith

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Printed Name: David Smith

Date: January 12, 2018

## LIST OF SUBSIDIARIES OF THE COMPANY

<u>Name</u>	<u>Jurisdiction of Organization</u>
AstroNova GmbH	Germany
AstroNova Limited	Ireland
AstroNova (Shanghai) Trading Co., Ltd	China
AstroNova Aerospace, Inc.	Delaware
ANI ApS	Denmark
TrojanLabel ApS	Denmark
AstroNova SAS	France



**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements (Nos. 333-143854, 333-204619 and 2-81081) on Form S-8 of AstroNova, Inc. of our report dated April 10, 2018, related to our audit of the consolidated financial statements, internal control over financial reporting and the financial statement schedule, which appear in this Annual Report on Form 10-K for the year ended January 31, 2018.

/s/ Wolf & Company, P.C.

Boston, Massachusetts  
April 10, 2018

**CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF  
THE SARBANES-OXLEY ACT OF 2002**

I, Gregory A. Woods certify that:

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

Date April 10, 2018

/s/ GREGORY A. WOODS

Gregory A. Woods  
President and Chief Executive Officer  
(Principal Executive Officer)

**CERTIFICATION OF THE CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF  
THE SARBANES-OXLEY ACT OF 2002**

I, David S. Smith, certify that:

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

Date April 10, 2018

/s/ David S. Smith

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David S. Smith

Vice President, Chief Financial Officer and Treasurer  
(Principal Financial Officer and Principal Accounting  
Officer)

**AstroNova Inc.**

**CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER  
PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE  
SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of AstroNova, Inc. (the "Company") on Form 10-K for the year ended January 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gregory A. Woods, Chief Executive Officer, hereby certify, pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (a) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated this 10th day of April, 2018

/s/ GREGORY A. WOODS

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Gregory A. Woods

President and Chief Executive Officer

(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to AstroNova, Inc. and will be retained by AstroNova, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

**AstroNova Inc.**

**CERTIFICATION OF THE CHIEF FINANCIAL OFFICER  
PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE  
SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of AstroNova, Inc. (the "Company") on Form 10-K for the year ended January 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David S. Smith, Vice President, Chief Financial Officer and Treasurer, hereby certify, pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (a) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (b) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated this 10th day of April, 2018

/S/ David S. Smith

\_\_\_\_\_  
David S. Smith

Vice President, Chief Financial Officer and Treasurer  
(Principal Financial Officer and Principal Accounting  
Officer)

A signed original of this written statement required by Section 906 has been provided to AstroNova, Inc. and will be retained by AstroNova, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.