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

☐ **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: 001-07982

RAVEN INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

South Dakota	**46-0246171**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
205 E. 6th Street, P.O. Box 5107, Sioux Falls, SD	**57117- 5107**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number including area code (605) 336-2750

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

Title of each class:	Name of each exchange on which registered
Common Stock, $1 par value	The NASDAQ Stock Market

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.	☑ Yes	☐ No
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.	☐ Yes	☑ No
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.	☑ Yes	☐ No
Indicate by check mark whether the registrant has submitted electronically 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 check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements 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, or a smaller reporting company. See the definition of "accelerated filer," "large accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☑		Accelerated filer	☐
Non-accelerated filer	☐	(Do not check if a smaller reporting company)	Smaller reporting company	☐
			Emerging growth company	☐

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

The aggregate market value of the registrant's common stock held by non-affiliates at July 31, 2017 was approximately $1,231,707,927. The aggregate market value was computed by reference to the closing price as reported on the NASDAQ Global Select Market, $34.40, on July 31, 2017, which was as of the last business day of the registrant's most recently completed second fiscal quarter. The number of shares outstanding on March 16, 2018 was 35,796,857.

DOCUMENTS INCORPORATED BY REFERENCE

The definitive proxy statement relating to the registrant's Annual Meeting of Shareholders, to be held May 22, 2018, is incorporated by reference into Part III to the extent described therein.

PART I

ITEM 1. BUSINESS

Raven Industries, Inc. (the Company or Raven) was incorporated in February 1956 under the laws of the State of South Dakota and began operations later that same year. The Company is a diversified technology company providing a variety of products to customers within the industrial, agricultural, geomembrane, construction, and aerospace/defense markets. The Company markets its products around the world and has its principal operations in the United States of America. Raven began operations as a manufacturer of high-altitude research balloons before diversifying into product lines that extended from technologies and production methods of this original balloon business. The Company employs 1,157 people and is headquartered at 205 E. 6th Street, Sioux Falls, SD 57104 - telephone (605) 336-2750. The Company's Internet address is http://www.ravenind.com and its common stock trades on the NASDAQ Global Select Market under the ticker symbol RAVN. The Company has adopted a Code of Conduct applicable to all officers, directors and employees, which is available on its website. Information on the Company's website is not part of this filing.

We make our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports available, free of charge, in the “Investor Relations” section of our Internet website as soon as reasonably practicable after we electronically file these materials with, or furnish these materials to, the Securities and Exchange Commission (SEC). Information on or connected to our website is neither part of, nor incorporated by reference into, this Form 10-K or any other report filed with or furnished to the SEC.

You may also read or copy any materials that we file with the SEC at its Public Reference Room at 100 F Street, N.E., Washington, DC 20549. You may obtain additional information about the Public Reference Room by calling the SEC at 1-800-SEC-0330. Additionally, you will find these materials on the SEC Internet site at www.sec.gov. This site contains reports, proxy statements and other information regarding issuers that file electronically with the SEC.

This Annual Report on Form 10-K (Form 10-K) contains forward-looking statements that are subject to risks and uncertainties. All statements other than statements of historical fact included in this Form 10-K are forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance, and business. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected. Important factors that could cause actual results to differ materially from our expectations and other important information about forward-looking statements are disclosed under Item 1A, “Risk Factors” and Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations, Forward-Looking Statements” in this Form 10-K.

BUSINESS SEGMENTS

The Company has three unique operating units, or divisions, that are also its reportable segments: Applied Technology Division (Applied Technology), Engineered Films Division (Engineered Films), and Aerostar Division (Aerostar). Product lines have been generally grouped in these segments based on technology, manufacturing processes, and end-use application; however, a business segment may serve more than one of the product markets identified above. The Company measures the profitability performance of its segments primarily based on their operating income excluding general and administrative expenses. Other expense and income taxes are not allocated to individual operating segments, and assets not identifiable to an individual segment are included as corporate assets. Segment information is reported consistent with the Company's management reporting structure.

Business segment financial information is found on the following pages of this Form 10-K:

23 Results of Operations – Segment Analysis
72 Note 16 *Business Segments and Major Customer Information*

Applied Technology
Applied Technology designs, manufactures, sells, and services innovative precision agriculture products and information management tools that help growers reduce costs, more precisely control inputs, and improve farm yields. The Applied Technology product families include field computers, application controls, GPS-guidance steering systems, automatic boom controls, injection systems, and planter and seeder controls. Applied Technology's services include high-speed in-field Internet connectivity and cloud-based data management. The Company's investment in the continued build-out of the Slingshot™ platform has also

positioned Applied Technology as an information platform that improves decision-making and achieves business efficiencies for its agriculture retail partners.

Applied Technology sells its precision agriculture control products to both original equipment manufacturers (OEMs) and through aftermarket distribution partners in the United States and in most major agricultural areas around the world. The Company's competitive advantage in this segment is designing and selling easy to use, reliable, and innovative value-added products that are supported by an industry-leading service and support team.

Engineered Films

Engineered Films produces high-performance plastic films and sheeting for geomembrane, agricultural, construction, and industrial applications. Engineered Films acquired the assets of Colorado Lining International, Inc. (CLI) in September 2017. This acquisition enhanced the division's geomembrane market position through extended service and product offerings with the addition of new design-build and installation service components. The acquisition of CLI advanced Engineered Films’ business model into a vertically-integrated, full-service solutions provider for the geomembrane market.

Engineered Films sells both direct to end-customers and through independent third-party distributors. The majority of product sold into the construction and agriculture markets is through distributors, while sales into the geomembrane and industrial markets are more direct in nature. The Company extrudes a significant portion of the film converted for its commercial products and believes it is one of the largest sheeting converters in the United States in the markets it serves. Engineered Films' ability to extrude and convert films, along with offering installation services for its geomembrane products, allows it to provide a more customized solution to customers. A number of film manufacturers compete with the Company on both price and product availability. Engineered Films is the Company's most capital-intensive business segment, and historically has made sizable investments in new extrusion capacity and conversion equipment. This segment's capital expenditures were $8.1 million in fiscal 2018, $2.8 million in fiscal 2017, and $10.8 million in fiscal 2016.

Aerostar

Aerostar serves the aerospace/defense, radar and lighter-than-air markets. Aerostar's primary products include high-altitude (stratospheric or lighter-than-air) balloons, tethered aerostats, and radar systems. These products can be integrated with additional third-party sensors to provide research, communications, and situational awareness capabilities to governmental and commercial customers. Aerostar’s growth strategy emphasizes the design and manufacture of proprietary products in these markets. Aerostar also pursues product and support services contracts with agencies and instrumentalities of the U.S. government as well as sales of advanced radar systems and aerostats in international markets. In previous years, Aerostar also provided contract manufacturing services. The Company largely exited this business and the planned reduction of contract manufacturing activities was completed in fiscal 2016.

Aerostar sells to government agencies as both a prime contractor and subcontractor, and to commercial users primarily as a sub-contractor. Further, sales to government agencies often involve large contracts subject to frequent delays because of budget uncertainties, and protracted negotiation processes. The timing and size of contract wins can create volatility in Aerostar’s results.

OUTLOOK

The Company is very pleased with the performance achieved by all three operating divisions throughout fiscal 2018. All three divisions achieved double-digit sales growth and the Company believes it is well positioned for the year ahead.

In fiscal 2018 Applied Technology achieved strong results in the face of challenging agricultural market conditions. The Company expects to continue to drive growth and will continue to strategically fund several long-term investments. Subsequent to the end of the fourth quarter, the division launched a strategic initiative to grow its local presence in Brazil and drive organic growth in Latin America, in order to better capitalize on one of the largest agricultural markets in the world.

Engineered Films demonstrated impressive operational discipline and sustained high plant utilization throughout fiscal 2018. The division grew sales by approximately $75 million year-over-year, and prior investments in acquisitions and manufacturing capacity drove strong growth in every market served. The division continues to see opportunities for growth and is investing in additional capacity in fiscal 2019. As for hurricane recovery efforts, the delivery of hurricane recovery film will result in sales of approximately $9 million in the first quarter and then return to significantly reduced levels consistent with prior years.

During the year, Aerostar improved its financial performance and achieved more consistency and stability in its results. The division continues to sharpen its focus on the stratospheric balloon platform, and has divested of a few non-strategic portions of its business during and subsequent to the end of fiscal 2018. Strong performance on existing programs is driving confidence for continued growth with Aerostar’s stratospheric balloon platform.

Overall, the Company is well positioned as it enters fiscal 2019 because of the actions taken and investments made to preserve and strengthen our core business. Furthermore, the Company is evaluating strategic acquisitions and will continue to invest in additional manufacturing capacity and technology development to enhance its core product lines. The Company's goal remains to generate 10 percent annualized earnings growth over the long-term, excluding unusual and generally non-recurring items.

MAJOR CUSTOMER INFORMATION

No customers accounted for 10% or more of consolidated sales in fiscal years 2018, 2017, or 2016.

SEASONAL WORKING CAPITAL REQUIREMENTS

Some seasonal demand exists in both the Applied Technology and Engineered Films divisions, primarily due to their respective exposure to the agricultural market. However, given the overall diversification of the Company, the seasonal fluctuations in net working capital (accounts receivable, net plus inventories less accounts payable) are not usually significant.

FINANCIAL INSTRUMENTS

The principal financial instruments that the Company maintains are cash, cash equivalents, short-term investments, accounts receivable, accounts payable, accrued liabilities, and acquisition-related contingent payments. The Company manages the interest rate, credit, and market risks associated with these accounts through periodic reviews of the carrying value of assets and liabilities and establishment of appropriate allowances in accordance with Company policies. The Company does not use off-balance sheet financing, except to enter into operating leases.

The Company does not enter into derivatives or other financial instruments for trading or speculative purposes. The Company uses derivative financial instruments to manage foreign currency balance sheet risk. The use of these financial instruments has had no material effect on consolidated results of operations, financial condition, or cash flows.

RAW MATERIALS

The Company obtains a wide variety of materials from numerous vendors. Principal materials include electronic components for Applied Technology and Aerostar, various polymeric resins for Engineered Films, and fabrics and film for Aerostar. Engineered Films has experienced volatile resin prices over the past three years. Price increases could not always be passed on to customers due to weak demand and/or a competitive pricing environment. Predicting future material volatility and the related potential impact on the Company is not easily estimated and the Company is unable to do so to the degree required to build reliance on such forecasts.

PATENTS

The Company owns a number of patents. The Company does not believe that its business, as a whole, is materially dependent on any one patent or related group of patents. The Company focuses significant research and development effort to develop technology-based offerings. As such, the protection of the Company's intellectual property is an important strategic objective. Along with an aggressive posture toward patenting new technology and protecting trade secrets, the Company has restrictions on the disclosure of our technology to industry and business partners to ensure that our intellectual property is maintained and protected.

RESEARCH AND DEVELOPMENT

The three business segments conduct ongoing research and development (R&D) efforts to improve their product offerings and develop new products. Most of the Company's R&D expenditures are directed toward new product development. R&D investment is particularly strong within the Applied Technology Division. Development of new technology and product enhancements within Applied Technology is a competitive differentiator and central to its long-term strategy. Engineered Films also utilizes R&D spending to develop new products and to value engineer and reformulate its products. These R&D investments deliver high-value film solutions to the markets it serves and also result in lower raw material costs and improved quality for existing product lines. Aerostar's investment in the development of new technology has a particular emphasis on its core stratospheric balloon platform. The Company's total R&D costs are presented in the Consolidated Statements of Income and Comprehensive Income.

ENVIRONMENTAL MATTERS

The Company believes that, in all material respects, it is in compliance with applicable federal, state and local environmental laws and regulations. Expenditures incurred in the past relating to compliance for operating facilities have not significantly affected the Company's capital expenditures, earnings, or competitive position. The Company is unaware of any potential liabilities as of January 31, 2018 for any environmental matters that would have a material effect on the Company's results of operations, financial position, or cash flows.

BACKLOG

As of February 1, 2018, the Company's order backlog totaled approximately $40.3 million. Backlog amounts as of February 1, 2017 and 2016 were $25.7 million and $18.6 million, respectively. Because the length of time between order and shipment varies considerably by business segment and customers can change delivery schedules or potentially cancel orders, the Company does not believe that backlog, as of any particular date, is necessarily indicative of actual net sales for any future period.

EMPLOYEES

As of January 31, 2018, the Company had 1,157 employees (including temporary workers). Following is a summary of active employees by segment: Applied Technology - 394; Engineered Films - 471; Aerostar - 195; and Corporate Services - 97. Management believes its relationship with its employees is good.

EXECUTIVE OFFICERS

Name, Age, and Position	Biographical Data
Daniel A. Rykhus, 53 *President and Chief Executive Officer*	Mr. Rykhus became the Company's President and Chief Executive Officer in 2010. He joined the Company in 1990 as Director of World Class Manufacturing, was General Manager of the Applied Technology Division from1998 through 2009, and served as Executive Vice President from 2004 through 2010.
Steven E. Brazones, 44 *Vice President and Chief Financial Officer*	Mr. Brazones joined the Company in December 2014 as its Vice President, Chief Financial Officer, and Treasurer. From 2002 to 2014, Mr. Brazones held a variety of positions with H.B. Fuller Company. Most recently, he served as H.B. Fuller's Americas Region Finance Director. Previously, he served as the Assistant Treasurer and the Director of Investor Relations. Prior to his tenure with H.B. Fuller, Mr. Brazones held various roles at Northwestern Growth.
Lee A. Magnuson, 62 *General Counsel and Vice President*	Mr. Magnuson joined the Company in June 2017, as Vice President and General Counsel and also became the Company's Secretary in August 2017. Prior to joining the Company, Mr. Magnuson was managing partner of Lindquist and Vennum Law Firm's Sioux Falls, SD office for 5 years, practicing in the areas of commercial transactions, mergers and acquisitions, corporate matters, real estate and regulatory matters.
Janet L. Matthiesen, 60 *Vice President of Human Resources*	Ms. Matthiesen joined the Company in 2010 as Director of Administration and has been the Company's Vice President of Human Resources since 2012. Prior to joining Raven, Ms. Matthiesen was a Human Resource Manager at Science Applications International Corporation from 2002 to 2010.
Brian E. Meyer, 55 *Division Vice President and General Manager - Applied Technology Division*	Mr. Meyer was named Division Vice President and General Manager of the Applied Technology Division in May 2015. He joined the Company in 2010 as Chief Information Officer. Prior to joining the Company, Mr. Meyer was an information and technology executive in the health insurance industry and vice president of systems development in the property and casualty insurance industry.
Anthony D. Schmidt, 46 *Division Vice President and General Manager - Engineered Films Division*	Mr. Schmidt was named Division Vice President and General Manager of the Engineered Films Division in 2012. He joined the Company in 1995 in the Applied Technology Division performing various leadership roles within manufacturing and engineering. He transitioned to Engineered Films Division in 2011 as Manufacturing Manager.
Scott W. Wickersham, 44 *Division Vice President and General Manager - Aerostar Division*	Mr. Wickersham was named Division Vice President and General Manager of the Aerostar Division in January 2018. He joined the Company in 2010 as the Director of Product Development and Engineering Manager and has been the General Manager for the Aerostar Division since November 2015. Prior to joining the Company, Mr. Wickersham held a range of engineering and operational roles with various technology companies.

ITEM 1A. RISK FACTORS

RISKS RELATING TO THE COMPANY

The Company's business is subject to many risks, which by their nature are unpredictable or unquantifiable and may be unknown. In an attempt to provide you with information on potential risks the Company may encounter, we have provided below, what we believe are the most significant risks the Company could potentially face, based on our knowledge, experience, information and assumptions. The risks provided below should be assessed contemporaneously with other information contained in this Form 10-K, including Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations," the risks and uncertainties addressed under "Forward-Looking Statements" on page 35, the Notes to the Consolidated Financial Statements on page 45, and other information presented in or incorporated by reference into this Annual Report on Form 10-K. The risks contained herein, as well as other statements in this 10-K are forward-looking statements and, as such, are uncertain. Such statements are not guarantees of future performance and undue reliance should not be placed on them. The indeterminate nature of risk factors makes them subject to change, and certain risks and uncertainties could potentially cause material changes to actual results. Some of these risks may affect the entire Company, where others may only affect particular segments of our business, or may have no material affect at all.

The Company, except as required by law, disclaims any obligation to update or revise the risk factors contained herein, regardless of changes, whether as a result of new information, developments or otherwise. The risks provided in this form 10-K and in other documents filed with the SEC are not exclusive in nature and, as such, there are other potential risks and uncertainties that the Company is not aware of, or does not presently consider material in nature that could feasibly cause actual results to vary materially from expectations.

Weather conditions or natural disasters could affect certain of the Company's markets, such as agriculture and construction, or the Company's primary manufacturing facilities.
The Company's Applied Technology Division is largely dependent on the ability of farmers, agricultural service providers, and custom applicators to purchase agricultural equipment, including its products. If such farmers, agricultural service providers, or custom applicators experience weather conditions or natural disasters resulting in unfavorable crop prices or farm incomes, sales in the Applied Technology Division may be adversely affected.

Weather conditions and natural disasters can also adversely affect sales in the Company's Engineered Films Division. To the extent weather conditions or natural disasters curtail construction or agricultural activity, sales of the division's plastic sheeting would likely decrease.

Seasonal and weather-related variation could also affect quarterly results. If expected sales are deferred in a fiscal quarter while inventory has been built and operating expenses incurred, financial results could be negatively impacted.

The Company’s primary manufacturing facilities for each of its operating divisions are located on contiguous properties in Sioux Falls, South Dakota. If weather-related natural disasters such as tornadoes or flooding were to occur in the area, such conditions could impede the manufacturing and shipping of products and potentially adversely affect the Company’s sales, transactions processing, and financial reporting. The Company has disaster recovery plans in place to manage the Company’s risks to these vulnerabilities but these measures may not be adequate, implemented properly, or executed timely to ensure that the Company’s operations are not disrupted. Such consequences could adversely affect our results of operations, financial condition, liquidity, and cash flows.

The loss, disruption, or material change in our business relationship with single source suppliers for particular materials, components or services, could cause a disruption in supply, or substantial increase in cost of any such products or services, and therefore could result in harm to our sales, profitability, cash flows and financial condition.
The Company obtains certain materials, components, or services from suppliers that serve as the only source of supply, or that supply the majority of the Company’s requirements of the particular material, component, or service. While these materials, components, services, or suitable replacements, could potentially be sourced from other suppliers, in the event of a disruption or loss of supply of relevant materials, components, or services for any reason, the Company may not be able to immediately find alternative sources of supply, or if found, may not be found on similar terms. If the Company’s relationship with any of these single source suppliers became challenged, or is terminated, we could have difficulty replacing these sources without causing disruption to the business.

Price fluctuations in, and shortages of, raw materials could have a significant impact on the Company's ability to sustain and grow earnings.
The Company's Engineered Films Division utilizes significant amounts of polymeric resin, the cost of which depends upon market prices for natural gas and oil and other market forces. These prices are subject to worldwide supply and demand as well as other factors beyond our control. Although the Engineered Films Division is sometimes able to pass on price increases to its customers, significant variations in the cost of polymeric resins can affect the Company's operating results from period to period. Success in offsetting higher raw material costs with price increases is largely influenced by competitive and economic conditions and could vary significantly depending on the market served. Unusual supply disruptions, such as one caused by a natural disaster, could cause suppliers to invoke "force majeure" clauses in their supply agreements, causing shortages in supply of material. If the Company is not able to fully offset the effects of adverse materials availability or higher costs, financial results could be adversely affected, which in turn could adversely affect our results of operations, financial condition, liquidity, and cash flows.

Electronic components used by both the Applied Technology Division and Aerostar Division are sometimes in short supply, which may impact our ability to meet customer demand. If a supplier of raw materials or electronic components were unable to deliver due to shortage or financial difficulty, any of the Company's segments could be adversely affected.

Fluctuations in commodity prices can increase our costs and decrease our sales.
Agricultural income levels are affected by agricultural commodity prices and input costs. As a result, changes in commodity prices or input costs that reduce agricultural income levels could have a negative effect on the ability of growers and their service providers to purchase the Company's precision agriculture products manufactured by its Applied Technology Division.

Exploration for oil and natural gas fluctuates with their price and energy market conditions are subject to volatility. Certain plastic sheeting manufactured and sold by our Engineered Films Division is sold as pit and pond liners to contain water used in the drilling processes for these energy commodities. Lower prices for oil and natural gas could reduce exploration activities and demand for our products.

Film manufacturing uses polymeric resins, which can be subject to changes in price as the cost of oil or natural gas changes. Accordingly, volatility in oil and natural gas prices may negatively affect our raw material costs and cost of goods sold and potentially cause us to increase prices, which could adversely affect our sales and/or profitability.

Failure to develop and market new technologies and products could impact the Company's competitive position and have an adverse effect on the Company's financial results.
The Company's operating results in Applied Technology, Engineered Films, and Aerostar depend upon the ability to renew the pipeline of new technologies and products and to bring these to market. This ability could be adversely affected by difficulties or delays in product development, such as the inability to identify viable new products, successfully complete research and development projects, obtain relevant regulatory approvals, obtain intellectual property protection, or gain market acceptance of new products and services. Because of the lengthy development process, technological challenges, and competition, there can be no assurance that any of the products the Company is currently developing, or could begin to develop in the future, will achieve commercial success. Technical advancements in products may also increase the risk of product failure, increasing product returns or warranty claims and settlements. In addition, sales of the Company's new products could replace sales of some of its current products, offsetting the benefit of a successful new product introduction.

Failure to develop and maintain partnerships, alliances, and other distribution or supplier relationships could adversely impact the Company's financial results.
In certain areas of the Company’s business, continued success depends on developing and maintaining relationships with other industry participants, such as original equipment manufacturers, dealers and distributors. If the Company fails to develop and maintain such relationships, or if there is disruption of current business relationships, due to actions of the Company, its partners or competitors, our ability to effectively market and sell certain products could be harmed. The Company’s relationships with other industry participants are complex and multifaceted, and evolve over time. Often, these relationships contribute to substantial ongoing business and operations in particular markets; therefore, changes in these relationships could have an adverse impact on our sales and revenue.

Additionally, the Company uses dealer/distributor networks, some of which are affiliated with strategic and industry partners. Enlisting and retaining qualified dealers and distributors and training them in the use and selling of product offerings necessitates substantial time and resources. If we were to lose a significant dealer or distributor relationship, and were forced to identify new channels, the time and expense of training new dealers or distributors may make new-product introduction difficult and also may hinder end-user sales and adoption, which could result in decreased revenues. Additionally, the interruption of dealer coverage within specific regions or markets could cause difficulties in marketing, selling or servicing our products and could harm the Company’s business, operating results or financial condition.

The Company's sales of products that are specialized and highly technical in nature are subject to uncertainties, start-up costs and inefficiencies, as well as market, competitive, and compliance risks.
The Company’s growth strategy relies on the design and manufacture of proprietary products. Highly technical, specialized product inventories may be more susceptible to fluctuations in market demand. If demand is unexpectedly low, write-downs or impairments of such inventory may become necessary. Either of these outcomes could adversely affect our results of operations. Start-up costs and inefficiencies can adversely affect operating results and such costs may not be recoverable in a proprietary product environment because the Company may not receive reimbursement from its customers for such costs.

Competition in agriculture markets could come from our current customers if original equipment manufacturers develop and integrate precision agriculture technology products themselves rather than purchasing from third parties, thereby reducing demand for Applied Technology’s products.

Regulatory restrictions could be placed on hydraulic fracturing activities because of environmental and health concerns, reducing demand for Engineered Film’s products. For Engineered Films, the development of alternative technologies, such as closed loop drilling processes that reduce the need for pit liners in energy exploration, could also reduce demand for the Company’s products.

Aerostar’s future growth relies on sales of high-altitude balloons, as well as advanced radar systems and aerostats to international markets. In limited cases, such sales may be direct commercial sales to foreign governments rather than foreign military sales through the U.S. government. Direct commercial sales to foreign governments often involve large contracts subject to frequent delays because of budget uncertainties, regional military conflicts, political instability, and protracted negotiation processes. Such delays could adversely affect our results of operations. The nature of these markets for certain of Aerostar's advanced radar systems and aerostats makes these products particularly susceptible to fluctuations in market demand. Demand fluctuations and the likelihood of delays in sales involving large contracts for such products also increase the risk of these products becoming obsolete, increasing the risk associated with expected sales of such products. The value of certain advanced radar systems and aerostat inventory at January 31, 2018 was $1.6 million and $3.4 million, respectively. This valuation is based on an estimate that the market demand for these products will be sufficient in future periods such that these inventories will be sold at a price greater than carrying value and related selling costs. Write-downs or impairment of the value of such products carried in inventory could adversely affect our results of operations. To the extent products become obsolete or anticipated sales are not realized, our expected future cash flows could be adversely impacted. This could also lead to an impairment, which could adversely impact the Company's results of operations and financial condition.

Sales of certain of Aerostar’s products into international markets increase the compliance risk associated with regulations such as International Traffic in Arms Regulations and Foreign Corrupt Practices Act, as well as others, exposing the Company to fines and its employees to fines, imprisonment, or civil penalties. Potential consequences of a material violation of such regulations include damage to our reputation, litigation, and increased costs.

The Company's Aerostar segment depends on the U.S. government for a significant portion of its sales, creating uncertainty in the timing of and funding for projected contracts.

A significant portion of Aerostar's sales are to the U.S. government or U.S. government agencies as a prime or sub-contractor. Government spending has historically been cyclical. A decrease in U.S. government defense or near-space research spending or changes in spending allocations could result in one or more of the Company's programs being reduced, delayed, or terminated. Reductions in the Company's existing programs, unless offset by other programs and opportunities, could adversely affect its ability to sustain and grow its future sales and earnings. The Company's U.S. government sales are funded by the federal budget, which operates on an October-to-September fiscal year. Changes in congressional schedules, negotiations for program funding levels, reduced program funding due to U.S government debt limitations, automatic budget cuts ("sequestration"), or unforeseen world events can interrupt the funding for a program or contract. Funds for multi-year contracts can be changed in subsequent years in the appropriations process.

In addition, many U.S. government contracts are subject to a competitive bidding and funding process even after the award of the basic contract, adding an additional element of uncertainty to future funding levels. Delays in the funding process or changes in funding are common and can impact the timing of available funds or can lead to changes in program content or termination at the government's convenience. The loss of anticipated funding or the termination of multiple or large programs could have an adverse effect on the Company's future sales and earnings.

The Company derives a portion of its revenues from foreign markets, which subjects the Company to business risks, including risk of changes in government policies and laws or changes in worldwide economic conditions.

The Company's consolidated net sales to locations outside of the U.S. were $41.6 million in fiscal 2018, representing approximately 11% of consolidated net sales. The Company's financial results could be affected by changes in trade, monetary and fiscal policies, laws and regulations, or other activities of U.S. and non-U.S. governments, agencies and similar organizations, along with changes in worldwide economic conditions. These conditions include, but are not limited to, changes in a country's or region's economic or political condition; trade regulations affecting production, pricing, and marketing of products; local labor conditions and regulations; reduced protection of intellectual property rights in some countries; changes in the regulatory or legal environment; restrictions on currency exchange activities; the impact of fluctuations in foreign currency exchange rates, which may affect product demand and may adversely affect the profitability of our products in U.S. dollars in foreign markets where payments are made in the local currency; burdensome taxes and tariffs; and other trade barriers. International risks and uncertainties also include changing social and economic conditions, terrorism, political hostilities and war, difficulty in enforcing agreements or collecting receivables, and increased transportation or other shipping costs. Any of these such risks could lead to reduced sales and reduced profitability associated with such sales.

Adverse economic conditions in the major industries the Company serves may materially affect segment performance and consolidated results of operations.

The Company's results of operations are impacted by the market fundamentals of the primary industries served. Significant declines of economic activity in the agricultural, oil and gas exploration, construction, industrial, aerospace/defense, and other major markets served may adversely affect segment performance and consolidated results of operations.

The Company may pursue or complete acquisitions which represent additional risk and could impact future financial results.
The Company's business strategy includes pursuing future acquisitions. Acquisitions involve a number of risks, including integration of the acquired company with the Company's operations and unanticipated liabilities or contingencies related to the acquired company. Further, business strategies supported by the acquisition may be in perceived, or actual, opposition to strategies of certain of our customers and our business could be materially adversely affected if those relationships are terminated and the expected strategic benefits are delayed or are not achieved. The Company cannot ensure that the expected benefits of any acquisition will be realized. Costs could be incurred on pursuits or proposed acquisitions that have not yet or may not close, which could significantly impact the operating results, financial condition, or cash flows. Additionally, after the acquisition, unforeseen issues could arise, which adversely affect the anticipated returns or which are otherwise not recoverable as an adjustment to the purchase price. Other acquisition risks include delays in realizing benefits from the acquired companies or products; difficulties due to lack of or limited prior experience in any new product or geographic markets we enter; unforeseen adjustments, charges or write-offs; unforeseen losses of customers of, or suppliers to, acquired businesses; difficulties in retaining key employees of the acquired businesses; or challenges arising from increased geographic diversity and complexity of our operations and our information technology systems.

Total goodwill and intangible assets accounted for $57.3 million, or approximately 18%, of the Company's total assets as of January 31, 2018. The Company evaluates goodwill and intangible assets for impairment annually, or when evidence of potential impairment exists. The annual impairment test is based on several factors requiring judgment. Principally, a significant decrease in expected cash flows or changes in market conditions may indicate potential impairment of recorded goodwill or intangible assets. Our expected future cash flows are dependent on several factors, including revenue growth in certain of our product lines. Our expected future cash flows could be adversely impacted if our anticipated revenue growth is not realized or if pricing in commodities markets does not recover in future periods. Reductions in cash flows could result in an impairment of goodwill and/or intangible assets, which could adversely impact the Company's results of operations and financial condition.

The Company may fail to continue to attract, develop, and retain key management and other key employees, which could negatively impact our operating results.
We depend on the performance of our board of directors, senior management team and other key employees, including experienced and skilled technical personnel. The loss of certain members of our board of directors, senior management, including our Chief Executive Officer, or other key employees, could negatively impact our operating results and ability to execute our business strategy. Our future success will also depend, in part, upon our ability to attract, train, motivate, and retain qualified board members, senior management and other key personnel.

The Company may fail to protect its intellectual property effectively, or may infringe upon the intellectual property of others.
The Company has developed significant proprietary technology and other rights that are used in its businesses. The Company relies on trade secret, copyright, trademark, and patent laws and contractual provisions to protect the Company's intellectual property. While the Company takes enforcement of these rights seriously, other companies, such as competitors or persons in related markets, may attempt to copy or use the Company's intellectual property for their own benefit.

In addition, intellectual property of others has an impact on the Company's ability to offer some of its products and services for specific uses or at competitive prices. Competitors' patents or other intellectual property may limit the Company's ability to offer products and services to its customers. Any infringement or claimed infringement by the Company on the intellectual property rights of others could result in litigation and adversely affect the Company's ability to continue to provide, or could increase the cost of providing, products and services and negatively impact sales and profitability. Any infringement by the Company could also result in judgments against the Company, which could adversely affect our results of operations, financial condition, liquidity, and cash flows.

The Company could be impacted by unfavorable results or material settlement of legal proceedings.
The Company is sometimes a party to various legal proceedings and claims that arise in the ordinary course of business.
Regardless of the merit of any such claims, litigation is often very costly, time-consuming, and disruptive to the operations and business of the Company, and a distraction to management and other personnel. While these matters generally are not material in nature, it is possible a matter may arise that is material to the Company’s business.

Although the Company believes the probability of a materially adverse outcome is remote, if one or more claims were resolved against the Company in a reporting period for amounts in excess of management’s expectations, the Company’s consolidated financial statements may be materially adversely affected. Further, such an outcome could result in significant compensatory, punitive or trebled monetary damages, disgorgement of revenue or profits, remedial corporate measures or injunctive relief against the Company that could have a material adverse affect on its businesses, financial condition, results of operation, and cash flows.

Technology failures or cyber-attacks on the Company's systems could disrupt the Company's operations or the functionality of its products and negatively impact the Company's business.

The Company increasingly relies on information technology systems to process, transmit, and store electronic information. In addition, a significant portion of internal communications, as well as communication with customers and suppliers, depends on information technology. Further, the products in our Applied Technology and Aerostar segments depend upon GPS and other systems through which our products interact with government computer systems and other centralized information sources. We are exposed to the risk of cyber incidents in the normal course of business. Cyber incidents may be deliberate attacks for the theft of intellectual property or other sensitive information or may be the result of unintentional events. Like other companies, the Company's information technology systems may be vulnerable to interruption due to a variety of events beyond the Company's control, including, but not limited to, natural disasters, terrorist attacks, telecommunications failures, computer viruses, hackers, foreign governments, and other security issues. Further, attacks on centralized information sources could affect the operation of our products or cause them to malfunction. The Company has technology security initiatives and disaster recovery plans in place to manage the Company's risk to these vulnerabilities, but these measures may not be adequate, or implemented properly, or executed timely to ensure that the Company's operations are not significantly disrupted. Potential consequences of a material cyber incident include damage to our reputation, litigation, and increased cyber security protection and remediation costs. Such consequences could adversely affect our results of operations.

The implementation of a new enterprise resource planning (ERP) system may result in short term disruption to the Company's operations and business, which could adversely impact the Company and damage customer relationships and brand reputation.

The Company depends heavily on its management information systems for several aspects of our business. The Company launched a company-wide initiative during the fiscal 2018 third quarter called "Project Atlas." This is a strategic long-term investment to replace the Company's existing ERP. Project Atlas is being implemented in a phased approach and is expected to take approximately three years. If the new ERP system or legacy system are disrupted, in any material way, during implementation, the Company may occur additional expense and loss of data. Additionally, if improvements or upgrades are required to meet the evolving needs of our business, we may be required to incur significant capital expenditures or expenses in the pursuit of improvements or upgrades to the new system. These efforts could potentially increase the amount of time for implementation of the new ERP system, require expenditures above the anticipated amounts, demand the use of additional resources, distract key personnel and potentially cause short-term disruptions to our existing systems and our business. Any of these outcomes could impair the Company's ability to achieve critical strategic initiatives and could adversely impact our sales, profitability, cash flows and financial condition.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Raven's corporate office is located in Sioux Falls, South Dakota. Along with the corporate headquarters building, the Company also owns separate manufacturing facilities for each of our business segments as well as various warehouses, training, and product development facilities in the immediate Sioux Falls area.

In addition to its Sioux Falls facilities, Applied Technology owns a product development facility in Austin, Texas. Applied Technology also leases manufacturing, warehouse, research, and office facilities in Middenmeer, Netherlands and Geel, Belgium as well as in Winnipeg, Manitoba and Stockholm, Saskatchewan in Canada and in Brazil. Furthermore, Applied Technology leases smaller research and office facilities in South Dakota.

Engineered Films also has additional owned production and conversion facilities located in Madison and Brandon, South Dakota and in Midland and Pleasanton, Texas. In addition, Engineered Films leases a production and conversion facility in Parker, Colorado and Colton, California.

Aerostar also owns manufacturing, sewing, and research facilities located in Madison, South Dakota and Sulphur Springs, Texas. Aerostar's subsidiary Vista also leases facilities in Arlington, Virginia and in Monterey and Chatsworth, California.

Most of the Company's manufacturing plants also serve as distribution centers and contain offices for sales, engineering, and manufacturing support staff. The Company believes that its properties are suitable and adequate to meet existing production needs. The Company also owns approximately 70 acres of undeveloped land adjacent to the other owned property, which is available for expansion.

The following is the approximate square footage of the Company's owned or leased facilities by segment: Applied Technology - 154,000; Engineered Films - 761,000; Aerostar - 285,000; and Corporate - 150,000.

ITEM 3. LEGAL PROCEEDINGS

The Company is involved as a party in lawsuits, claims, regulatory inquiries, or disputes arising in the normal course of its business, the potential costs and liability of which cannot be determined at this time. Management does not believe the ultimate outcomes of its legal proceedings are likely to be material to its results of operations, financial position, or cash flows. The previously disclosed patent infringement lawsuit in which Capstan Ag Systems, Inc. made certain infringement claims against the Company has been settled on a confidential basis.

The Company has insurance policies that provide coverage to various degrees for potential liabilities arising from legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The Company's common stock is traded on the NASDAQ Global Select Market under the ticker symbol RAVN. The following table shows quarterly unaudited financial results, quarterly high and low trade prices per share of the Company's common stock, as reported by the NASDAQ Global Select Market, and dividends declared for the periods indicated:

QUARTERLY INFORMATION (UNAUDITED)

(Dollars in thousands, except per-share amounts)

	Net Sales	Gross Profit	Operating Income (Loss)	Pre-tax Income (Loss)	Net Income (Loss) Attributable to Raven	Net Income (Loss) Per Share[a]		Common Stock Market Price		Cash Dividends Per Share
						Basic	Diluted	High	Low	
FISCAL 2018										
First Quarter	**$ 93,535**	**$ 31,956**	**$ 18,219**	**$ 17,989**	**$ 12,348**	**$ 0.34**	**$ 0.34**	**$ 31.60**	**$ 23.75**	**$ 0.13**
Second Quarter	**86,610**	**26,513**	**11,700**	**11,637**	**8,235**	**0.23**	**0.23**	**37.40**	**29.80**	**0.13**
Third Quarter[b]	**101,349**	**33,333**	**17,829**	**17,795**	**11,998**	**0.33**	**0.33**	**35.80**	**26.70**	**0.13**
Fourth Quarter[b][c]	**95,823**	**29,763**	**11,422**	**11,565**	**8,441**	**0.24**	**0.23**	**40.85**	**32.06**	**0.13**
Total Year	**$ 377,317**	**$ 121,565**	**$ 59,170**	**$ 58,986**	**$ 41,022**	**$ 1.14**	**$ 1.13**	**$ 40.85**	**$ 23.75**	**$ 0.52**
FISCAL 2017										
First Quarter	$ 68,360	$ 20,117	$ 8,050	$ 7,953	$ 5,517	$ 0.15	$ 0.15	$ 16.86	$ 12.88	$ 0.13
Second Quarter	67,598	18,915	6,696	6,487	4,495	0.12	0.12	21.58	15.01	0.13
Third Quarter[d]	72,522	19,839	7,389	7,116	5,741	0.16	0.16	25.47	20.21	0.13
Fourth Quarter	68,915	19,319	6,278	6,297	4,438	0.12	0.12	26.90	20.80	0.13
Total Year	$ 277,395	$ 78,190	$ 28,413	$ 27,853	$ 20,191	$ 0.56	$ 0.56	$ 26.90	$ 12.88	$ 0.52
FISCAL 2016										
First Quarter	$ 70,273	$ 20,359	$ 7,214	$ 7,170	$ 4,855	$ 0.13	$ 0.13	$ 22.85	$ 16.91	$ 0.13
Second Quarter	67,518	17,858	6,429	6,163	4,191	0.11	0.11	22.36	18.52	0.13
Third Quarter[e]	67,611	16,972	(9,823)	(9,946)	(6,188)	(0.17)	(0.17)	19.53	15.77	0.13
Fourth Quarter	52,827	11,785	571	694	1,918	0.05	0.05	19.61	13.87	0.13
Total Year	$ 258,229	$ 66,974	$ 4,391	$ 4,081	$ 4,776	$ 0.13	$ 0.13	$ 22.85	$ 13.87	$ 0.52

[a] *Net income per share is computed discretely by quarter and may not add to the full year.*

[b] *Fiscal year 2018 third and fourth quarters include net sales of $5.2 million and $7.9 million, respectively, related the acquisition of Colorado Lining International, Inc., as further described in Note 6 "Acquisitions of and Investments in Businesses and Technologies" of the Notes to the Consolidated Financial Statements.*

[c] *The Tax Cuts and Jobs Act, effective January 1, 2018, lowered the Company's federal statutory rate by 1.2 percentage points and benefited net income approximately $0.7 million for the fiscal year, as further described in Note 10 "Income Taxes" of the Notes to the Consolidated Financial Statements.*

[d] *The fiscal year 2017 third quarter includes inventory write-downs of $2,278 for Vista as a result of discontinuing sales activities for a specific radar product line within its business, as further described in Note 7 "Goodwill, Long-Lived Assets, and Other Charges " of the Notes to the Consolidated Financial Statements.*

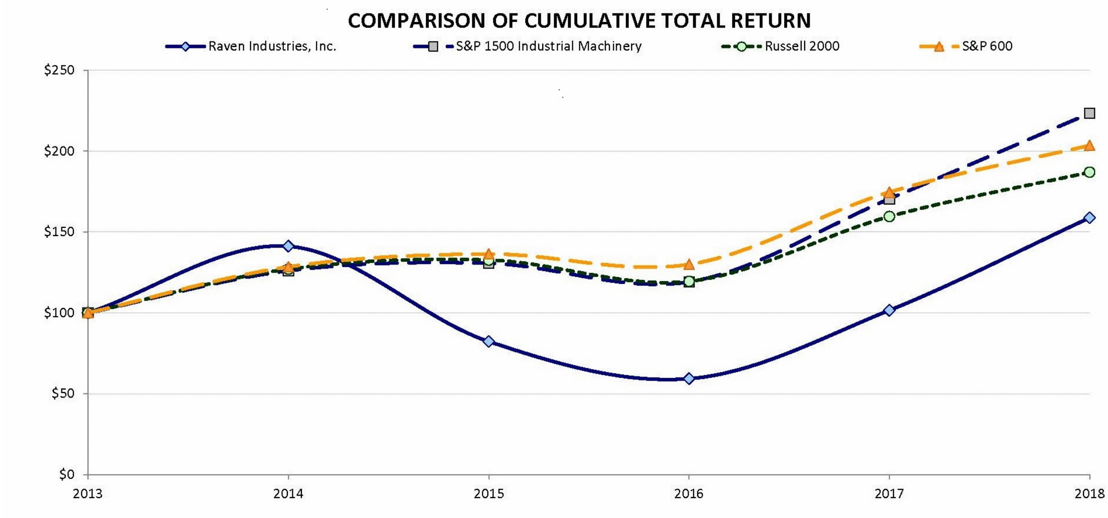
[e] *The fiscal year 2016 third quarter includes pre-contract cost write-offs of $2,933 (which is comprised of $2,075 of costs capitalized as of July 31, 2015 and additional costs of $858 capitalized during August and September 2015), a goodwill impairment loss of $11,497, a long-lived asset impairment loss of $3,813, and a reduction of $2,273 acquisition-related contingent liability for Vista. For further information regarding these impairments and other charges refer to Note 7 "Goodwill, Long-Lived Assets, and Other Charges" of the Notes to the Consolidated Financial Statements.*

As of January 31, 2018, the Company had approximately 12,400 beneficial holders, which includes a substantial amount of the Company's common stock held of record by banks, brokers, and other financial institutions.

On November 3, 2014, the Company announced that its Board of Directors (Board) had authorized a $40.0 million stock buyback program. Since that time, the Board has provided additional authorizations to increase the total amount authorized under the program to $75.0 million.

During fiscal 2018, the Company made purchases of 348,286 common shares under this plan at an average price of $28.71 equating to a total cost of $10.0 million. None of these common shares were repurchased during the fourth quarter of fiscal 2018. During fiscal 2017, the Company made purchases of 484,252 common shares under this plan at an average price of $15.91 per share for a total cost of $7.7 million. None of these common shares were repurchased during the fourth quarter of fiscal 2017. During fiscal 2016, the Company made purchases of 1,602,545 common shares under this plan at an average price of $18.31 per share for a total cost of $29.3 million. None of these common shares were repurchased during the fourth quarter of fiscal 2016. There is $28.0 million still available for share repurchases under this Board-authorized program which remains in place until such time as the authorized spending limit is reached or is otherwise revoked by the Board.

COMPARISON OF 5-YEAR CUMULATIVE TOTAL RETURN AMONG RAVEN INDUSTRIES, INC., S&P 1500 INDUSTRIAL MACHINERY INDEX, RUSSELL 2000 INDEX, AND THE S&P SMALL CAP 600 INDEX.



The above graph compares the cumulative total shareholders return on the Company's stock with the cumulative return of the S&P 1500 Industrial Machinery Index, Russell 2000 Index, and S&P Small Cap 600 Index. The S&P 1500 Industrial Machinery Index is being replaced by the S&P Small Cap 600 Index as the Company determined that the S&P Small Cap 600 Index more closely represents similar companies. The S&P 1500 Industrial Machinery Index remains on this chart in the year of transition for comparative purposes. Investors who bought $100 of the Company's stock on January 31, 2013, held this for five years and reinvested the dividends would have seen its value increase to $158.77. Stock performance on the graph is not necessarily indicative of future price performance.

	Years Ended January 31,						5-Year
Company / Index	2013	2014	2015	2016	2017	2018	CAGR[(a)]
Raven Industries, Inc.	$ 100.00	$ 141.12	$ 82.29	$ 59.29	$ 101.55	$ 158.77	9.7%
S&P 1500 Industrial Machinery Index	100.00	125.99	130.62	119.14	170.46	223.32	17.4%
Russell 2000 Index	100.00	127.03	132.63	119.47	159.53	186.94	13.3%
S&P Small Cap 600 Index	100.00	128.44	136.34	129.95	174.58	203.49	15.3%

[(a)] *compound annual growth rate (CAGR)*

ITEM 6. SELECTED FINANCIAL DATA

FIVE-YEAR FINANCIAL SUMMARY

(In thousands, except employee counts and per-share amounts)	For the years ended January 31,				
	2018	2017	2016	2015	2014
OPERATIONS					
Net sales[(a)]	**$ 377,317**	$ 277,395	$ 258,229	$ 378,153	$ 394,677
Gross profit[(b)]	**121,565**	78,190	66,974	103,246	119,354
Operating income[(b)(c)]	**59,170**	28,413	4,391	43,801	63,994
Income before income taxes[(b)(c)]	**58,986**	27,853	4,081	43,501	63,623
Net income attributable to Raven Industries, Inc.[(d)]	**41,022**	20,191	4,776	31,733	42,903
Net income % of sales	**10.9%**	7.3%	1.8%	8.4%	10.9%
Net income % of average equity[(e)]	**15.3%**	7.7%	1.7%	11.4%	18.2%
FINANCIAL POSITION					
Cash and cash equivalents	**$ 40,535**	$ 50,648	$ 33,782	$ 51,949	$ 52,987
Property, plant and equipment	**106,280**	106,324	115,704	117,513	98,076
Total assets	**326,803**	301,509	298,688	362,873	301,819
Total debt (including capital lease obligations)	**448**	—	—	—	—
Raven Industries, Inc. shareholders' equity	**276,064**	259,426	264,155	305,153	251,362
Net working capital[(f)]	**100,777**	77,012	77,870	100,183	97,184
Net working capital percentage[(g)]	**26.3%**	27.9%	36.9%	27.9%	26.2%
Long-term debt / total capitalization	**0.2%**	—%	—%	—%	—%
CASH FLOWS PROVIDED BY (USED IN)					
Operating activities	**$ 44,961**	$ 48,636	$ 44,008	$ 60,083	$ 52,836
Investing activities	**(25,675)**	(4,642)	(11,074)	(29,986)	(31,615)
Financing activities	**(29,721)**	(27,151)	(50,684)	(30,665)	(17,354)
Change in cash and cash equivalents	**(10,113)**	16,866	(18,167)	(1,038)	3,634
COMMON STOCK DATA					
EPS — basic	**$ 1.14**	$ 0.56	$ 0.13	$ 0.86	$ 1.18
EPS — diluted	**1.13**	0.56	0.13	0.86	1.17
Cash dividends per share	**0.52**	0.52	0.52	0.50	0.48
Stock price range during the year					
High	**$ 40.85**	$ 26.90	$ 22.85	$ 40.06	$ 42.99
Low	**23.75**	12.88	13.87	20.75	25.46
Close	**38.55**	25.05	15.01	21.44	37.45
OTHER DATA					
Price / earnings ratio[(h)]	**34.1**	44.7	115.5	24.9	32.0
Average number of employees	**1,054**	907	936 1,251	1,251	1,264
Sales per employee	**$ 358**	$ 306	$ 276	$ 302	$ 312

[(a)] *Fiscal year 2018 includes $13.1 million in net sales related to the acquisition of Colorado Lining International, Inc., further described in Note 6 "Acquisitions of and Investments in Businesses and Technologies" of the Notes to the Consolidated Financial Statements.*

[(b)] *The fiscal year ended January 31, 2017 includes inventory write-downs of $2,278 for Vista as a result of discontinuing sales activities for a specific radar product line within its business, as further described in Note 7 "Goodwill, Long-Lived Assets, and Other Charges " of the Notes to the Consolidated Financial Statements.*

[(c)] *The fiscal year ended January 31, 2016 includes pre-contract cost write-offs of $2,933, a goodwill impairment loss of $11,497, and a long-lived asset impairment loss of $3,826, partially offset by a reduction of $2,273 of an acquisition-related contingent liability for Vista. For further information regarding these impairments and other charges refer to Note 7 "Goodwill, Long-Lived Assets, and Other Charges" of the Notes to the Consolidated Financial Statements.*

[(d)] *The Tax Cuts and Jobs Act, effective January 1, 2018, lowered the Company's federal statutory rate by 1.2 percentage points and benefited net income approximately $0.7 million for the fiscal year, as further described in Note 10 "Income Taxes" of the Notes to the Consolidated Financial Statements.*

[(e)] *Net income attributable to Raven Industries, Inc. divided by average equity. Average equity is the sum of Raven Industries, Inc. shareholders' equity for the beginning of the fiscal year plus Raven Industries, Inc. shareholders' equity for the end of the fiscal year divided by two.*

[(f)] *Net working capital is defined as accounts receivable (net) plus inventories less accounts payable.*

[(g)] *Net working capital percentage is defined as net working capital divided by fourth quarter net sales times four for each of the fiscal years, respectively.*

[(h)] *Closing stock price on last business day of fiscal year divided by EPS — diluted.*

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

The Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is designed to enhance overall financial disclosure with commentary on the operating results, liquidity, capital resources, and financial condition of Raven Industries, Inc. (the Company or Raven). This commentary provides management's analysis of the primary drivers of year-over-year changes in key financial statement elements, business segment results, and the impact of accounting principles on the Company's financial statements. The most significant risks and uncertainties impacting the operating performance and financial condition of the Company are discussed in Item 1A., Risk Factors, of this Annual Report on Form 10-K (Form 10-K).

This discussion should be read in conjunction with Raven's Consolidated Financial Statements and notes thereto in Item 8 of this Form 10-K.

The MD&A is organized as follows:

- Executive Summary
- Results of Operations - Segment Analysis
- Liquidity and Capital Resources
- Off-Balance Sheet Arrangements and Contractual Obligations
- Critical Accounting Policies and Estimates
- Accounting Pronouncements

EXECUTIVE SUMMARY

Raven is a diversified technology company providing a variety of products to customers within the industrial, agricultural, geomembrane, construction, aerospace/defense, radar and lighter-than-air markets. The Company is comprised of three unique operating units, classified into reportable segments: Applied Technology Division (Applied Technology), Engineered Films Division (Engineered Films), and Aerostar Division (Aerostar). Segment information is reported consistent with the Company's management reporting structure.

Management uses a number of measures to assess the Company's performance:

- Consolidated net sales, gross margin, operating income, operating margin, net income, and diluted earnings per share
- Cash flow from operations and shareholder returns
- Return on sales, average assets, and average equity
- Segment net sales, gross profit, gross margin, operating margin, and operating income. At the segment level, operating income does not include an allocation of general and administrative expenses.

Raven's growth strategy focuses on its proprietary product lines and the Company made the decision in fiscal year 2015 to largely reduce its non-strategic contract manufacturing business. To assess the effectiveness of this strategy during the transition period, management has used two additional measures:

- Consolidated net sales excluding contract manufacturing sales (adjusted sales)
- Segment net sales excluding contract manufacturing sales (adjusted sales)

Information reported as net sales excluding contract manufacturing sales on both a consolidated and segment basis exclude sales generated from contract manufacturing activities and do not conform to generally accepted accounting principles (GAAP). As such, these are non-GAAP measures. As the reduction of contract manufacturing was largely completed in fiscal 2016, these additional measures are not utilized for comparisons to periods after fiscal 2016 and are excluded from the tables in this MD&A for fiscal 2018 and 2017.

As described in the Notes to the Financial Statements of this Form 10-K, four significant unusual charges were recorded in Vista Research, Inc. (Vista) within the Aerostar Division in the fiscal 2016 third quarter. To allow evaluation of operating income and net income for the Company’s core business, the Company used three additional measures. The additional measurements are:

- Segment operating income excluding Vista charges (adjusted operating income)
- Consolidated operating income excluding Vista charges (consolidated adjusted operating income)
- Net income excluding Vista charges (adjusted net income)

Information reported as adjusted operating income and adjusted net income excluding the Vista charges, on both a consolidated and segment basis, do not conform to GAAP and are non-GAAP measures.

Non-GAAP measures should not be construed as an alternative to the reported results determined in accordance with GAAP. Non-GAAP measures exclude the impact of certain items (as further described below) and provide supplemental information regarding the operating performance of the Company and its operating segments. By disclosing these non-GAAP financial measures, management intends to provide a supplemental comparison of our operating results and trends for the periods presented. The Company believes these measures are also useful as they allow investors to evaluate our performance using the same metrics that management uses to evaluate past performance and prospects for future performance.

With regards to adjusted operating income and net income measures, management believes these measures assist in understanding the operating performance of the Company and its operating segments by excluding the impact of unusual charges which are non-recurring in nature and which, from management's perspective, significantly impact the comparison of year-over-year changes in underlying financial performance.

This non-GAAP information may not be consistent with the methodologies used by other companies. All non-GAAP measures are reconciled with reported GAAP results in the tables that follow.

Vision and Strategy
At Raven, our purpose is to solve great challenges. Great challenges require great solutions. Raven’s three unique divisions share resources, ideas, and a passion to create technology that helps the world grow more food, produce more energy, protect the environment, and live safely.

The Raven business model is our platform for success. Our business model is defensible, sustainable, and gives us a consistent approach in the pursuit of quality financial results. This overall approach to creating value, which is employed across the three business segments, is summarized as follows:

- Intentionally serve a set of diversified market segments with attractive near- and long-term growth prospects;
- Consistently manage a pipeline of growth initiatives within our market segments;
- Aggressively compete on quality, service, innovation, and peak performance;
- Hold ourselves accountable for continuous improvement;
- Value our balance sheet as a source of strength and stability with which to pursue strategic acquisitions; and
- Make corporate responsibility a top priority.

The following discussion highlights the consolidated operating results for the years ended January 31, 2018, 2017, and 2016. Segment operating results are more fully explained in the Results of Operations - Segment Analysis section.

(dollars in thousands, except per-share data)	For the years ended January 31, **2018**	% change	2017	% change	2016
Results of Operations					
Net sales[(a)]	**$ 377,317**	36.0%	$ 277,395	7.4%	$ 258,229
Gross margin[(b)]	**32.2%**		28.2%		25.9%
Operating income	**$ 59,170**	108.2%	$ 28,413	547.1%	$ 4,391
Operating margin[(b)]	**15.7%**		10.2%		1.7%
Net income attributable to Raven Industries, Inc.[(c)]	**$ 41,022**	103.2%	$ 20,191	322.8%	$ 4,776
Diluted income per share	**$ 1.13**	101.8%	$ 0.56	330.8%	$ 0.13
Adjusted net income attributable to Raven Industries, Inc.[(d)]	**$ 41,022**	103.2%	$ 20,191	34.1%	$ 15,053
Cash Flow and Shareholder Returns					
Cash flow from operating activities	**$ 44,961**		$ 48,636		$ 44,008
Cash outflow for capital expenditures	**$ 12,011**		$ 4,642		$ 13,046
Cash dividends	**$ 18,685**		$ 18,839		$ 19,426
Common share repurchases	**$ 10,000**		$ 7,702		$ 29,338
Performance Measures					
Return on net sales[(e)]	**10.9%**		7.3%		1.8%
Return on average assets[(f)]	**13.1%**		6.7%		1.4%
Return on average equity[(g)]	**15.3%**		7.7%		1.7%

[(a)] Fiscal year 2018 includes $13.1 million in net sales related to the acquisition of Colorado Lining International, Inc. further described in Note 6 "Acquisitions of and Investments in Businesses and Technologies" of the Notes to the Consolidated Financial Statements.

[(b)] The Company's gross and operating margins may not be comparable to industry peers due to variability in the classification of expenses across industries in which the Company operates.

[(c)] The Tax Cuts and Jobs Act, effective January 1, 2018, lowered the Company's federal statutory rate by 1.2% and benefited net income approximately $0.7 million for the fiscal year, as further described in Note 10 "Income taxes" of the Notes to the Consolidated Financial Statements.

[(d)] Non-GAAP measure reconciled to GAAP in the applicable table below.

[(e)] Net income divided by net sales.

[(f)] Net income attributable to Raven Industries, Inc. divided by average assets. Average assets is the sum of Total Assets for the beginning of the fiscal year plus Total Assets for the end of the fiscal year divided by two.

[(g)] Net income attributable to Raven Industries, Inc. divided by average equity. Average equity is the sum of Total Raven Industries, Inc. shareholders' equity for the beginning of the fiscal year plus Total Raven Industries, Inc. shareholders' equity for the end of the fiscal year divided by two.

The following table reconciles the reported net sales to adjusted sales, a non-GAAP financial measure. Adjusted sales excludes contract manufacturing and represents the Company's sales from proprietary products. As the reduction of contract manufacturing was largely completed in fiscal 2016, adjusted sales excluding manufacturing is not a meaningful measure in subsequent fiscal periods. As such fiscal 2018 and 2017 has been excluded from this table.

(dollars in thousands)	For the year ended January 31, 2016
Applied Technology	
Reported net sales	$ 92,599
Less: Contract manufacturing sales	546
Applied Technology net sales, excluding contract manufacturing sales	$ 92,053
Aerostar	
Reported net sales	$ 36,368
Less: Contract manufacturing sales	4,701
Aerostar net sales, excluding contract manufacturing sales	$ 31,667
Consolidated Raven	
Reported net sales	$ 258,229
Less: Contract manufacturing sales	5,247
Consolidated net sales, excluding contract manufacturing sales	$ 252,982

The following table reconciles the reported operating (loss) income to adjusted operating income, a non-GAAP financial measure. On both a segment and consolidated basis, adjusted operating income excludes the goodwill impairment loss, long-lived asset impairment loss, pre-contract cost write-offs, and an acquisition-related contingent consideration benefit all of which relate to the Vista business within the Aerostar Division and all of which occurred in the fiscal 2016 third quarter. These are described in more detail in Note 7 *Goodwill, Long-lived Assets, and Other Charges* and Note 6 *Acquisition of and Investments in Businesses and Technologies* of the Notes to the Consolidated Financial Statements.

	For the years ended January 31,				
(dollars in thousands)	**2018**	% change	2017	% change	2016
Aerostar					
Reported operating income (loss)	**$ 4,122**	(364.2)%	$ (1,560)	(89.5)%	$ (14,801)
Plus:					
Goodwill impairment loss	—		—		11,497
Long-lived asset impairment loss	—		—		3,813
Pre-contract costs written off	—		—		2,933
Less:					
Acquisition-related contingent liability benefit	—		—		2,273
Aerostar adjusted operating income (loss) [(a)]	**$ 4,122**	(364.2)%	$ (1,560)	(233.4)%	$ 1,169
Aerostar adjusted operating income (loss) % of net sales	**10.3%**		(4.6)%		3.2%
Consolidated Raven					
Reported operating income	**$ 59,170**	108.2 %	$ 28,413	547.1 %	$ 4,391
Plus:					
Goodwill impairment loss	—		—		11,497
Long-lived asset impairment loss	—		—		3,813
Pre-contract costs written off	—		—		2,933
Less:					
Acquisition-related contingent liability benefit	—		—		2,273
Consolidated adjusted operating income	**$ 59,170**	108.2 %	$ 28,413	39.5 %	$ 20,361
Consolidated adjusted operating income % of net sales	**15.7%**		10.2 %		7.9%

[(a)] At the segment level, adjusted operating income (loss) does not include an allocation of general and administrative expenses.

The following table reconciles the reported net income to adjusted net income, a non-GAAP financial measure. Adjusted net income excludes the goodwill impairment loss, long-lived asset impairment loss, pre-contract cost write-off, an acquisition-related contingent consideration benefit, and the income tax effect of these items, all of which relate to the Vista business within the Aerostar Division and all of which occurred in the fiscal 2016 third quarter. These are described in more detail in Note 7 *Goodwill, Long-lived Assets, and Other Charges* and Note 6 *Acquisition of and Investments in Businesses and Technologies* of the Notes to the Consolidated Financial Statements.

	For the years ended January 31,				
(dollars in thousands)	**2018**	% change	2017	% change	2016
Consolidated Raven					
Reported net income attributable to Raven Industries, Inc.	**$ 41,022**	103.2%	$ 20,191	322.8%	$ 4,776
Plus:					
Goodwill impairment loss	—		—		11,497
Long-lived asset impairment loss	—		—		3,813
Pre-contract costs written off	—		—		2,933
Less:					
Acquisition-related contingent liability benefit	—		—		2,273
Net tax benefit on adjustments	—		—		5,693
Adjusted net income attributable to Raven Industries, Inc.	**$ 41,022**	103.2%	$ 20,191	34.1%	$ 15,053
Adjusted net income per common share:					
— Basic	**$ 1.14**	103.6%	$ 0.56	40.0%	$ 0.40
— Diluted	**$ 1.13**	101.8%	$ 0.56	40.0%	$ 0.40

Results of Operations - Fiscal 2018 compared to Fiscal 2017

The Company's net sales in fiscal 2018 were $377.3 million, an increase of $99.9 million, or 36.0%, from last year's net sales of $277.4 million. All three divisions achieved double-digit growth, with Engineered Films achieving growth of 53.6 percent year-over-year. Delivery of hurricane recovery film to support relief efforts and the recent acquisition of CLI contributed sales of $24.2 million and $13.1 million, respectively.

Operating income for fiscal year 2018 was $59.2 million compared to $28.4 million in fiscal year 2017. The operating income increase year-over-year was principally driven by operating leverage on higher sales volumes in Engineered Films and Applied Technology, as well as improved profitability within Aerostar. Project Atlas began in the third quarter of fiscal 2018, and the related costs incurred were $0.9 million in fiscal year 2018.

Net income for fiscal year 2018 was $41.0 million, or $1.13 per diluted share, compared to net income of $20.2 million, or $0.56 per diluted share, in fiscal year 2017. Net income was up $20.8 million year-over-year, or $0.57 per diluted share, in fiscal 2018. The U.S. Tax Cuts and Jobs Act (TCJA) was enacted on December 22, 2017 and reduced the U.S. federal statutory tax rate to 21 percent effective January 1, 2018. This change caused the Company’s fiscal 2018 U.S. federal statutory tax rate to be reduced by 1.2 percentage points, benefiting fiscal year 2018 net income by approximately $0.7 million.

Applied Technology Division

Fiscal 2018 net sales increased $19.5 million, or 18.5%, to $124.7 million from $105.2 million in fiscal 2017. This increase in sales was driven by new product introductions and market share gains. Sales in the original equipment manufacturer (OEM) channel were up 32.4% while sales in the aftermarket channel increased 6.3%. The Company does not specifically model comparative market share position for any of its operating divisions, but based on the sales developments in fiscal 2018 the Company believes that Applied Technology's global market share position improved during the year as a result of new product sales and building on key OEM relationships.

Applied Technology's operating income increased by 17.3% to $31.3 million from $26.6 million in the prior year due primarily to higher sales volume and lower manufacturing expenses. Throughout fiscal 2018, the division continued to invest in research and development activities to position itself for incremental new product sales and market share gains in future years.

Engineered Films Division
Fiscal 2018 net sales were $213.3 million, an increase of $74.4 million, or 53.6%, compared to fiscal 2017. The geomembrane and construction markets had the largest increases in net sales, but all markets were up year-over-year. Although the Company does not specifically model comparative market share position for any of its operating divisions, based on the sales developments in fiscal year 2018 the Company believes that Engineered Films achieved sales growth due to improved end-market demand and increased market share. Delivery of hurricane recovery film to support relief efforts and the recent acquisition of CLI contributed net sales of $24.2 million and $13.1 million, respectively.

Engineered Film's operating income increased by 106.1% to $47.3 million from $23.0 million in the prior year due primarily to strong operating leverage on higher sales volume. Operational efficiency gains developed throughout the year and higher sales volume improved capacity utilization and resulted in fixed cost leverage.

Aerostar Division
Fiscal 2018 net sales were $39.9 million compared to $34.1 million in fiscal 2017, up $5.8 million. The increase in sales for the division was principally driven by higher sales of stratospheric balloons and radar systems. While it is particularly challenging to measure market share information for the Aerostar division and the Company does not specifically model comparative market share position for any of its operating divisions, the Company believes that Aerostar's sales growth was primarily the result of continuing to develop capabilities for and interest in the emerging stratospheric balloon market rather than capturing existing market share from others.

Aerostar reported operating income of $4.1 million in fiscal 2018 compared to an operating loss of $1.6 million in fiscal 2017. The improved profitability was driven by higher sales volume, and the absence of inventory write-downs, which lowered prior year results by $2.3 million as discussed in more detail in Note 7 *Goodwill, Long-Lived Assets, and Other Charges* of the Notes to the Consolidated Financial Statements.

Results of Operations - Fiscal 2017 compared to Fiscal 2016
The Company's net sales in fiscal 2017 were $277.4 million, an increase of $19.2 million, or 7.4%, from last year's net sales of $258.2 million. Despite the continued challenges within the end-markets in their primary markets of focus, the Applied Technology and Engineered Films divisions saw sales increases year-over-year. With respect to Aerostar, delays and uncertainties regarding certain opportunities important to the division's growth strategy resulted in lower net sales for this division.

Operating income for fiscal year 2017 was $28.4 million compared to $4.4 million in fiscal year 2016. The fiscal 2016 results were impacted by the Vista goodwill and long-lived impairment losses and associated financial impacts. Excluding these specific Vista related items, adjusted operating income for fiscal 2016 was $20.4 million. Adjusted operating income increased $8.0 million, or 39.5%, year-over-year. The adjusted operating income increase year-over-year was principally driven by higher sales volume and lower manufacturing expenses in Applied Technology and Engineered Films.

Net income for fiscal year 2017 was $20.2 million, or $0.56 per diluted share, compared to net income of $4.8 million, or $0.13 per diluted share, in fiscal year 2016. The fiscal 2016 results were impacted by the Vista goodwill and long-lived asset impairments and associated financial impacts. Excluding these specific Vista related items, adjusted net income for fiscal 2016 was $15.1 million, or $0.40 per diluted share. On an adjusted basis, net income was up $5.1 million year-over-year, or $0.16 per diluted share, in fiscal 2017.

Applied Technology Division
Fiscal 2017 net sales increased $12.6 million, or 13.6%, to $105.2 million from $92.6 million in fiscal 2016. This increase in sales was driven by new product introductions and market share gains. Sales in the original equipment manufacturer (OEM) channel were up 25.1% while sales in the aftermarket channel increased 6.1%. The Company does not specifically model comparative market share position for any of its operating divisions, but based on the sales developments in fiscal 2017 the Company believes that Applied Technology's global market share position improved during the year as a result of new product sales and expanded OEM relationships.

Applied Technology's operating income increased by 45.4% to $26.6 million from $18.3 million in the prior year due primarily to higher sales volume and lower manufacturing expenses. End-market demand conditions remain subdued, but new product introductions have driven sales increases in fiscal 2017.

Engineered Films Division
Fiscal 2017 net sales were $138.9 million, an increase of $9.4 million, or 7.3%, compared to fiscal 2016. The increase in sales was driven by increases in the industrial, geomembrane, and construction markets, partially offset by a decrease in the agricultural market. Although the Company does not specifically model comparative market share position for any of its operating divisions,

based on the sales developments in fiscal year 2017 the Company believes that Engineered Films' market share position improved during the year in all of the end markets served, with the exception of the agriculture market.

Engineered Film's operating income increased by 28.4% to $23.0 million from $17.9 million in the prior year due primarily to higher sales volume and lower manufacturing expenses. Higher production and sales volume helped improve capacity utilization and resulted in fixed cost leverage.

Aerostar Division
Fiscal 2017 net sales were $34.1 million compared to $36.4 million in fiscal 2016, down $2.3 million. The decline in sales for the division was principally driven by lower aerostat sales, partially offset by higher sales of stratospheric balloons. While it is particularly challenging to measure market share information for the Aerostar division and the Company does not specifically model comparative market share position for any of its operating divisions, the Company believes that Aerostar's market share position was largely unchanged during the year for all of the markets served, with the exception of radar products and services which the Company believes experienced an erosion of market share.

Aerostar reported an operating loss of $1.6 million in fiscal 2017 compared to an operating loss of $14.8 million in fiscal 2016. The fiscal 2016 results were impacted by the Vista goodwill and long-lived assets impairments and associated financial impacts. Excluding these specific Vista related items, adjusted operating income in fiscal 2016 was $1.2 million, compared to an operating loss of $1.6 million for fiscal 2017, a decline of $2.8 million on an adjusted basis. This decline in operating income was primarily driven by lower sales volume and $2.3 million of inventory write-downs related to certain radar systems, discussed in more detail in Note 7 *Goodwill, Long-lived Assets, and Other Charges* of the Notes to the Consolidated Financial Statements, and lower sales volume.

RESULTS OF OPERATIONS - SEGMENT ANALYSIS

Applied Technology

Applied Technology designs, manufactures, sells, and services innovative precision agriculture products and information management tools that help growers reduce costs, more precisely control inputs, and improve yields for the global agriculture market. Applied Technology's operations include operations of SBG Innovatie BV and its affiliate, Navtronics BVBA (collectively, SBG), based in the Netherlands.

	For the years ended January 31,							
(dollars in thousands)		**2018**	% change		2017	% change		2016
Net sales	**$**	**124,688**	18.5%	$	105,217	13.6%	$	92,599
Gross profit		**54,682**	25.8%		43,476	28.0%		33,969
Gross margin		**43.9%**			41.3%			36.7%
Operating expense	**$**	**23,166**	37.6%	$	16,833	7.6%	$	15,650
Operating expense as % of sales		**18.6%**			16.0%			16.9%
Long-lived asset impairment loss		**259**		$	—			—
Operating income[(a)]	**$**	**31,257**	17.3%	$	26,643	45.4%		18,319
Operating margin		**25.1%**			25.3%			19.8%
Applied Technology net sales, excluding contract manufacturing sales[(b)]		NMF	NMF		NMF	NMF	$	92,053

[(a)] *At the segment level, operating income does not include an allocation of general and administrative expenses.*

[(b)] *Reduction of contract manufacturing was largely completed in fiscal 2016; measure is not meaningful (NMF) for comparisons in subsequent fiscal periods.*

For fiscal 2018, net sales increased $19.5 million, or 18.5%, to $124.7 million as compared to $105.2 million in fiscal 2017. Operating income increased $4.6 million, or 17.3%, to $31.3 million as compared to $26.6 million in fiscal 2017.

Fiscal 2018 fourth quarter net sales increased $4.6 million, or 17.6%, to $30.5 million and operating income decreased $0.6 million, or 8.7%, to $5.8 million compared to the fourth quarter of fiscal 2017.

Fiscal 2018 comparative results were primarily driven by the following factors:

- *Market conditions.* Conditions in the agriculture market remain subdued; however, Applied Technology's marketplace strategy has capitalized on new product introductions in fiscal 2018. While OEM and aftermarket sales channel demand remains challenging, Applied Technology achieved fourth quarter and year-to-date sales growth compared to the prior year primarily due to market share gains driven by new product introductions and building on key OEM relationships. These were the primary growth drivers both domestically and internationally.

- *Sales volume and selling prices.* Sales in the OEM and aftermarket channels were up 32.4% and 6.3%, respectively, in fiscal 2018. Fiscal 2018 domestic sales were up 25.0% while international sales were up 1.5%. Higher sales volume, rather than an increase in selling price, was the main driver for these increases.
- *International sales.* Net sales outside the U.S. accounted for 23.6% of segment sales in fiscal 2018 compared to 27.6% in fiscal 2017. International sales increased $0.4 million, or 1.5%, to $29.4 million in fiscal 2018 compared to fiscal 2017. Higher sales in Latin America and Europe, partially offset by a decrease in Canada, were the primary drivers of the increase. European revenue growth included strong growth at SBG in fiscal 2018. For the fourth quarter, international sales totaled $6.3 million, an increase of 6.2% from the prior year comparative quarter.
- *Gross margin.* Gross margin increased from 41.3% in fiscal 2017 to 43.9% in fiscal 2018. Higher sales volume and lower manufacturing costs increased operating leverage and drove the increase in gross margin. Due to the existing available capacity of the manufacturing facilities, the increase in sales volume did not require a commensurate increase in costs in fiscal 2018.
- *Operating expenses.* Fiscal 2018 operating expenses were 18.6% of net sales compared to 16.0% for the prior year. Throughout fiscal 2018, the division continued to invest in research and development activities to position itself for incremental new product sales and market share gains in future years.

For fiscal 2017, net sales increased $12.6 million, or 13.6%, to $105.2 million as compared to $92.6 million in fiscal 2016. Operating income increased $8.3 million, or 45.4%, to $26.6 million as compared to fiscal 2016.

Fiscal 2017 fourth quarter net sales increased $7.5 million, or 40.4%, to $25.9 million and operating income increased $4.1 million, or 184.3%, to $6.4 million compared to fourth quarter fiscal 2016.

Fiscal 2017 comparative results were primarily driven by the following factors:

- *Market conditions.* Conditions in the agriculture market remain subdued; however, Applied Technology's marketplace strategy has capitalized on new product introductions in fiscal 2017. While OEM and aftermarket sales channel demand remains challenging, Applied Technology achieved fourth quarter and year-to-date sales growth compared to the prior year primarily due to market share gains driven by new product introductions and expanded relationships with OEM partners. These were the primary growth drivers both domestically and internationally.
- *Sales volume and selling prices.* Fiscal 2017 sales increased 13.6% to $105.2 million as compared to $92.6 million in the prior fiscal year. Sales in the OEM and aftermarket channels were up 25.1% and 6.1%, respectively, in fiscal 2017. Fiscal 2017 domestic sales were up 9.9% while international sales were up 24.8%. Higher sales volume, rather than an increase in selling price, was the main driver for these increases.
- *International sales.* Net sales outside the U.S. accounted for 27.6% of segment sales in fiscal 2017 compared to 25.1% in fiscal 2016. International sales increased $5.8 million, or 24.8%, to $29.0 million in fiscal 2017 compared to fiscal 2016. Higher sales in Canada and Europe were the primary drivers of the increase. European revenue growth included strong growth at SBG in fiscal 2017. For the fourth quarter, international sales totaled $5.9 million, an increase of 29.8% from the prior year comparative quarter.
- *Gross margin.* Gross margin increased from 36.7% in fiscal 2016 to 41.3% in fiscal 2017. Higher sales volume and lower manufacturing costs including increased leverage of fixed manufacturing costs contributed to the higher margin. Due to the existing available capacity of the facilities, the increase in sales volume did not require a commensurate increase in costs in fiscal 2017.
- *Restructuring expenses.* Fiscal 2016 results included severance and other related exit activity totaling $0.6 million. These costs were offset by completion of the St. Louis contract manufacturing exit activities which resulted in gains of $0.6 million recorded in the fiscal 2016 results. There were no impairments recorded as a result of the exit of this business. No restructuring or exit costs were incurred in the three-month period ended January 31, 2016. No restructuring or exit costs were incurred in the three-month or year-to-date period ended January 31, 2017.
- *Operating expenses.* Fiscal 2017 operating expenses were 16.0% of net sales compared to 16.9% for the prior year. Operating expenses increased less than revenues due primarily to continued cost control measures and resulted in a lower percentage of sales year-over-year.

Engineered Films

Engineered Films manufactures high performance plastic films and sheeting for geomembrane, agricultural, construction, and industrial applications. Engineered Films' ability to develop value-added innovative products is expanded by its fabrication, conversion, design-build and installation capabilities.

	For the years ended January 31,				
(dollars in thousands)	**2018**	% change	2017	% change	2016
Net sales	**$ 213,298**	53.6%	$ 138,855	7.3 %	$ 129,465
Gross profit	**56,255**	91.3%	29,407	17.3 %	25,076
Gross margin	**26.4%**		21.2%		19.4%
Operating expenses	**$ 8,931**	38.7%	$ 6,441	(10.3)%	$ 7,184
Operating expenses as % of sales	**4.2%**		4.6%		5.5%
Operating income[(a)]	**$ 47,324**	106.1%	$ 22,966	28.4 %	$ 17,892
Operating margin	**22.2%**		16.5%		13.8%

[(a)] *At the segment level, operating income does not include an allocation of general and administrative expenses.*

For fiscal 2018, net sales increased $74.4 million, or 53.6%, to $213.3 million as compared to fiscal 2017. Operating income was $47.3 million, up 106.1% for fiscal 2018 as compared to $23.0 million for fiscal 2017.

For fiscal 2018, fourth quarter net sales increased $21.1 million, or 61.0%, to $55.6 million as compared to $34.5 million in the fiscal 2017 fourth quarter. Operating income was up $6.6 million, or 125.2%, to $11.9 million as compared to $5.3 million in the prior year fourth quarter.

Fiscal 2018 comparative results were primarily driven by the following factors:

- *Market conditions.* Engineered Films produces high-performance plastic films and sheeting for geomembrane, agricultural, construction, and industrial applications. Each of these markets had significant growth in fiscal 2018, with the geomembrane and construction markets growing most significantly. Geomembrane end-market conditions for Engineered Films exhibited significant year-over-year improvement throughout fiscal 2018. U.S. land-based rig counts have increased 34.6% from January 2017 to January 2018. Additionally, as discussed in more detail in Note 6 *Acquisitions and Investments in Business and Technologies* of the Notes to the Consolidated Financial Statements, Engineered Films acquired the assets of CLI in September 2017. This acquisition enhanced the division's geomembrane market position through extended service and product offerings with the addition of new design-build and installation service components. The acquisition of CLI advanced Engineered Films' business model into a vertically-integrated, full-service solutions provider for the geomembrane market. CLI contributed $13.1 million in net sales in fiscal 2018. For fiscal 2018, sales into the geomembrane market increased 103.3% year-over-year. The growth in the construction market was driven by delivery of hurricane recovery film. Due to the unusually devastating hurricane season, delivery of hurricane recovery film during fiscal 2018 resulted in sales of $24.2 million. It has been several years since the Company received a substantial increase in demand for hurricane recovery film, and sales of such film are generally less than $2.0 million on an annual basis. For fiscal 2018, sales into the construction market increased 46.8% year-over-year.
- *Sales volume and selling prices*. Primary drivers of the increase in net sales were the improved conditions within the geomembrane and industrial markets, the acquisition of CLI, and the delivery of hurricane recovery film, which added $2.3 million, $7.9 million and $15.8 million, in the fourth quarter of fiscal 2018, and $34.9 million, $13.1 million and $24.2 million, in the 2018 full fiscal year, respectively.
- *Gross margin*. Fiscal 2018 gross margin was 26.4%, 5.2 percentage points higher than the prior fiscal year. During fiscal 2018 fourth quarter, the gross margin was 26.3% compared to 20.5% in the prior year fourth quarter. The increase for both periods was primarily the result of operational efficiency gains developed throughout the year and higher sales volume that improved capacity utilization and resulted in fixed cost leverage. Due to the existing available capacity of the facilities, the increase in sales volume did not require a commensurate increase in costs in fiscal 2018.
- *Operating expenses.* Fiscal 2018 operating expenses, as a percentage of net sales, decreased to 4.2%, from 4.6% in the prior year. Operating expenses increased less than revenues due primarily to continued cost control measures and resulted in a lower percentage of sales year-over-year.

For fiscal 2017, net sales increased $9.4 million, or 7.3%, to $138.9 million as compared to fiscal 2016. Operating income was $23.0 million for fiscal 2017, up 28.4%, as compared to $17.9 million for fiscal 2016.

For fiscal 2017, fourth quarter net sales increase $9.1 million, or 35.8% to $34.5 million as compared to $25.4 million in the fiscal 2016 fourth quarter. Operating income was up $3.4 million, or 177.3%, to $5.3 million as compared to $1.9 million in the prior year fourth quarter.

Fiscal 2017 comparative results were primarily driven by the following factors:

- *Market conditions.* End-market conditions have improved in the geomembrane market in the second half of fiscal 2017 for Engineered Films. U.S. land-based rig counts have increased approximately 17.0% from January 2016 to January 2017. For fiscal 2017, sales into the geomembrane market increased 16.9% year-over-year.
- *Sales volume and selling prices*. Fiscal 2017 net sales were up 7.3% to $138.9 million compared to fiscal 2016 net sales of $129.5 million. Sales volume, measured in pounds, for fiscal 2017 was up 11.4%. Primary drivers of the increase in sales volume included the improved market conditions within the geomembrane market and new sales into the industrial and geomembrane markets as a result of successfully selling capacity of the division's new production line that was commissioned in the fiscal 2017 first quarter. Average selling prices for the same period were down approximately 3.7% compared to the prior fiscal year primarily due to product mix and the competitive landscape in the geomembrane market. Fourth quarter fiscal 2017 sales volume was up 34.0% compared to fourth quarter fiscal 2016. Fourth quarter average selling prices increased 1.3% year-over-year.
- *Gross margin*. Fiscal 2017 gross margin was 21.2%, 1.8 percentage points higher than the prior fiscal year. During fiscal 2017 fourth quarter, the gross margin was 20.5% compared to 15.0% in the prior year fourth quarter. The increase for both periods was primarily the result of higher sales volume. Due to the existing available capacity of the facilities, the increase in sales volume did not require a commensurate increase in costs in fiscal 2017. In addition, benefits from value engineering, reformulation efforts, pricing discipline, and favorable raw material cost developments also benefited gross margin.
- *Operating expenses.* Fiscal 2017 operating expenses, as a percentage of net sales, decreased to 4.6%, from 5.5% in the prior year. Sales volume increased while selling expense decreased compared to fiscal year 2016 as a result of cost control measures and lower bad debt expense.

Aerostar

Aerostar serves the aerospace/defense, radar and lighter-than-air markets. Aerostar had also provided significant contract manufacturing services in the past, but largely exited this business in fiscal 2016. Aerostar designs and manufactures proprietary products including high-altitude (stratospheric) balloon systems, tethered aerostats, and radar systems. These products can be integrated with additional third-party sensors to provide research, communications, and situational awareness capabilities to governmental and commercial customers. Aerostar pursues product and support services contracts for agencies and instrumentalities of the U.S. and foreign governments.

	For the years ended January 31,							
(dollars in thousands)		**2018**	% change		2017	% change		2016
Net sales	**$**	**39,915**	17.0 %	$	34,113	(6.2)%	$	36,368
Gross profit		**10,608**	99.4 %		5,319	(32.1)%		7,838
Gross margin		**26.6%**			15.6 %			21.6 %
Operating expenses	**$**	**6,486**	(4.5%)	$	6,792	(7.2)%	$	7,316
Operating expenses as % of sales		**16.2%**			19.9 %			20.1 %
Goodwill and long-lived asset impairment loss	**$**	**—**		$	87		$	15,323
Operating (loss) income*(a)*		**4,122**	(364.2)%		(1,560)	(89.5)%		(14,801)
Operating margin		**10.3%**			(4.6)%			(40.7)%
Aerostar net sales, excluding contract manufacturing sales*(b)*		NMF	NMF		NMF	NMF	$	31,667

(a) At the segment level, operating (loss) income does not include an allocation of general and administrative expenses.

(b) Reduction of contract manufacturing was largely completed in fiscal 2016; measure is not meaningful (NMF) for comparisons in subsequent fiscal periods.

Net sales increased 17.0% to $39.9 million from last year's net sales of $34.1 million. Operating income was $4.1 million, up $5.7 million, compared to the fiscal 2017 operating loss of $1.6 million. Higher sales volume and the absence of inventory write-downs, which lowered prior year results by $2.3 million, drove the improved profitability.

Fiscal 2018 fourth quarter net sales increased $1.0 million, or 11.8%, to $9.8 million. Aerostar's operating income for the fiscal 2018 fourth quarter was essentially break-even. This is down $0.2 million compared with the prior year fourth quarter.

Fiscal 2018 comparative results were primarily driven by the following factors:

- *Market conditions*. Aerostar's markets are subject to significant variability due to government spending and the timing of contract awards. Aerostar is also pioneering new markets with leading-edge applications of its stratospheric balloons and remains in active collaboration with Google on Project Loon. Project Loon is a program to provide high-speed wireless Internet accessibility and telecommunications to rural, remote, and under-served areas of the world. During fiscal 2018 Aerostar had several new contract wins further expanding the market for its stratospheric balloons.
- *Sales volume.* The increase was principally driven by higher sales of stratospheric balloons and radar systems.
- *Gross margin.* For fiscal 2018, gross margin increased 11.0 percentage points compared to the prior fiscal year. The improved profitability was driven by higher sales volume, and the absence of inventory write-downs, which lowered prior year results by $2.3 million.
- *Operating expenses.* Operating expenses as a percentage of net sales decreased 3.7 percentage points compared to prior fiscal year. Fiscal 2018 operating expenses were $6.5 million, or 16.2% of net sales, compared to operating expenses of $6.8 million, or 19.9% of net sales in fiscal 2017.

Fiscal 2017 net sales declined 6.2% to $34.1 million from fiscal 2016 net sales of $36.4 million. Fiscal 2017 operating loss was $1.6 million, up $13.2 million, compared to fiscal 2016 operating loss of $14.8 million. Fiscal 2016 results were impacted by the Vista goodwill and long-lived asset impairments and associated financial impacts. Excluding these Vista related items, adjusted operating income in fiscal 2016 was $1.2 million, compared to an operating loss of $1.6 million for fiscal 2017, a decline of $2.8 million an adjusted basis.

Fiscal 2017 fourth quarter net sales declined $0.2 million, or 2.5%, to $8.8 million compared to fiscal 2016 fourth quarter results. Aerostar reported a fiscal 2017 fourth quarter operating income of $0.2 million, flat compared with the prior year fourth quarter.

Fiscal 2017 comparative results were primarily driven by the following factors:

- *Market conditions*. Aerostar is experiencing delays and uncertainties regarding certain opportunities important to the division's growth strategy, and some of Aerostar's markets are subject to significant variability due to government spending and the timing of contract awards. Aerostar is pioneering new markets with leading-edge applications of its high-altitude balloons and remains in active collaboration with Google on Project Loon. Project Loon is a program to provide high-speed wireless Internet accessibility and telecommunications to rural, remote, and under-served areas of the world.
- *Sales volume.* Fiscal 2017 net sales decreased $2.3 million from the prior year, a year-over-year decrease of 6.2%. The decline was principally driven by lower aerostat sales due to the timing of deliveries. This was partially offset by higher sales of stratospheric balloons for Project Loon and other customers newly established in fiscal 2017.
- *Gross margin.* For fiscal 2017, gross margin decreased 6.0 percentage points compared to the prior fiscal year. Fiscal 2017 gross margin decline was primarily driven by lower sales volume and $2.3 million of inventory write-downs related to certain radar systems discussed in more detail in Note 7 *Goodwill, Long-lived Assets, and Other Charges* of the Notes to the Consolidated Financial Statements*,* offset somewhat by a $1.3 million reduction in depreciation and amortization expense due to the long-lived asset impairment charges recorded in fiscal 2016.
- *Goodwill and long-lived asset impairment loss.* In fiscal 2016, Aerostar recorded a goodwill impairment loss of $11.5 million and a long-lived asset impairment loss of $3.8 million. These impairment charges were recorded in the Vista reporting unit and are described more fully in Note 7 *Goodwill, Long-lived Assets, and Other Charges* of the Notes to the Consolidated Financial Statements. As also described in Note 7 *Goodwill, Long-lived Assets, and Other Charges,* a $0.1 million long-lived asset impairment loss was recorded in fiscal 2017 on the Radar asset group. Expense control measures executed throughout fiscal year 2017 reduced operating expenses year-over-year.
- *Operating expenses.* Operating expenses as a percentage of net sales was essentially flat year-over-year. Fiscal 2017 operating expenses of $6.8 million were 19.9% of net sales compared to operating expenses of $7.3 million, equivalent to 20.1% of net sales in fiscal 2016.
- *Aerostar adjusted operating income.* Aerostar reported an operating loss of $1.6 million in fiscal 2017 compared to an operating loss of $14.8 million in fiscal 2016. The fiscal 2016 results were impacted by the Vista goodwill and long-lived asset impairments and associated financial impacts. Excluding these Vista related items, adjusted operating income in fiscal 2016 was $1.2 million, compared to an operating loss of $1.6 million for fiscal 2017, a decline of $2.8 million on an adjusted basis. This decline in operating income was primarily driven by lower sales volume and $2.3 million of inventory write-downs related to certain radar systems, offset somewhat by a $1.3 million reduction in depreciation and amortization expense due to the long-lived asset impairment charges recorded in fiscal 2016.

Corporate Expenses (administrative expenses; other (expense), net; and effective tax rate)

	For the years ended January 31,		
(dollars in thousands)	**2018**	2017	2016
Administrative expenses	**$ 23,553**	$ 19,624	$ 17,110
Administrative expenses as a % of sales	**6.2%**	7.1%	6.6 %
Other (expense), net	**$ (184)**	$ (560)	$ (310)
Effective tax rate	**30.5%**	27.5%	(18.8)%

Administrative expenses increased $3.9 million in fiscal 2018 compared with fiscal 2017. The increase is primarily due to higher head count and incentive compensation, due diligence related expenses for CLI and the evaluation of other acquisition targets, and costs incurred for Project Atlas. Project Atlas is a strategic long-term investment to replace the Company's existing enterprise resource planning platform. Costs incurred related to Project Atlas were $0.6 million and $0.9 million for the three- and twelve-month periods ended January 31, 2018.

Other (expense), net consists primarily of activity related to the Company's equity investments, interest income, foreign currency transaction gains or losses, amortization of debt issuance costs, and other fees related to the Company's credit facility further described in Note 11 *Financing Arrangements* of the Notes to the Consolidated Financial Statements. It declined $0.4 million in fiscal 2018 due to a combination of higher interest income and lower amortization expense related to an equity method investment.

The Company's fiscal 2018 effective tax rate was 30.5% compared to 27.5% in the prior year. The difference in the effective tax rate is primarily due to higher pre-tax income in the current year and the recognition of discrete tax expense related to the Company's adoption of ASU 2016-09 in fiscal 2018 as further discussed in Note 1 *Summary of Significant Accounting Policies* of the Notes to the Consolidated Financial Statements. This ASU requires that the tax effects resulting from the settlement of stock-based awards be recognized as a discrete income tax expense or benefit in the income statement in the reporting period in which they occur. Additionally, the TCJA, effective January 1, 2018, lowered the Company's U.S. federal statutory tax rate by 1.2 percentage points for the fiscal year. The TCJA reduces the U.S. federal statutory tax rate to 21% for fiscal 2019.

The effective tax rate and other items causing the effective tax rate to differ from the statutory tax rate are more fully described in Note 10 *Income Taxes* of the Notes to the Consolidated Financial Statements. For fiscal year 2019, the Company expects a consolidated effective tax rate of approximately 21%, excluding discrete items.

LIQUIDITY AND CAPITAL RESOURCES

The Company's balance sheet continues to reflect significant liquidity and a strong capital base. Management focuses on the current cash balance and operating cash flows in considering liquidity, as operating cash flows have historically been the Company's primary source of liquidity. Management expects that current cash, combined with the generation of positive operating cash flows, will be sufficient to fund the Company's normal operating, investing and financing activities beyond the next twelve months. Additionally, the Company has a credit facility of up to $125.0 million with a maturity date of April 15, 2020.

The Company's cash balances and cash flows were as follows:

	As of January 31,		
(dollars in thousands)	**2018**	2017	2016
Cash and cash equivalents	**$ 40,535**	$ 50,648	$ 33,782

	For the years ended January 31,		
(dollars in thousands)	**2018**	2017	2016
Cash provided by operating activities	**$ 44,961**	$ 48,636	$ 44,008
Cash used in investing activities	**(25,675)**	(4,642)	(11,074)
Cash used in financing activities	**(29,721)**	(27,151)	(50,684)
Effect of exchange rate changes on cash and cash equivalents	**322**	23	(417)
Net increase (decrease) in cash and cash equivalents	**$ (10,113)**	$ 16,866	$ (18,167)

Cash and cash equivalents totaled $40.5 million at January 31, 2018 compared to $50.6 million at January 31, 2017, a decrease of $10.1 million. The decrease from fiscal 2017 year-end was primarily driven by cash outlays for the acquisition of CLI and share repurchases, partially offset by strong operating cash flows.

At January 31, 2018 the Company held cash and cash equivalents of $4.1 million in accounts outside the United States. These balances included undistributed earnings of foreign subsidiaries. As of January 31, 2018, the Company has recorded United States income taxes of $0.3 million on $3.2 million of undistributed earnings from its Canadian and European subsidiaries. As a result of the TCJA, we can repatriate our cumulative undistributed earnings back to the U.S. when needed with minimal U.S. income tax consequences other than the transition tax. We plan to reinvest our foreign earnings internationally, but will continue to assess if there is a need in the future to bring back a portion of foreign cash which was subject to the transition tax. Our liquidity is not materially impacted by the amount held in accounts outside of the United States as the Company's operating cash flows are primarily driven by U.S. sources.

Operating Activities
Operating cash flows result primarily from cash received from customers, which is offset by cash payments for inventories, services, employee compensation, and income taxes. Cash provided by operating activities was $45.0 million in fiscal 2018 compared with $48.6 million in fiscal 2017. The $3.6 million decrease in operating cash flows year-over-year is primarily due to the increase in net working capital demands.

The Company's cash needs have minimal seasonal trends. As a result, the discussion of trends in operating cash flows focuses on the primary drivers of year-over-year variability in net working capital. Net working capital and net working capital percentage are metrics used by management as a guide in measuring the efficient use of cash resources to support business activities and growth. The Company's net working capital for the comparative periods was as follows:

	As of January 31,		
(dollars in thousands)	**2018**	2017	2016
Accounts receivable, net	**$ 58,532**	$ 43,143	$ 38,069
Plus: Inventories	**55,351**	42,336	45,839
Less: Accounts payable	**13,106**	8,467	6,038
Net working capital*(a)*	**$ 100,777**	$ 77,012	$ 77,870
Net working capital percentage*(b)*	**26.3%**	27.9%	36.9%

(b) Net working capital is defined as accounts receivable (net) plus inventories less accounts payable.

(b) Net working capital percentage is defined as net working capital divided by fourth quarter net sales times four for each of the fiscal years, respectively.

The net working capital percentage decreased from 27.9% at January 31, 2017 to 26.3% at January 31, 2018. The decrease was driven by an increase in accounts payable balances as well as managing inventory levels and receivables terms proactively with the substantial increase in sales versus the prior year. The Company has placed emphasis on managing efficient levels of inventory. Similar emphasis was placed on managing accounts payable terms and to a lesser extent, accounts receivable terms and collections.

Inventory levels decreased from $45.8 million at January 31, 2016 to $42.3 million at January 31, 2017 driven by focused inventory reduction actions in the Applied Technology and Engineered Films divisions as well as the inventory write-downs for certain radar inventory in the third quarter of fiscal 2017. Conversely, inventory levels increased $13.0 million, or 30.7% from $42.3 million at January 31, 2017 to $55.4 million at January 31, 2018. In comparison net sales increased $26.9 million or 39.0% year-over year in the fourth quarter. The increase in inventory was primarily driven by growth in net sales and backlog in the Engineered Films Division, offset somewhat by actions to reduce inventory levels in all three divisions.

Accounts receivable levels increased $5.1 million, or 13.3%, from $38.1 million at January 31, 2016 to $43.1 million at January 31, 2017 due primarily to increased sales volume. Accounts receivable levels increased $15.4 million, or 35.7% from $43.1 million at January 31, 2017 to $58.5 million at January 31, 2018. In comparison net sales increased $26.9 million or 39.0% year-over year in the fourth quarter.

Accounts Payable increased $2.4 million, or 40.2%, year-over-year from $6.0 million at January 31, 2016 to $8.5 million at January 31, 2017, primarily due to improvement in the timing of payments to suppliers. Accounts payable increased $4.6 million, or 54.8% to $13.1 million at January 31, 2018 from $8.5 million at January 31, 2017. This increase was due to improved timing of payments to suppliers, as well as additional purchases of raw materials to support the increase in sales year-over-year.

Investing Activities
Cash used in investing activities totaled $25.7 million in fiscal 2018, $4.6 million in fiscal 2017, and $11.1 million in fiscal 2016. Capital expenditures totaled $12.0 million in fiscal 2018 compared to $4.8 million in fiscal 2017 and $13.0 million in fiscal 2016. The primary drivers of the increase in fiscal 2018 cash outflows were payments related to the acquisition of CLI, as further described in Note 6 *Acquisitions of and Investments in Businesses and Technologies* of the Notes to the Consolidated Financial Statements included in Item 8 of this Form 10-K, and increased capital expenditures. Net capital outlay related to the CLI business acquisition was $13.3 million. There were no businesses acquired in fiscal year 2017 or 2016. Capital expenditures in fiscal year 2018 included $1.7 million for the Pleasanton, Texas facility purchased by Engineered Films in the first quarter. In addition, $3.3 million of costs were capitalized in the fourth quarter for a new extrusion line to expand capacity within the Engineered Films division. The installation of this line will continue throughout most of fiscal 2019.

Fiscal 2017 spending primarily related to maintenance activities. Due to the existing available capacity of the facilities as the result of meaningful capacity additions in prior years, the increase in sales volume in fiscal 2017 did not require capital expenditures for new capacity. Fiscal 2017 also benefited from $1.2 million in cash provided by the disposal of assets, most of which related to selling the Company's idle St. Louis, Missouri facility. There was $2.1 million of cash flows from the disposal of assets in fiscal 2016.

Management anticipates capital spending of approximately $22 million in fiscal 2019. The increase over fiscal 2018 will primarily be driven by installation of a new production line for Engineered Films.

Financing Activities
Financing activities consumed cash of $29.7 million in fiscal 2018 compared with $27.2 million in fiscal 2017 and $50.7 million in fiscal 2016.

Quarterly dividends paid in fiscal 2018 were $18.7 million, or $0.52 per share, compared to $18.8 million, or $0.52 share, in fiscal 2017 and $19.4 million, or $0.52 share, in fiscal 2016.

In fiscal 2016, the Company began to repurchase common shares as part of the $40.0 million share repurchase plan authorized by the Company's Board of Directors. Since that time, the Board has provided additional authorizations bringing the total amount authorized under the plan to $75.0 million at January 31, 2018. The Company paid $10.0 million, $7.7 million and $29.3 million for share repurchases in fiscal 2018, 2017 and 2016, respectively. Approximately $28.0 million of the total authorization is remains available for share repurchases under this plan as of January 31, 2018.

The Company made $0.4 million, $0.4 million, and $0.8 million of acquisition-related contingent liability payments related to the Vista and SBG acquisitions in fiscal 2018, 2017, and 2016, respectively.

During fiscal 2016, the Company paid $0.5 million of debt issuance costs associated with the Credit Agreement discussed further in Note 11 *Financing Arrangements* of the Notes to the Consolidated Financial Statements and below. No debt issuance costs were paid during fiscal 2018 or fiscal 2017. No borrowings or repayment have occurred on the Credit Agreement during any of fiscal periods reported.

Financing cash outflows included $0.2 million, $0.3 million and $0.5 million, of employee taxes in relation to the net settlement of restricted stock units (RSUs) that vested during fiscal years 2018, 2017 and 2016, respectively.

Other Liquidity and Capital Resources
The Company entered into a credit facility on April 15, 2015 (Credit Agreement) which provides for a syndicated senior revolving credit facility up to $125.0 million with a maturity date of April 15, 2020. This Credit Agreement is more fully described in Note 11 *Financing Arrangements* of the Notes to the Consolidated Financial Statements. There were no borrowings outstanding for any of the fiscal periods covered by this Form 10-K. Availability under the Credit Agreement for borrowings as of January 31, 2018 was $124.0 million.

The Credit Agreement contains customary affirmative and negative covenants, including those relating to financial reporting and notification, limits on levels of indebtedness and liens, investments, mergers and acquisitions, affiliate transactions, sales of assets, restrictive agreements, and change in control as defined in the Credit Agreement. The Company requested and received the necessary covenant waivers relating to its late filing of financial information in fiscal 2017. Financial covenants include an interest coverage ratio and funded indebtedness to earnings before interest, taxes, depreciation, and amortization as defined in the Credit Agreement. The Company is in compliance with all financial covenants set forth in the Credit Agreement.

Letters of credit (LOC) totaling $1.1 million and $0.5 million were outstanding at January 31, 2018 and 2017. Any draws required under the LOCs would be settled with available cash or borrowings under the Credit Agreement.

The Company launched a company-wide initiative during the third quarter of fiscal 2018 called Project Atlas. This is a strategic long-term investment to replace the Company's existing enterprise resource planning platform. This investment will drive efficiencies across the enterprise, enable faster integration of future acquisitions, automate a significant portion of internal controls, and enhance the enterprise's execution of its long-term growth strategy. Project Atlas is expected to take approximately three years to complete and cost between $8 and $10 million. The company recognized $0.6 million and $0.9 million of expenses for Project Atlas in the three- and twelve-month periods ended January 31, 2018. Project Atlas spending is expected to be approximately $1 million per quarter in fiscal year 2019.

OFF-BALANCE SHEET ARRANGEMENTS AND CONTRACTUAL OBLIGATIONS

As of January 31, 2018, the Company is obligated to make cash payments in connection with its non-cancelable operating leases for facilities and equipment, capital lease obligations and unconditional purchase obligations, primarily for raw materials. Additionally, the Company's known off-balance sheet debt and other unrecorded obligations at January 31, 2018 are listed in the table below.

(dollars in thousands)	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Credit facility[a]	$ 485	$ 211	$ 274	$ —	$ —
Capital lease obligations	528	237	259	32	—
Operating leases	6,655	2,012	3,705	938	—
Unconditional purchase obligations	33,874	33,874	—	—	—
Postretirement benefits[b]	18,066	313	655	688	16,410
Acquisition-related contingent payments[c]	3,835	1,278	2,518	39	—
Uncertain tax positions[d]	2,634	—	—	—	—
	$ 66,077	$ 37,925	$ 7,411	$ 1,697	$ 16,410

[a] *Amounts reflect administrative and unborrowed capacity fees under the credit facility described below.*

[b] *Postretirement benefit amounts represent expected payments on the accumulated postretirement benefit obligation before it is discounted.*

[c] *Amounts reflect the expected future earn-out payments related to the acquisitions of CLI, SBG, and Vista. These amounts also reflect the Vista employee bonus pool payments which are separate from the acquisition earn-out payments. Actual payments on these obligations may vary from the expected amounts since the total payment amount due depends upon certain future conditions. See below for further detail on the specific obligations.*

[d] *See below for further details on specific obligations.*

Credit facility
The Company's credit facility, the Credit Agreement dated as of April 15, 2015 among Raven Industries, Inc., JPMorgan Chase Bank, N.A., Toronto Branch as Canadian Administrative Agent, JPMorgan Chase Bank, National Association, as administrative agent, and each lender from time to time party thereto (the Credit Agreement), provides for a syndicated senior revolving credit facility up to $125.0 million with a maturity date of April 15, 2020. The loan proceeds may be utilized by Raven for strategic business purposes such as acquisitions and for working capital needs.

Loans or borrowings defined under the Credit Agreement bear interest and fees at varying rates and terms defined in the Credit Agreement based on the type of borrowing as defined. The Credit Agreement includes annual administrative and unborrowed capacity fees of $0.2 million.

Capital lease obligations
Related to the fiscal year 2018 asset acquisition of CLI further described in Note 6 *Acquisition of and Investments in Businesses and Technologies* of the Notes to the Consolidated Financial Statements, the Company has future obligations for a fleet of vehicles held under capital leases to support Engineered Film's new design-build and installation service capabilities.

Operating Leases
The Company leases certain vehicles, equipment, and facilities under operating leases. These future obligations primarily support Applied Technology's precision agriculture products and international sales efforts and Aerostar's defense, radar and lighter-than-air markets.

Unconditional purchase obligations
Unconditional purchase obligations consist of those for inventory and other obligations that arise in the normal course of business operations. The majority of these obligations are related to the Applied Technology and Engineered Films divisions and arise from the purchase of raw materials inventory.

Postretirement Benefit Obligation,
In fiscal 2016, the Company eliminated this benefit and obligation for all of its senior executive officers and their spouses except two officers with over 20 years of service. At January 31, 2018 two active participants and 15 retiree participants and their spouses remain eligible to receive postretirement medical and other benefits for their lifetimes. This benefit obligation is unfunded and is further described in Note 8 *Employee Postretirement Benefits* of the Notes to the Consolidated Financial Statements.

Acquisition-related obligations
The Company has future obligations for earn-out payments associated with the acquisition of Vista completed in fiscal 2012, SBG completed in fiscal 2015 and CLI completed in fiscal 2018. The total liability recorded on the Consolidated Balance Sheet as of January 31, 2018 related to these future obligations was $3.0 million, of which $1.0 million was classified as "Accrued liabilities" and $2.0 million as "Other liabilities." These liabilities represent the present value of earn-out payments classified as consideration at the acquisition date. In the recent CLI acquisition, the Company entered into a contingent earn-out agreement, not to exceed $2.0 million. The earn-out is paid annually for 3 years after the purchase date, contingent upon achieving certain revenues and operational synergies. Specific to the SBG acquisition, the Company may pay up to $2.5 million in additional earn-out payments calculated and paid quarterly over 10 years contingent upon SBG achieving certain revenues. Specific to the Vista acquisition, the Company agreed to pay additional contingent consideration not to exceed $15.0 million, based upon earn-out percentages on specific revenue streams until January 31, 2019. In a transaction separate from the Vista acquisition but related to Vista, the Company agreed to a revenue-based bonus pool, also not to exceed $15.0 million, which is accrued as the specific revenue stream is recorded using those same earn-out percentages over the same time period.

Uncertain tax positions
Raven reported a total liability for uncertain tax positions of $2.6 million at January 31, 2018. The Company is not able to reasonably estimate the timing of future payments relating to these non-current tax benefits. This obligation is retired when the uncertain tax position is settled or applicable tax year is no longer subject to examination by the tax authorities.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Critical accounting policies are those that require the application of especially challenging, subjective, or complex judgment when valuing assets and liabilities on the Company's balance sheet. These policies and estimates are discussed below because a fluctuation in actual results versus expected results could materially affect operating results and because the policies require significant judgments and estimates to be made. Accounting related to these policies is initially based on best estimates at the time of original entry in the accounting records. Adjustments are periodically recorded when the Company's actual experience differs from the expected experience underlying the estimates. These adjustments could be material if experience were to change significantly.

Inventory Reserves
The Company estimates inventory valuation each quarter. Typically, when a product reaches the end of its lifecycle, inventory is utilized more slowly or alternative uses for the product are explored. Management uses its manufacturing resources planning data to help determine if inventory is slow-moving or has become obsolete due to an engineering change. The Company closely reviews items that have balances in excess of the forecasted requirements, or that have been dropped from production requirements. Despite these reviews, technological or strategic decisions made by management or the Company's customers may result in unexpected excess material. Further, a decline in the market demand for the Company's products may also result in write-down of inventory balances. The Company assesses current and expected selling prices in determining if inventory balances should be written down to net realizable value. In every Raven operating unit, management must manage obsolete inventory risk. The accounting judgment ultimately made is an evaluation of the success that management will have in controlling inventory risk and mitigating the impact of obsolescence when it does occur.

Revenue Recognition
The Company recognizes revenue when it is realized or realizable and has been earned. Revenue is recognized when there is persuasive evidence of an arrangement, the sales price is determinable, collectability is reasonably assured, and shipment or delivery has occurred (depending on the terms of the sale) or services have been rendered. The Company sells directly to customers or distributors who incur the expense and commitment for any post-sale obligations beyond stated warranty terms. Estimated returns, sales allowances, or warranty charges are recognized upon shipment of a product.

Long-lived Assets Impairment

For long-lived assets, including definite-lived intangibles, equity investments, and property plant and equipment, management tests for recoverability whenever events or changes in circumstances indicate that the asset's carrying amount may not be recoverable. Management periodically assesses for triggering events and discusses any significant changes in the utilization of long-lived assets, which may result from, but are not limited to, an adverse change in the asset's physical condition or a significant adverse change in the business climate. For purposes of recognition and measurement of an impairment loss, a long-lived asset is grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. An impairment loss is recognized when the carrying amount of an asset exceeds the estimated undiscounted cash flows used in determining its fair value. The cash flows used for this analysis are similar to those used in the goodwill impairment assessment discussed further below. Such valuations are derived from valuation techniques in which one or more significant inputs are not observable (Level 3 fair value measures).

In the quantitative analysis of the long-lived and intangible asset, the book value of the asset is compared to the undiscounted cash flows supporting the value of the asset. Projecting undiscounted future cash flows requires the Company to make significant estimates and assumptions regarding future revenues and expenses, projected capital expenditures, changes in net working capital, and allocations of certain costs.

In developing the undiscounted cash flow analysis, assumptions about the revenue growth rate, operating profit margin percentage, capital expenditures, and changes in net working capital reference our annual operating plan and long-term strategic plan, but also reflect the best available information at that time, and as appropriate, reflect market participant assumptions if such amounts might differ from the Company-specific assumptions for each of the Company’s asset groups. In addition, certain reporting unit costs which are not specific to an asset group are allocated between asset groups to estimate undiscounted cash flows at the asset group level.

If the estimated undiscounted cash flows for the asset group exceed the book value of the asset, there is no impairment. If the estimated undiscounted cash flows for the asset group are below the book value of the asset, an impairment loss is possible and a more refined measurement of the impairment loss would take place. This is the Step 2 of the long-lived and intangible asset impairment analysis in which management compares the discounted value of the cash flows of the asset group to the book value of the asset. The difference between the book value of the asset and the present value of the discounted cash flows supporting the asset group determines the amount of the asset impairment. The discount rate for the Step 2 analysis is derived in a similar manner as the discount rate used for goodwill impairment testing. The valuation methodologies in both steps of long-lived and intangible asset impairment testing use significant estimates and assumptions. Management evaluates the merits of each significant assumption and the overall basket of assumptions used to determine the fair value of the asset.

During the first quarter of fiscal 2018, the Company determined that the customer relationship intangible asset related to the Company's equity method investment in Ag Eagle, further described in Note 7 *Goodwill, Long-lived assets and Other Charges* of the Notes to the Consolidated Financial Statements included in Item 8 of this form 10-K, was fully impaired. The total impairment loss related to this intangible asset was $0.3 million and is reported in "Long-lived asset impairment loss" in the Consolidated Statements of Income and Comprehensive Income for the twelve-month period ended January 31, 2018.

In fiscal 2017, as discussed below, the Company determined that there were triggering events with respect to the assets associated with the Lighter than Air (aerostat and stratospheric balloon programs) and Radar asset groups in the Aerostar reporting unit in the third quarter, which resulted in an asset impairment test. The asset impairment test with respect to the Radar asset group resulted in a long-lived asset impairment in the third quarter of fiscal 2017 in addition to the impairments recorded in fiscal 2016 for the Radar asset group.

During fiscal 2016, the Company determined that there were triggering events with respect to the Engineered Films asset group in the second quarter and the client private business (CP) and Radar asset groups in the Vista reporting unit in the third quarter, each of which resulted in an asset impairment test. The undiscounted cash flows for the Engineered Films asset group exceeded the carrying value of the long-lived assets by more than $100 million, or approximately 800%, and no Step 2 was deemed to be necessary based on the recoverability of the long-lived assets.

For the two asset groups associated with the Vista reporting unit (CP and Radar), using the sum of the undiscounted cash flows associated with each of the asset groups, a quantitative test was performed for each asset group. The undiscounted cash flows for the CP asset group exceeded the carrying value of the long-lived assets and no Step 2 test was deemed to be necessary based on the recoverability of the long-lived assets. For the Radar asset group, however, the undiscounted cash flows did not exceed the carrying value of the long-lived assets and the Company performed a Step 2 impairment analysis for the long-lived assets. In the Step 2 impairment analysis, the fair value determined was allocated to the assets and liabilities of the Radar asset group. The resulting implied fair value of the Radar asset group long-lived assets was $0.1 million compared to the carrying value of $3.9 million for the asset group. The shortfall of $3.8 million was recorded in the fiscal 2016 third quarter as an impairment charge to operating income reported as "Long-lived asset impairment loss" in the Consolidated Statements of Income and Comprehensive Income. Of the total long-lived asset impairment of $3.8 million, $3.2 million was related to amortizable intangible assets related to radar technology and radar customers, $0.5 million was related to property, plant, and equipment, and $0.1 million was related to patents.

Goodwill Impairment
The Company recognizes goodwill as the excess cost of an acquired business over the net amount assigned to assets acquired and liabilities assumed. Management assesses goodwill for impairment annually during the fourth quarter and between annual tests whenever a triggering event indicates there may be an impairment. When performing goodwill impairment testing, the fair values of reporting units are determined based on valuation techniques using the best available information, primarily discounted cash flow projections. Such valuations are derived from valuation techniques in which one or more significant inputs are not observable (Level 3 fair value measures).

The Company performs impairment reviews of goodwill by reporting unit. Through fiscal 2016, the Company determined it had four reporting units: Engineered Films Division; Applied Technology Division; and two separate reporting units in the Aerostar Division, one of which was Vista and one of which was all other Aerostar operations.

During the first quarter of fiscal 2017, management implemented managerial and financial reporting changes within Vista and Aerostar to further integrate Vista into the Aerostar Division. Integration actions included leadership re-alignment, including selling and business development functions, re-deployment of employees across the division, and consolidation of administrative functions, among other actions. Based on the changes made, the Company consolidated the two separate reporting units within the Aerostar Division into one reporting unit for the purposes of goodwill impairment review. As such as of April 30, 2016, the Company has three reporting units: Engineered Films Division, Applied Technology Division, and Aerostar Division.

In step one of the goodwill impairment analysis (quantitative analysis), the fair value of each reporting unit is determined using a discounted cash flow analysis. Projecting discounted future cash flows requires the Company to make significant estimates and assumptions regarding future revenues and expenses, projected capital expenditures, changes in net working capital, and the appropriate discount rate.

In developing the discounted cash flow analysis, assumptions about the revenue growth rate, operating profit margin percentage, capital expenditures, and changes in net working capital reference our annual operating plan and long-term strategic plan for each of the Company’s reporting units, but also reflect the best available information at that time and as appropriate, reflect market participant assumptions if such amounts might differ from the Company-specific assumptions for each of the Company’s reporting units.

Discount rate assumptions for each reporting unit are the value-weighted average of the Company’s estimated cost of capital derived using both known and estimated customary market metrics and take into consideration management’s assessment of risks inherent in the future cash flows of the respective reporting unit. One of the metrics considered by the Company in its selection of a discount rate is the relevant small company size premium appropriate to the reporting unit for which the valuation is being assessed. Generally, the lower the revenues associated with a reporting unit, the higher the small company premium and the higher the discount rate for that reporting unit. With other factors such as the optimal capital structure assumed for the reporting unit, this may result in a different discount rate assumption for each reporting unit being evaluated and may result in the discount rate for a reporting unit varying from year to year.

For goodwill impairment tests prior to fiscal 2018, the estimated fair value of the reporting unit was then compared with the book value of its net assets. If the estimated fair value of the reporting unit was less than the book value of the net assets of the reporting unit, an impairment loss was possible and a more refined measurement of the impairment loss takes place. This is the second step of the goodwill impairment testing (Step 2), in which management may use market comparisons and recent transactions to assign the fair value of the reporting unit to all of the assets and liabilities of that unit. The valuation methodologies in both steps of goodwill impairment testing use significant estimates and assumptions. Management evaluates the merits of each significant assumption and the overall basket of assumptions used to determine the fair value of the reporting unit.

In the fiscal 2018 first quarter, the Company early adopted Accounting Standards Update (ASU) No. 2017-04 (issued by the Financial Accounting Standards Board (FASB) in January 2017), "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" (ASU 2017-04) on a prospective basis. This ASU removed Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. Under the new guidance, a goodwill impairment is measured as the amount by which a reporting unit’s carrying value exceeds its fair value. The amendment is applied on a prospective basis, and as such Step 2 was applied as appropriate in fiscal 2017 and 2016.

During fiscal 2018 there were no triggering events with respect to any of the Company's reporting units. Based on the Company's annual qualitative assessment for the Applied Technology and the Engineered Films reporting unit, the Company determined a quantitative analysis was not necessary for fiscal 2018. For the Aerostar reporting unit, the Company determined the excess of the fair value of the reporting unit over its carrying value in the previous year's annual impairment assessment was not significant enough based on the current macroeconomic conditions to perform a qualitative analysis. As such, the Company performed a quantitative analysis for the annual impairment assessment of the Aerostar reporting unit. In determining the estimated fair value of the Aerostar reporting unit, the Company was required to estimate a number of factors, including projected revenue growth rates, projected operating results, terminal growth rates, economic conditions, anticipated future cash flows, and the discount rate. This analysis indicated that the estimated fair value of the Aerostar reporting unit exceeded the net book value by approximately $12 million, or approximately 41%. No goodwill impairment losses were recorded for fiscal year 2018.

The discount rate and terminal growth rate used in determination of the fair value were 13.0% and 3.0%, respectively. Using the discount rate and terminal growth rate to illustrate sensitivity on this estimated fair value, a one-half percentage point increase in the discount rate or a one-half percentage point decrease in the terminal growth rate would have reduced the fair value of the Aerostar reporting unit by $1.5 million and $0.5 million, respectively.

During fiscal 2017, there were no triggering events with respect to the Applied Technology or Engineered Films reporting units. Based on the Company's annual impairment assessment (Step 0) for the Applied Technology reporting unit, no quantitative or Step 2 analysis were determined to be necessary for fiscal 2017. The Company determined that there was a triggering event with respect to the Aerostar reporting unit in the third quarter, which resulted in a goodwill impairment test. The Company also completed a quantitative analysis during the annual goodwill impairment process on the Engineered Films and Aerostar reporting units. The annual impairment analysis indicated that the fair value of Engineered Films and Aerostar reporting units exceeded their carrying value by approximately $105 million and $9 million, or approximately 90% and 30%, respectively. No goodwill impairment losses were recorded for fiscal year 2017.

In fiscal 2016, the Company determined that there were triggering events with respect to the Engineered Films reporting unit in the second quarter and the Vista reporting unit in the third quarter, each of which resulted in goodwill impairment tests. The second quarter Engineered Films analysis indicated that the estimated fair value of the reporting unit exceeded the net book value by approximately $51 million, or approximately 37%. However, the results of the Vista reporting unit quantitative goodwill impairment testing as of October 31, 2015 indicated that the fair value of the Vista reporting unit was below its carrying value. Accordingly, the Company performed the Step 2 test and concluded the goodwill of the Vista reporting unit was impaired. As a result, the Company recorded a non-cash goodwill impairment charge of $11.5 million in the third quarter of fiscal 2016 as "Goodwill impairment loss" in the Consolidated Statements of Income and Comprehensive Income.

ACCOUNTING PRONOUNCEMENTS

See Note 1 *Summary of Significant Accounting Policies* of the Notes to the Consolidated Financial Statements included in Item 8 of this Form 10-K for a summary of recent accounting pronouncements.

FORWARD-LOOKING STATEMENTS

Certain statements contained in this report are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding the expectations, beliefs, intentions or strategies regarding the future, not past or historical events. Without limiting the foregoing, the words "anticipates," "believes," "expects," "intends," "may," "plans," "should," "estimate," "would," "will," "predict," "project," "potential," and similar expressions are intended to identify forward-looking statements. However, the absence of these words or similar expressions does not mean that a statement is not forward-looking. The Company intends that all forward-looking statements be subject to the safe harbor provisions of the Private Securities Litigation Reform Act.

Although the Company believes that the expectations reflected in such forward-looking statements are based on reasonable assumptions when made, there is no assurance that such assumptions are correct or that these expectations will be achieved. Assumptions involve important risks and uncertainties that could significantly affect results in the future. These risks and uncertainties include, but are not limited to, those relating to weather conditions, which could affect sales and profitability in some of the Company's primary markets, such as agriculture and construction and oil and gas drilling; or changes in raw material availability, commodity prices, competition, technology or relationships with the Company's largest customers, risks and uncertainties relating to development of new technologies to satisfy customer requirements, possible development of competitive technologies, ability to scale production of new products without negatively impacting quality and cost, risks of operating in foreign markets, risks relating to acquisitions, including risks of integration or unanticipated liabilities or contingencies, and ability to finance investment and net working capital needs for new development projects, any of which could adversely impact any of the Company's product lines, risks of litigation, as well as other risks described in Item 1A., Risk Factors, of this Annual Report on Form 10-K. The foregoing list is not exhaustive and the Company disclaims any obligation to subsequently revise any forward-looking statements to reflect events or circumstances after the date of such statements. Past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The exposure to market risks pertains mainly to changes in interest rates on cash and cash equivalents. The Company's only outstanding debt as of January 31, 2018 is an immaterial amount of capital lease obligations. The Company does not expect operating results or cash flows to be significantly affected by changes in interest rates.

The Company's subsidiaries that operate outside the United States use their local currency as the functional currency. The functional currency is translated into U.S. dollars for balance sheet accounts using the period-end exchange rates, and average exchange rates for the statement of income. Cash and cash equivalents held in foreign currency (primarily Euros and Canadian dollars) totaled $4.1 million and $2.3 million at January 31, 2018 and 2017, respectively. Adjustments resulting from financial statement translations are included as cumulative translation adjustments in "Accumulated other comprehensive income (loss)" within shareholders' equity. Foreign currency transaction gains or losses are recognized in the period incurred and are included in "Other (expense), net" in the Consolidated Statements of Income and Comprehensive Income. Foreign currency fluctuations had no material effect on the Company's financial condition, results of operations, or cash flows.

The Company does not enter into derivatives or other financial instruments for trading or speculative purposes. However, the Company does utilize derivative financial instruments to manage the economic impact of fluctuation in foreign currency exchange rates on those transactions that are denominated in currency other than its functional currency, which is the U.S. dollar. Such transactions are principally Canadian dollar-denominated transactions. The use of these financial instruments had no material effect on the Company's financial condition, results of operations, or cash flows.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Financial Statements

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) of the Securities Exchange Act of 1934, as amended. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our 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.

Management has assessed effectiveness of the Company's internal control over financial reporting as of January 31, 2018. In making its assessment of effectiveness of internal control over financial reporting, management used the criteria described by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control - Integrated Framework* (2013). Based on this assessment using those criteria, we concluded that, as of January 31, 2018, the Company's internal control over financial reporting was effective at a reasonable assurance level.

The effectiveness of our internal control over financial reporting as of January 31, 2018 has been audited by Deloitte & Touche, LLP, an independent registered public accounting firm, as stated in their report, which appears on the next page.

/s/ DANIEL A. RYKHUS	/s/ STEVEN E. BRAZONES
Daniel A. Rykhus	Steven E. Brazones
President and Chief Executive Officer	Vice President and Chief Financial Officer

March 23, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Raven Industries, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheet of Raven Industries, Inc. and subsidiaries (the "Company") as of January 31, 2018, the related consolidated statement of income and comprehensive income, consolidated statement of shareholder’s equity, consolidated statement of cash flows, and the related notes and the schedules listed in the Index at Item 15 for the fiscal year then ended (collectively referred to as the "financial statements"). We also have audited the Company’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 the results of their operations and their cash flows for the year in the 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 COSO.

Basis for Opinions

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 managements report on internal control over financial reporting. Our responsibility is to express an opinion on these 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 to 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.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Deloitte & Touche LLP

Minneapolis, Minnesota
March 23, 2018

We have served as the Company's auditor since 2017.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Raven Industries, Inc.

In our opinion, the consolidated balance sheet as of January 31, 2017 and the related consolidated statements of income and comprehensive income, of shareholders' equity and of cash flows for each of the two years in the period ended January 31, 2017 present fairly, in all material respects, the financial position of Raven Industries, Inc. and its subsidiaries as of January 31, 2017, and the results of their operations and their cash flows for each of the two years in the period ended January 31, 2017, in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule for each of the two years in the period ended January 31, 2017 present fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Minneapolis, Minnesota
March 31, 2017

RAVEN INDUSTRIES, INC.

CONSOLIDATED BALANCE SHEETS

(Dollars and shares in thousands, except per-share amounts)

	As of January 31,	
	2018	2017
ASSETS		
Current assets		
Cash and cash equivalents	**$ 40,535**	$ 50,648
Accounts receivable, net	**58,532**	43,143
Inventories	**55,351**	42,336
Other current assets	**5,861**	2,689
Total current assets	**160,279**	138,816
Property, plant and equipment, net	**106,280**	106,324
Goodwill	**46,710**	40,649
Amortizable intangible assets, net	**10,584**	12,048
Other assets	**2,950**	3,672
TOTAL ASSETS	**$ 326,803**	$ 301,509
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable	**$ 13,106**	$ 8,467
Accrued liabilities	**21,946**	18,055
Other current liabilities	**1,890**	1,860
Total current liabilities	**36,942**	28,382
Other liabilities	**13,795**	13,696
Commitments and contingencies (see Note 12)		
Raven Industries, Inc. shareholders' equity		
Common stock, $1 par value, authorized shares 100,000; issued 67,124 and 67,060, respectively	**67,124**	67,060
Paid-in capital	**59,143**	55,795
Retained earnings	**252,772**	230,649
Accumulated other comprehensive loss	**(2,573)**	(3,676)
Less treasury stock at cost, 31,332 and 30,984 shares, respectively	**(100,402)**	(90,402)
Total Raven Industries, Inc. shareholders' equity	**276,064**	259,426
Noncontrolling interest	**2**	5
Total shareholders' equity	**276,066**	259,431
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	**$ 326,803**	$ 301,509

The accompanying notes are an integral part of the consolidated financial statements.

RAVEN INDUSTRIES, INC.

CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

(Dollars in thousands, except per-share amounts)

	For the years ended January 31,		
	2018	2017	2016
Net sales	**$ 377,317**	$ 277,395	$ 258,229
Cost of sales	**255,752**	199,205	191,255
Gross profit	**121,565**	78,190	66,974
Research and development expenses	**16,936**	16,312	14,686
Selling, general and administrative expenses	**45,200**	33,378	32,574
Goodwill impairment loss	**—**	—	11,497
Long-lived asset impairment loss	**259**	87	3,826
Operating income	**59,170**	28,413	4,391
Other (expense), net	**(184)**	(560)	(310)
Income before income taxes	**58,986**	27,853	4,081
Income tax expense (benefit)	**17,967**	7,661	(767)
Net income	**41,019**	20,192	4,848
Net (loss) income attributable to the noncontrolling interest	**(3)**	1	72
Net income attributable to Raven Industries, Inc.	**$ 41,022**	$ 20,191	$ 4,776
Net income per common share:			
─ Basic	**$ 1.14**	$ 0.56	$ 0.13
─ Diluted	**$ 1.13**	$ 0.56	$ 0.13
Comprehensive income:			
Net income	**$ 41,019**	$ 20,192	$ 4,848
Other comprehensive income (loss):			
Foreign currency translation	**1,234**	50	(729)
Postretirement benefits, net of income tax (expense) benefit of $44, $129, and $(1,620), respectively	**(131)**	(225)	3,077
Other comprehensive income (loss), net of tax	**1,103**	(175)	2,348
Comprehensive income	**42,122**	20,017	7,196
Comprehensive (loss) income attributable to noncontrolling interest	**(3)**	1	72
Comprehensive income attributable to Raven Industries, Inc.	**$ 42,125**	$ 20,016	$ 7,124

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(Dollars and shares in thousands, except per-share amounts)

	$1 Par Common Stock	Paid-in Capital	Treasury Stock		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Raven Industries, Inc. Equity	Non-controlling Interest	Total Equity
			Shares	Cost					
Balance January 31, 2015	$ 66,947	$ 53,237	28,897	$ (53,362)	$ 244,180	$ (5,849)	$ 305,153	$ 84	$ 305,237
Net income	—	—	—	—	4,776	—	4,776	72	4,848
Other comprehensive income (loss), net of income tax	—	—	—	—	—	2,348	2,348	—	2,348
Cash dividends ($0.52 per share)	—	169	—	—	(19,513)	—	(19,344)	—	(19,344)
Dividends of less than wholly-owned subsidiary paid to noncontrolling interest	—	—	—	—	—	—	—	(82)	(82)
Share issuance costs related to fiscal 2015 business combination	—	(15)	—	—	—	—	(15)	—	(15)
Shares issued on stock options exercised, net of shares withheld for employee taxes	7	(54)	—	—	—	—	(47)	—	(47)
Shares issued on vesting of stock units, net of shares withheld for employee taxes	52	(510)	—	—	—	—	(458)	—	(458)
Shares repurchased	—	—	1,603	(29,338)	—	—	(29,338)	—	(29,338)
Share-based compensation	—	2,311	—	—	—	—	2,311	—	2,311
Income tax impact related to share-based compensation	—	(1,231)	—	—	—	—	(1,231)	—	(1,231)
Balance January 31, 2016	67,006	53,907	30,500	(82,700)	229,443	(3,501)	264,155	74	264,229
Net income	—	—	—	—	20,191	—	20,191	1	20,192
Other comprehensive income, net of income tax	—	—	—	—	—	(175)	(175)	—	(175)
Cash dividends ($0.52 per share)	—	216	—	—	(18,985)	—	(18,769)	—	(18,769)
Dividends of less than wholly-owned subsidiary paid to noncontrolling interest	—	—	—	—	—	—	—	(70)	(70)
Director shares issued	19	(19)	—	—	—	—	—	—	—
Shares issued on vesting of stock units, net of shares withheld for employee taxes	35	(291)	—	—	—	—	(256)	—	(256)
Shares repurchased	—	—	484	(7,702)	—	—	(7,702)	—	(7,702)
Share-based compensation	—	3,071	—	—	—	—	3,071	—	3,071
Income tax impact related to share-based compensation	—	(1,089)	—	—	—	—	(1,089)	—	(1,089)
Balance January 31, 2017	67,060	55,795	30,984	(90,402)	230,649	(3,676)	259,426	5	259,431
Net income	**—**	**—**	**—**	**—**	**41,022**	**—**	**41,022**	**(3)**	**41,019**
Other comprehensive income, net of income tax	**—**	**—**	**—**	**—**	**—**	**1,103**	**1,103**	**—**	**1,103**
Cash dividends ($0.52 per share)	**—**	**214**	**—**	**—**	**(18,899)**	**—**	**(18,685)**	**—**	**(18,685)**
Director shares issued	**26**	**(26)**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Shares issued on stock options exercised, net of shares withheld for employee taxes	**21**	**(311)**	**—**	**—**	**—**	**—**	**(290)**	**—**	**(290)**
Shares issued on vesting of stock units, net of shares withheld for employee taxes	**17**	**(254)**	**—**	**—**	**—**	**—**	**(237)**	**—**	**(237)**
Shares repurchased	**—**	**—**	**348**	**(10,000)**	**—**	**—**	**(10,000)**	**—**	**(10,000)**
Share-based compensation	**—**	**3,725**	**—**	**—**	**—**	**—**	**3,725**	**—**	**3,725**
Balance January 31, 2018	**$ 67,124**	**$ 59,143**	**31,332**	**$ (100,402)**	**$ 252,772**	**$ (2,573)**	**$ 276,064**	**$ 2**	**$ 276,066**

The accompanying notes are an integral part of the consolidated financial statements.

RAVEN INDUSTRIES, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)

	For the years ended January 31,		
	2018	2017	2016
OPERATING ACTIVITIES:			
Net income	**$ 41,019**	$ 20,192	$ 4,848
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	**12,743**	13,169	13,856
Amortization of intangible assets	**2,059**	2,267	3,280
Goodwill impairment loss	**—**	—	11,497
Long-lived asset impairment loss	**259**	87	3,826
Change in fair value of acquisition-related contingent consideration	**457**	36	(1,488)
Loss (income) from equity investments	**114**	72	(83)
Deferred income taxes	**(787)**	307	(6,039)
Share-based compensation expense	**3,725**	3,071	2,311
Other operating activities, net	**2,053**	2,390	2,112
Change in operating assets and liabilities	**(16,681)**	7,045	9,888
Net cash provided by operating activities	**44,961**	48,636	44,008
INVESTING ACTIVITIES:			
Capital expenditures	**(12,011)**	(4,796)	(13,046)
Proceeds (payments) related to business acquisitions	**(13,267)**	—	351
Maturities of investments	**250**	250	250
Purchases of investments	**(273)**	(750)	(250)
(Disbursements) proceeds from settlement of liabilities, sale of assets	**(333)**	1,188	2,124
Other investing activities, net	**(41)**	(534)	(503)
Net cash used in investing activities	**(25,675)**	(4,642)	(11,074)
FINANCING ACTIVITIES:			
Dividends paid	**(18,685)**	(18,839)	(19,426)
Payments for common shares repurchased	**(10,000)**	(7,702)	(29,338)
Payment of acquisition-related contingent liabilities	**(408)**	(354)	(814)
Debt issuance costs paid	**—**	—	(548)
Restricted stock units vested and issued	**(237)**	(256)	(458)
Employee stock option exercises net of tax benefit	**(290)**	—	(85)
Other financing activities, net	**(101)**	—	(15)
Net cash used in financing activities	**(29,721)**	(27,151)	(50,684)
Effect of exchange rate changes on cash	**322**	23	(417)
Net increase (decrease) in cash and cash equivalents	**(10,113)**	16,866	(18,167)
Cash and cash equivalents at beginning of year	**50,648**	33,782	51,949
Cash and cash equivalents at end of year	**$ 40,535**	$ 50,648	$ 33,782

The accompanying notes are an integral part of the consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Dollars in thousands, except per-share amounts)

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Principles of Consolidation

Raven Industries, Inc. (the Company or Raven) is a diversified technology company providing a variety of products to customers within the industrial, agricultural, geomembrane, construction, and aerospace/defense markets. The Company conducts this business through the following direct and indirect subsidiaries: Aerostar International, Inc. (Aerostar); Vista Research, Inc. (Vista); Raven International Holding Company BV (Raven Holdings); Raven Industries Canada, Inc. (Raven Canada); SBG Innovatie BV; Navtronics BVBA; Raven Industries Australia Pty Ltd (Raven Australia) and Raven Do Brazil Participacoes E Servicos Technicos LTDA (Raven Brazil). The Company and these subsidiaries comprise three unique operating units, or divisions, classified into reportable segments (Applied Technology, Engineered Films, and Aerostar).

The consolidated financial statements for the periods included herein have been prepared by the Company pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned or controlled subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Noncontrolling Interest

Noncontrolling interests represent capital contributions, income and loss attributable to the owners of less than wholly-owned and consolidated entities. The Company owns 75% of a business venture to pursue potential product and support services contracts for agencies and instrumentalities of the United States government. The business venture, Aerostar Integrated Systems (AIS), is included in the Aerostar business segment. No capital contributions have been made by the noncontrolling interest since the initial capitalization in fiscal year 2012. Given the Company's controlling financial interest, the accounts of the business venture have been consolidated with the accounts of the Company, and a noncontrolling interest has been recorded for the noncontrolling investor's interests in the net assets and operations of the business venture.

Equity Investments

In February 2016, the Applied Technology Division acquired an interest of approximately 5% in Ag-Eagle Aerial Systems, Inc. (AgEagle).

AgEagle is considered a variable interest entity (VIE) and the Company’s equity ownership interest in AgEagle is considered a variable interest. The Company accounts for its investment in AgEagle under the equity method of accounting as the Company has the ability to exercise significant influence over the operating policies of AgEagle through the Company's representation on AgEagle's Board of Directors and the exclusive distribution agreement between the companies discussed in Note 6 *Acquisitions of and Investments in Businesses and Technologies*. However, the Company is not the primary beneficiary as the Company does not have the power to direct the activities that most significantly impact the VIE’s economic performance and the obligation to absorb the majority of the losses or the right to receive the majority of the benefits of the VIE.

The Company also owns an interest of approximately 22% in Site-Specific Technology Development Group, Inc. (SST). The Company has significant influence, but neither a controlling interest nor a majority interest in the risks or rewards of SST and as such, this affiliate investment is accounted for using the equity method.

The investment balances for both AgEagle and SST are included in “Other assets” while the Company's share of the results of AgEagle and SST operations is included in “Other (expense), net.”

The Company considers whether the value of any of its equity method investments has been impaired whenever adverse events or changes in circumstances indicate that recorded values may not be recoverable. If the Company considered any such decline to be other than temporary (based on various factors, including historical financial results, product development activities, and the overall health of the affiliate's industry), an impairment loss would be recorded.

(Dollars in thousands, except per-share amounts)

Use of Estimates
Preparing the financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make certain estimates and assumptions. These affect the reported amounts of assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The Company's forecasts, based principally on estimates, are critical inputs to asset valuations such as those for inventory or goodwill. These assumptions and estimates require significant judgment and actual results could differ from assumed and estimated amounts.

Foreign Currency
The Company's subsidiaries that operate outside the United States use the local currency as their functional currency. The functional currency is translated into U.S. dollars for balance sheet accounts using the period-end exchange rates and average exchange rates for the statement of income and comprehensive income. Adjustments resulting from financial statement translations are included as foreign currency translation adjustments in “Accumulated other comprehensive income (loss)” within shareholders' equity. Foreign currency transaction gains or losses are recognized in the period incurred and are included in “Other (expense), net” in the Consolidated Statements of Income and Comprehensive Income. Foreign currency transaction gains or losses on intercompany notes receivable and notes payable denominated in foreign currencies for which settlement is not planned in the foreseeable future are considered part the net investment and are reported in the same manner as foreign currency translation adjustments.

Cash and Cash Equivalents
The Company considers all highly liquid instruments with original maturities of three or fewer months to be cash equivalents. Cash and cash equivalent balances are principally concentrated in checking, money market, and savings accounts. Certificates of deposit that mature in over 90 days but less than one year are considered short-term investments. Certificates of deposit that mature in one year or more are considered to be other long-term assets and are carried at cost. The Company held cash and cash equivalents in accounts outside the United States of $4,101 and $2,281 as of January 31, 2018 and 2017, respectively.

Accounts Receivable and Allowance for Doubtful Accounts
Trade accounts receivable are recorded at the invoiced amount, do not bear interest, and are considered past due based on invoice terms. The allowance for doubtful accounts is the Company’s best estimate of the amount of probable credit losses. This is based on historical write-off experience by segment and an estimate of the collectability of past due accounts. Unbilled receivables arise when revenues have been earned, but not billed, and are related to differences in timing. Unbilled receivables were not material as of January 31, 2018 or 2017.

Inventory Valuation
Inventories are carried at the lower of cost or net realizable value, with cost determined on the first-in, first-out basis. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Prior to adopting ASU 2015-11 "Inventory (Topic 330) Simplifying the Measurement of Inventory" in fiscal 2018, inventories were carried at the lower of cost or market.

Pre-Contract Costs
From time to time, Pre-contract costs incurred, excluding start-up costs which are expensed as incurred, are deferred to the balance sheet and included in "Inventories." if the Company determines that it is probable it will be awarded the specific anticipated contract. Deferred pre-contract costs are periodically reviewed and assessed for recoverability under the contract. Write-offs of pre-contract costs are charged to cost of sales when it becomes probable that such costs will not be recoverable. No pre-contract costs were included in "Inventories" at January 31, 2018 or 2017.

Property, Plant and Equipment
Property, plant and equipment held for use is carried at the asset's cost and depreciated over the estimated useful life of the asset.

The estimated useful lives used for computing depreciation are as follows:

Building and improvements	15 - 39 years
Manufacturing equipment by segment	
Applied Technology	3 - 5 years
Engineered Films	5 - 12 years
Aerostar	3 - 5 years
Furniture, fixtures, office equipment, and other	3 - 7 years

The cost of maintenance and repairs is charged to expense in the period incurred, and renewals and betterments are capitalized. The cost and related accumulated depreciation of assets sold or disposed are removed from the accounts and the resulting gain or loss is reflected in operations.

Fair Value Measurements
Fair value is defined as an exit price representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. The Company uses the established fair value hierarchy, which classifies or prioritizes the inputs used in measuring fair value. These classifications include:

Level 1 - Observable inputs such as quoted prices in active markets;

Level 2 - Inputs other than quoted prices in active markets that are either directly or indirectly observable; and

Level 3 - Unobservable inputs in which little or no market data exists, therefore, requiring an entity to develop its own assumptions.

The Company's financial assets required to be measured at fair value on a recurring basis include cash and cash equivalents and short-term investments. The Company determines fair value of its cash equivalents and short-term investments through quoted market prices. The fair values of accounts receivable and accounts payable approximate carrying values because of the short-term nature of these instruments.

The Company's goodwill and long-lived assets, including intangible assets subject to amortization, are measured at fair value on a non-recurring basis. These valuations are derived from valuation techniques in which one or more significant inputs are not observable.

For all acquisitions, the Company is required to measure the fair value of the net identifiable tangible and intangible assets acquired. In addition, the Company determines the estimated fair value of contingent consideration as of the acquisition date, and subsequently at the end of each reporting period. These valuations are derived from valuation techniques in which one or more significant inputs are not observable. Fair value measurements associated with acquisitions, including acquisition-related contingent liabilities, are described in Note 6 *Acquisition of and Investments in Businesses and Technologies.*

Intangible Assets
Intangible assets, primarily comprised of technologies acquired through acquisition, are recorded at cost and are presented net of accumulated amortization. Amortization is computed using the method that best approximates the pattern of economic benefits which the asset provides. The Company has used both the straight-line method and the undiscounted cash flows method to appropriately allocate the cost of intangible assets to earnings in each reporting period.

The straight-line method allocates the cost of such intangible assets ratably over the asset’s life. Under the undiscounted cash flow method, the estimated cash flow attributable to each year of an intangible asset’s life is calculated as a percentage of the total of the cash flows over the asset’s life and that percentage is applied to the initial value of the asset to determine the annual amortization to be recorded.

Intangible assets also include patents, trademarks, and other product rights attained to protect the Company’s intellectual property. The estimated useful lives of the Company’s intangible assets range from 3 to 20 years.

Goodwill
The Company recognizes goodwill as the excess cost of an acquired business over the net amount assigned to assets acquired and liabilities assumed. Goodwill is allocated to the reporting units that are expected to benefit from the synergies of the business combination. Acquisition earn-out payments are accrued at fair value as of the purchase date and payments reduce the accrual without affecting goodwill. Any change in the fair value of the contingent consideration after the acquisition date is recognized in "Cost of sales" in the Consolidated Statements of Income and Comprehensive Income.

Goodwill is tested for impairment on an annual basis during the fourth quarter and between annual tests whenever a triggering event indicates there may be an impairment. Impairment tests of goodwill are performed at the reporting unit level. A qualitative impairment assessment over relevant events and circumstances may be assessed to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If events and circumstances indicate the fair value of a reporting unit may be less than its carrying value, then the fair values are estimated based on discounted cash flows and are compared with the corresponding carrying value of the reporting unit. If the fair value of the reporting unit is less than the carrying amount, a goodwill impairment loss is recognized for the amount that the carrying value of the reporting unit, including goodwill, exceeds its fair value, limited to the total amount of goodwill allocated to the reporting unit. Prior to adopting ASU 2017-04 "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" in fiscal 2018 first quarter, the Company recognized a goodwill impairment loss for the amount that the carrying value of the reporting unit exceeded the reporting unit's implied fair value of the goodwill. The impact of adopting this new guidance is further described below in the *Accounting Pronouncements - Accounting Standards Adopted.*

When performing goodwill impairment testing, the fair values of reporting units are determined based on valuation techniques using the best available information, primarily discounted cash flow projections. Such valuations are derived from valuation techniques in which one or more significant inputs are not observable (Level 3 fair value measures).

Long-Lived Assets
The Company periodically assesses the recoverability of long-lived and intangible assets. An impairment loss is recognized when the carrying amount of an asset group exceeds the estimated undiscounted cash flows used in determining the fair value of the asset group. The amount of the impairment loss to be recorded is the excess of the carrying value of the assets within the group over their fair value. When performing long-lived assets impairment testing, the fair values of assets are determined based on valuation techniques using the best available information. Such valuations are derived from valuation techniques in which one or more significant inputs are not observable (Level 3 fair value measures).

Long-lived assets determined to be held for sale and classified as such in accordance with the applicable guidance are reported as long-term assets at the lower of the asset's carrying amount or fair value less the estimated cost to sell. Depreciation is not recorded once a long-lived asset has been classified as held for sale.

Acquisition-Related Contingent Consideration
Acquisition-related contingent consideration represents an obligation of the Company to transfer additional assets or equity interests if specified future events occur or conditions are met. This contingency is accounted for at fair value either as a liability or equity depending on the terms of the acquisition agreement. The Company determines the estimated fair value of contingent consideration as of the acquisition date, and subsequently at the end of each reporting period. In doing so, the Company makes significant estimates and assumptions regarding future events or conditions being achieved under the subject contingent agreement as well as the appropriate discount rate to apply. Such valuations are derived from valuation techniques in which one or more significant inputs are not observable (Level 3 fair value measures).

Litigation and Contingencies
We recognize legal costs as an expense in the period incurred. The Company is involved as a defendant in lawsuits, claims, regulatory inquiries, or disputes arising in the normal course of business, some of which allege substantial monetary damages. We accrue for any loss contingencies when losses become probable and are reasonably estimable. If the reasonable estimate of the loss is a range and no amount within the range is a better estimate, the minimum amount of the range is recorded as a liability. Amounts recovered by insurance are recognized when they are realized.

Revenue Recognition
The Company recognizes revenue when it is realized or realizable and has been earned. Revenue is recognized when there is persuasive evidence of an arrangement, the sales price is determinable, collectability is reasonably assured, and shipment or delivery has occurred (depending on the terms of the sale) or services have been rendered. The Company sells directly to customers or distributors who incur the expense and commitment for any post-sale obligations beyond stated warranty terms. Estimated returns, sales allowances, or warranty charges are recognized upon shipment of a product.

Certain contracts contain provisions for incentive payments that the Company may receive based on performance criteria related to product design, development and production standards. Revenue related to the incentive payments is recognized when ultimate realization by the Company is assured.

Operating Expenses
The primary types of operating expenses are classified in the income statement as follows:

Cost of sales	Research and development (R&D) expenses	Selling, general, and administrative (SG&A)expenses
Direct material costs	Personnel costs	Personnel costs
Material acquisition and handling costs	Professional service fees	Professional service fees
Direct labor	Material and supplies	Advertising
Factory overhead including depreciation and amortization	Facility allocation	Promotions
		Information technology equipment depreciation
Inventory obsolescence		Office supplies
Product warranties		Facility allocation
Shipping and handling cost		Bad debt expense

The Company's R&D expenditures consist primarily of internal direct and indirect costs associated with development of technologies to support its proprietary product lines in each of its divisions. These R&D costs are expensed as incurred.

General and administrative expenses included in SG&A are not allocated at the segment level. The Company's gross margin and segment operating income may not be comparable to industry peers due to variability in the classification of these expenses across the industries in which the Company operates.

Warranties
Accruals necessary for product warranties are estimated based on historical warranty costs and average time elapsed between purchases and returns for each division. Additional accruals are made for any significant, discrete warranty issues.

Share-Based Compensation
The Company records compensation expense related to its share-based compensation plans using the fair value method. Under this method, the fair value of share-based compensation is determined as of the grant date and the related expense is recorded over the period in which the share-based compensation vests.

Income Taxes
Deferred income taxes reflect future tax effects of temporary differences between the tax and financial reporting basis of the Company's assets and liabilities measured using enacted tax laws and statutory tax rates applicable to the periods when the temporary differences will affect taxable income. When necessary, deferred tax assets are reduced by a valuation allowance to reflect realizable value. All deferred tax balances are reported as long-term on the Consolidated Balance Sheets. Accruals are maintained for uncertain tax positions.

Accounting Pronouncements
Accounting Standards Adopted
In the fiscal 2018 first quarter, the Company early adopted Accounting Standards Update (ASU) No. 2017-04 (issued by the Financial Accounting Standards Board (FASB) in January 2017), "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" (ASU 2017-04) on a prospective basis. This ASU removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. Under the new guidance, a goodwill impairment will be measured as the amount by which a reporting unit’s carrying value exceeds its fair value. The amount of any impairment may not exceed the carrying amount of goodwill. The amendments should be applied on a prospective basis. As discussed in Note 7 *Goodwill, Long-lived Assets, and Other Intangibles*, management determined no triggering events had occurred for any of its three reporting units in fiscal 2018 and the Company's annual fourth quarter impairment testing did not result in a goodwill impairment loss being recorded; therefore, the early adoption of this guidance did not have any impact on the consolidated financial statements or the results of operations as of and for the twelve-month period ended January 31, 2018.

In the fiscal 2018 first quarter when it became effective, the Company adopted FASB ASU 2016-09 (issued in March 2016), "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" (ASU 2016-09). ASU 2016-09 amends the accounting for employee share-based payment transactions to require recognition of the tax effects resulting from the settlement of stock-based awards as discrete income tax expense or benefit in the income statement in the reporting period in which they occur. This guidance also requires that all tax-related cash flows resulting from share-based awards be disclosed as operating cash flows in the statement of cash flows and that cash paid to taxing authorities on the behalf of employees for withheld shares be classified as a financing activity in the statement of cash flows. Finally, this ASU allows companies to make an accounting policy election to either estimate the number of awards that are expected to vest, consistent with current GAAP, or account for forfeitures when they occur. The Company accounts for forfeitures as they occur. The Company is prospectively recognizing excess tax benefits or deficits on vesting or settlement of awards, when they occur, as a discrete income tax benefit or expense instead of as additional paid-in capital as required under previous guidance. This change to the Company's accounting policies resulted in recognition of income tax expense of $692, or $0.02 per diluted share, for the twelve-month period ended January 31, 2018. These tax-related cash flows are now classified within operating activities. The Company classifies tax payments made to taxing authorities on the employee's behalf for withheld shares as a financing activity on the statement of cash flows, as such the adoption of this guidance had no impact. Under the new guidance, excess tax benefits are no longer included in assumed proceeds under the treasury stock method of calculating earnings per share. The increase in incremental shares used in the weighted average diluted shares calculation was not material to the Company's diluted earnings per share calculation.

In the fiscal 2018 first quarter when it became effective, the Company adopted the FASB ASU No. 2015-11 (issued in July 2015), "Inventory (Topic 330) Simplifying the Measurement of Inventory" (ASU 2015-11) on a prospective basis. The amendments in ASU 2015-11 clarify that an entity should measure inventory within the scope of this update at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Substantial and unusual losses that result from subsequent measurement of inventory should be disclosed in the financial statements. Previously the Company reported its inventory at the lower of cost or market. Market was defined as replacement cost with a ceiling of net realizable value and a floor of net realizable value less a normal profit margin. The Company evaluates its inventory in all three reporting segments quarterly to determine if cost exceeds net realizable value and records a write-down, if necessary. The adoption of this guidance did not have any impact on the consolidated financial statements or the results of operations as of and for the twelve-month period ended January 31, 2018.

New Accounting Standards Not Yet Adopted

In February 2018, the FASB issued ASU No. 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" (ASU 2018-02). The amendments in this guidance allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act (TCJA). Consequently, the amendments eliminate the stranded tax effects resulting from the TCJA and will improve the usefulness of information reported. The amendments in this update are effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption of the amendments in this update is permitted, including adoption in any interim period for which financial statements have not yet been issued. The amendments in this update may be applied either in the period of adoption or retrospectively to each period (or periods) in which the effect of the change in the U.S. federal corporate income tax rate in the TCJA is recognized. The Company is evaluating the impact the adoption of this guidance will have on the stranded tax effects in accumulated other comprehensive income related to the Company's postretirement benefit plan.

In May 2017, the FASB issued ASU No. 2017-09, "Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting" (ASU 2017-09). The guidance amends the scope of modification accounting for share-based payment arrangements. The ASU provides guidance on the types of changes to the terms or conditions of share-based payment awards to which an entity would be required to apply modification accounting under Topic 718. Specifically, an entity would not apply modification accounting if the fair value, vesting conditions, and classification of the awards as equity instruments or as liability instruments are the same immediately before and after the modification to the award. The guidance is effective for annual periods, including interim periods, in fiscal years beginning after December 15, 2017. Early adoption is permitted and the amendments should be applied prospectively to an award modified on or after the adoption date. The Company currently has no plans to modify any of its outstanding awards. The Company does not expect the adoption of this guidance will have a significant impact on its consolidated financial statements, results of operations, and disclosures.

In March 2017, the FASB issued ASU No. 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Postretirement Benefit Cost" (ASU 2017-07). The guidance clarifies where the cost components of the net benefit cost should be reported in the income statement and it allows only the service cost to be capitalized. Currently the Company reports all of the components of the net benefit cost in "Operating income" in the Consolidated Statement of Income and Comprehensive Income. The net benefit cost for participants that are active employees is reported in the same manner as each participant's compensation cost is classified in the Consolidated Statement of Income and Comprehensive Income. The net benefit cost attributable to retired (inactive) participants is reported in "Selling, general, and administrative expenses" in the Consolidated Statement of Income and Comprehensive Income. Under the new guidance only the service cost component of the net benefit cost will be classified the same as the participant's compensation cost. The other components of the net benefit cost are required to be reported separately as a non-operating income (expense). The guidance is effective for annual periods, including interim periods, in fiscal years beginning after December 15, 2017. Early adoption is permitted and the amendments should be applied retrospectively. The Company does not expect this guidance will have a significant impact on its consolidated financial statements, results of operations and disclosures since it primarily will only change how the net benefit cost is classified in the Company's Consolidated Statements of Income and Comprehensive Income.

In February 2017, the FASB issued ASU No. 2017-05, "Other Income - Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets" (ASU 2017-05). Subtopic 610-20 was issued as part of the new revenue standard. It provides guidance for recognizing gains and losses from the transfer of nonfinancial assets in contracts with non-customers. The new guidance defines “in substance nonfinancial assets,” unifies guidance related to partial sales of nonfinancial assets, eliminates rules specifically addressing sales of real estate, removes exceptions to the financial asset derecognition model, and clarifies the accounting for contributions of nonfinancial assets to joint ventures. The amendments are effective for annual periods beginning after December 15, 2017 with early adoption permitted. Transition can use either the full retrospective approach or the modified retrospective approach. The Company does not expect the adoption of this guidance will have a significant impact on its consolidated financial statements, results of operations, and associated disclosures.

In November 2016, the FASB issued ASU 2016-16, "Income Taxes (Topic 740) Intra-Entity Transfers of Assets Other Than Inventory" (ASU 2016-16). Current GAAP prohibits the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. In addition, interpretations of this guidance have developed in practice over the years for transfers of certain intangible and tangible assets. This prohibition on recognition is an exception to the principle of comprehensive recognition of current and deferred income taxes in GAAP. The new guidance eliminates the exception for an intra-entity transfer of an asset other than inventory. The amendments in ASU 2016-16 are effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company can early adopt ASU 2016-16, but earlier adoption must be in the first quarter of the fiscal year. The amendments in ASU 2016-16 will be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The Company does not expect the adoption of this guidance will have significant impact on its consolidated financial statements, results of operations, and associated disclosures.

In August 2016 the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230) Classification of Certain Cash Receipts and Cash Payments" (ASU 2016-15). The new guidance clarifies eight cash flow classification issues where current GAAP was either unclear or had no specific guidance. The new standard is effective for annual reporting periods beginning after December 15, 2017 and interim periods within those fiscal years. All entities may elect to early adopt ASU 2016-15 in any interim period. If an entity early adopts it must adopt all eight of the amendments in the same period and if early adopted in an interim period any adjustments should be reflected as of the beginning of the year. The amendments in ASU 2016-15 will be applied using the modified retrospective transition method for each period presented. The specific classification issues clarified in the guidance either are not applicable to the Company or are consistent with how the Company currently classifies them, therefore the Company does not expect the adoption of this guidance will have a significant impact on the classification of these specific items in its Consolidated Statements of Cash Flows.

In February 2016 the FASB issued ASU No. 2016-02, "Leases (Topic 842)" (ASU 2016-02). The primary difference between previous GAAP and ASU 2016-02 is the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous GAAP. The guidance requires a lessee to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. When measuring assets and liabilities arising from a lease, a lessee (and a lessor) should include payments to be made in optional periods only if the lessee is reasonably certain to exercise an option to extend the lease or not to exercise an option to terminate the lease. Similarly, optional payments to purchase the underlying asset should be included in the measurement of lease assets and lease liabilities only if the lessee is reasonably certain to exercise that purchase option. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. If a lessee makes this election, it should recognize lease expense for such leases generally on a straight-line basis over the lease term. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018. Lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach includes a number of optional practical expedients that entities may elect to apply. An entity that elects to apply the practical expedients will, in effect, continue to account for leases that commence before the effective date in accordance with previous GAAP unless the lease is modified, except that lessees are required to recognize a right-of-use asset and a lease liability for all operating leases at each reporting date based on the present value of the remaining minimum rental payments that were tracked and disclosed under previous GAAP. In addition, FASB has amended Topic 842 prior to it becoming effective. The effective date and transition requirements for these amendments to Topic 842 are the same as ASU 2016-02. The Company is in the initial stages of evaluating the impact the adoption of this guidance will have on its consolidated financial statements, results of operations, and disclosures which will include recognizing a lease liability and a right-of-use asset representing its right to use the underlying asset for the lease term.

In January of 2016, the FASB issued ASU No. 2016-01, "Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities." The updated accounting guidance requires changes to the reporting model for financial instruments. The amendments in this guidance supersede the guidance to classify equity securities with readily determinable fair values into different categories (that is, trading or available-for sale) and require equity securities (including other ownership interests, such as partnerships, unincorporated joint ventures, and limited liability companies to be measured at fair value with changes in the fair value recognized through net income. An entity’s equity investments that are accounted for under the equity method of accounting or result in consolidation of an investee are not included within the scope of this update. The amendments also require separate presentation of financial assets and financial liabilities by measurement category and form of financial asset (that is, securities or loans and receivables) on the balance sheet or in the accompanying notes to the financial statements. This guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Since the securities held at the time of adoption that are in scope under this new guidance will be immaterial in amount, the Company does not expect the adoption of this guidance and the subsequent changes to Subtopic 825-10 in ASU 2018-03 "Technical Corrections and Improvements to Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities," will have a significant impact to the Company's financial statements, results of operations, and disclosures.

In May 2014 the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" (ASU 2014-09). ASU 2014-09 provides a comprehensive new recognition model that requires recognition of revenue when a company transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to receive in exchange for those goods or services. This guidance supersedes the revenue recognition requirements in FASB ASC Topic 605, "Revenue

Recognition," and most industry-specific guidance. ASU 2014-09 defines a five-step process to achieve this core principle and, in doing so, companies will need to use more judgment and make more estimates than under the current guidance. It also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts. In August 2015, the FASB approved a one-year deferral of the effective date (ASU 2015-14) and the standard is now effective for the Company for fiscal 2019 and interim periods therein. The guidance may be applied using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). In addition, FASB has amended Topic 606 prior to it becoming effective. The effective date and transition requirements for these amendments to Topic 606 are the same as ASU 2014-09. The Company has completed its assessment of the impact that the standard will have on revenue recognition. The Company has reviewed contracts for all material revenue streams across the Company's three divisions, held discussions with key stakeholders, and assessed potential impacts on the Company’s consolidated financial statements, results of operations, disclosures, and internal controls over financial reporting. The Company currently recognizes a significant majority of its revenue across all three divisions at a point-in-time with some exceptions that are recognized over time. These exceptions primarily relate to certain revenue streams within the Aerostar Division and installation sales within the Engineered Films Division. Management has determined that this will remain materially consistent upon adoption of the new standard, but has identified a few exceptions within the Aerostar Division and the Engineered Films Division for which revenue recognition will change from point-in-time to over time. As such, in these limited instances revenue may be recognized sooner than it had been in prior years under previously applicable accounting guidance. While these limited differences have been identified, due to the timing of activities under these revenue streams no adjustment to beginning retained earnings will be necessary upon adoption. Additionally, the Company will make additional disclosures related to the revenues arising from contracts with customers as required by the new standard. The Company will adopt this guidance in the first quarter of fiscal 2019 using the modified retrospective approach.

(Dollars in thousands, except per-share amounts)

NOTE 2 SELECTED BALANCE SHEET INFORMATION

Following are the components of selected balance sheet items:

	As of January 31,	
	2018[(a)]	2017[(a)]
Accounts receivable, net:		
Trade accounts	**$ 59,510**	$ 43,834
Allowance for doubtful accounts	**(978)**	(691)
	$ 58,532	$ 43,143
Inventories:		
Finished goods	**$ 8,054**	$ 5,438
In process	**961**	2,288
Materials	**46,336**	34,610
	$ 55,351	$ 42,336
Other current assets:		
Insurance policy benefit	**$ 759**	$ 802
Federal income tax receivable	**1,397**	604
Prepaid expenses and other	**3,705**	1,283
	$ 5,861	$ 2,689
Property, plant and equipment, net:		
Assets held for use and assets held for sale[(a)]:		
Land	**$ 3,234**	$ 3,054
Buildings and improvements	**80,299**	77,817
Machinery and equipment	**149,847**	142,471
Accumulated depreciation	**(127,523)**	(117,018)
	$ 105,857	$ 106,324
Property, plant and equipment subject to capital leases:		
Machinery and equipment	**488**	—
Accumulated amortization for capitalized leases	**(65)**	—
	423	—
	$ 106,280	$ 106,324
Other assets:		
Equity investments	**$ 1,955**	$ 2,371
Deferred income taxes	**19**	18
Other	**976**	1,283
	$ 2,950	$ 3,672
Accrued liabilities:		
Salaries and related	**$ 9,409**	$ 6,286
Benefits	**4,225**	3,960
Insurance obligations	**1,992**	2,400
Warranties	**1,163**	1,547
Income taxes	**226**	498
Other taxes	**1,880**	1,540
Acquisition-related contingent consideration	**1,036**	445
Other	**2,015**	1,379
	$ 21,946	$ 18,055
Other liabilities:		
Postretirement benefits	**$ 8,264**	$ 8,054
Acquisition-related contingent consideration	**2,010**	1,397
Deferred income taxes	**615**	1,421
Uncertain tax positions	**2,634**	2,610
Other	**272**	214
	$ 13,795	$ 13,696

[a] *The amount of assets and liabilities held for sale as of January 31, 2018 are separately disclosed in Note 3 - Assets Held For Sale in Item 8 of this Form 10-K. There were no assets or liabilities held for sale as of January 31, 2017.*

(Dollars in thousands, except per-share amounts)

NOTE 3 ASSETS HELD FOR SALE

Aerostar

The Company continually analyzes its product and service offerings to ensure we serve market segments with attractive near- and long-term growth prospects that are consistent with our core capabilities. Through this continued evaluation, the Company's Aerostar segment finalized a plan ("the Plan") to actively market the sale of its client private and radar product lines, each of which it has determined constitutes a business. During the second quarter of fiscal 2018 the Company determined that it was probable that these product lines would be sold within one year.

During the fourth quarter, Aerostar modified the plan and no longer marketed the sale of its radar product line. A buyer was identified and the sale of the client private business was completed subsequent to the end of fiscal 2018. As such, and as of January 31, 2018, the radar product line is not considered held for sale.

The Company has identified specific assets and liabilities that have been sold, including an allocation of goodwill based on the relative fair value of the business. The Company has determined that the final selling price will be in excess of the net book value. As such there is no impact to the Consolidated Statement of Income for the twelve-month period ended January 31, 2018.

Under the Plan, Aerostar will remain focused on serving the aerospace/defense market with its stratospheric balloon and radar product lines.

The amounts of assets and liabilities classified as held for sale were as follows:

	As of January 31
	2018
Assets held for sale	
Property, plant and equipment, net	63
Goodwill	103
Amortizable intangible assets, net	329
Other assets	17
Total assets held for sale	$ 512
Liabilities held for sale	
Current liabilities	$ 91
Total liabilities held for sale	$ 91

There were no assets held for sale as of January 31, 2017.

(Dollars in thousands, except per-share amounts)

NOTE 4 ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Other comprehensive income (loss) refers to revenue, expenses, gains, and losses that under GAAP are recorded as an element of shareholders' equity but are excluded from net income. The changes in the components of accumulated other comprehensive income (loss) (AOCI) are shown below:

	Cumulative foreign currency translation adjustment	Postretirement benefits	Total
Balance at January 31, 2016	$ (2,477)	$ (1,024)	$ (3,501)
Other comprehensive income (loss) before reclassifications	50	—	50
Amounts reclassified from accumulated other comprehensive (loss) after tax benefit of $129	—	(225)	(225)
Balance at January 31, 2017	(2,427)	(1,249)	(3,676)
Other comprehensive income before reclassifications	**1,234**	**—**	**1,234**
Amounts reclassified from accumulated other comprehensive (loss) after tax benefit of $44	**—**	**(131)**	**(131)**
Balance at January 31, 2018	**$ (1,193)**	**$ (1,380)**	**$ (2,573)**

Postretirement benefit cost components are reclassified in their entirety from AOCI to net periodic benefit cost. Net periodic benefit costs are reported in net income as “Cost of sales” or “Selling, general and administrative expenses” in a manner consistent with the classification of direct labor and personnel costs of the eligible employees.

NOTE 5 SUPPLEMENTAL CASH FLOW INFORMATION

	For the years ended January 31,		
	2018	2017	2016
Changes in operating assets and liabilities:			
Accounts receivable	**$ (7,014)**	$ (5,361)	$ 16,847
Inventories	**(11,062)**	1,215	7,564
Prepaid expenses and other assets	**(2,445)**	228	(111)
Accounts payable	**1,280**	2,558	(5,059)
Accrued and other liabilities	**2,560**	8,405	(9,353)
	$ (16,681)	$ 7,045	$ 9,888
Supplemental disclosures of cash flow information:			
Cash paid during the year for income taxes	**$ 19,854**	$ 6,618	$ 6,558
Interest paid	**$ 186**	$ 190	$ 129
Significant non-cash transactions:			
Capital expenditures included in accounts payable	**$ 418**	$ 84	$ 161
Assets acquired under capital leases	**$ 79**	$ —	$ —
Capital expenditures converted from inventory	**$ —**	$ —	$ 1,036

NOTE 6 ACQUISITIONS OF AND INVESTMENTS IN BUSINESSES AND TECHNOLOGIES

Colorado Lining International, Inc.

On September 1, 2017, the Company completed the acquisition of substantially all of the assets ("the acquisition") of Colorado Lining International, Inc., a Colorado corporation, headquartered in Parker, CO (“CLI”). The acquisition was aligned under the Company’s Engineered Films Division. The acquisition enhanced the Company’s geomembrane market position through extended service and product offerings with the addition of new design-build and installation service components, and advanced Engineered Films' business model into a vertically-integrated, full-service solutions provider for the geomembrane market. The acquisition constitutes a business and as such was accounted for as a business combination.

(Dollars in thousands, except per-share amounts)

The acquisition included a working capital adjustment that was settled in January 2018. The final working capital adjustment was $566 which brought the purchase price to $14,938. The purchase price includes potential earn-out payments with an estimated fair value of $1,256 which are contingent upon achieving certain revenues and operational synergies.

The fair value of the business acquired was allocated to the assets acquired and liabilities assumed based on their estimated fair values. The excess of the purchase price over the fair value of the identifiable assets acquired and liabilities assumed is reflected as goodwill. Goodwill recorded as part of the purchase price allocation was $5,714, all of which is tax deductible. Identifiable intangible assets acquired as part of the acquisition were $610, including definite-lived intangibles, such as customer relationships and order backlog.

Acquisition-related contingent consideration
The Company has contingent liabilities related to the current fiscal year acquisition of CLI, as well as the prior acquisitions of SBG Innovatie BV and its affiliate, Navtronics BVBA (collectively, SBG) in May 2014 and Vista Research, Inc. (Vista) in January 2012. The fair value of such contingent consideration is estimated as of the acquisition date, and subsequently at the end of each reporting period, using forecasted cash flows. Projecting future cash flows requires the Company to make significant estimates and assumptions regarding future events, conditions, or revenues being achieved under the subject contingent agreement as well as the appropriate discount rate. Such valuation techniques include one or more significant inputs that are not observable (Level 3 fair value measures).

Changes in the fair value of the liability for acquisition-related contingent consideration are as follows:

	For the years ended January 31,	
	2018	2017
Beginning balance	**$ 1,741**	$ 2,059
Fair value of contingent consideration acquired	**1,256**	—
Change in fair value of the liability	**457**	36
Contingent consideration earn-out paid	**(408)**	(354)
Ending balance	**$ 3,046**	$ 1,741
Classification of liability in the Consolidated balance sheet		
Accrued Liabilities	**$ 1,036**	$ 345
Other Liabilities, long-term	**2,010**	1,396
Balance at January 31, 2018	**$ 3,046**	$ 1,741

As part of the CLI acquisition in the current fiscal year, the Company entered into a contingent earn-out agreement, not to exceed $2,000. The earn-out is paid annually for three years after the purchase date, contingent upon achieving certain revenues and operational synergies. To date, the Company has made no payments on this potential earn-out liability.

In connection with the acquisition of SBG, Raven is committed to making additional earn-out payments, not to exceed $2,500 calculated and paid quarterly for ten years after the purchase date contingent upon achieving certain revenues. To date, the Company has paid a total of $890 of this potential earn-out liability.

Related to the acquisition of Vista in 2012, the Company is committed to making annual payments based upon earn-out percentages on specific revenue streams for seven years after the purchase date, not to exceed $15,000. To date, the Company has paid a total of $1,572 of this potential earn-out liability.

Equity Method Investments
The Company has owned interests in two affiliates accounted for as equity method investments: AgEagle and SST.

AgEagle
In February 2016, the Applied Technology Division acquired an interest of approximately 5% in AgEagle. AgEagle is a privately held company that is a leading provider of unmanned aerial systems (UAS) used for agricultural applications. Contemporaneously with the execution of the stock purchase agreement, AgEagle and the Company entered into a distribution agreement whereby the Company was appointed as the sole and exclusive distributor worldwide of the existing AgEagle system as it pertains to the

(Dollars in thousands, except per-share amounts)

agriculture market. The Company's equity ownership interest is considered a variable interest and it accounts for this investment under the equity method of accounting. The Company is not the primary beneficiary as the Company does not have the power to direct the activities that most significantly impact the VIE's economic performance and the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the entity. The purchase price was allocated between the equity ownership interest and an intangible asset for the exclusive distribution agreement. In April 2017, the Company determined that the investment in AgEagle, was fully impaired, further described in Note 7 *Goodwill, Long-lived Assets and Other Intangibles*, due to lower than expected cash flows. The Company has no commitments or guarantees related to this equity method investment.

SST
The Company's owned interest of approximately 22% in SST is accounted for using the equity method. SST is a privately-held agricultural software development and information services provider. Raven and SST are strategically aligned to provide customers with simple, more efficient ways to move and manage data in the precision agriculture market.

Changes in the net carrying value of the Company's equity investments was as follows:

	As of January 31,	
	2018	2017
Balance at beginning of year	**$ 2,371**	$ 2,805
Purchase price of equity investment	**—**	135
(Loss) income from equity investment	**(42)**	(72)
Amortization of intangible assets	**(320)**	(497)
Impairment to equity investment	**(72)**	—
Balance at end of year	**$ 1,937**	$ 2,371

NOTE 7 GOODWILL, LONG-LIVED ASSETS, AND OTHER CHARGES

Goodwill
For goodwill, the Company performs impairment reviews by reporting unit. At the end of fiscal 2016, the Company determined the reporting units to be Engineered Films Division, Applied Technology Division, and two separate reporting units in the Aerostar Division, one of which was Vista and one of which was all other Aerostar operations (Aerostar excluding Vista).

During the first quarter of fiscal 2017, management implemented managerial and financial reporting changes within Vista and Aerostar to further integrate Vista into the Aerostar Division. Integration actions included leadership re-alignment, including selling and business development leadership functions, re-deployment of employees across the division, and consolidation of administrative functions, among other actions. Based on the changes made, the Company consolidated the two separate reporting units within the Aerostar Division into one reporting unit for the purposes of goodwill impairment review. As such, as of April 30, 2016, and thereafter the Company has three reporting units: Engineered Films Division, Applied Technology Division, and Aerostar Division. The Company reviewed the quantitative and qualitative factors associated with the change in reporting units and determined there were no indicators of impairment at the time of the reporting unit change.

The changes in the carrying amount of goodwill by reporting unit are shown below:

	Applied Technology	Engineered Films	Aerostar	Total
Balance at January 31, 2016	$ 12,365	$ 27,518	$ 789	$ 40,672
Foreign currency translation adjustment	(23)	—	—	(23)
Reporting unit transfer balance[(a)]	—	—	—	—
Balance at January 31, 2017	12,342	27,518	789	40,649
Additions due to business combinations	—	**5,714**	—	**5,714**
Divestiture of business	—	—	**(52)**	**(52)**
Foreign currency translation adjustment	**399**	—	—	**399**
Balance at January 31, 2018	**$ 12,741**	**$ 33,232**	**$ 737**	**$ 46,710**

[(a)] *The Company combined the Aerostar and Vista reporting units in fiscal 2017. No goodwill amount was transferred between reporting units due to the goodwill impairment loss recorded at the Vista reporting unit during fiscal 2016.*

(Dollars in thousands, except per-share amounts)

Goodwill gross and net of accumulated impairment losses were as follows:

	As of January 31,	
	2018	2017
Gross goodwill	**$ 58,207**	$ 52,146
Accumulated impairment loss	**(11,497)**	(11,497)
Net goodwill	**$ 46,710**	$ 40,649

Goodwill is tested for impairment on an annual basis and between annual tests whenever a triggering event indicates there may be an impairment. The annual impairment tests were completed for each reporting unit in the fourth quarter based on a November 30th valuation date.

Fiscal 2018 Goodwill Impairment Testing
In fiscal 2018 no triggering events were deemed to have occurred in any of the quarterly periods and no impairments were recorded as a result of the annual impairment testing. In its annual impairment testing, the Company concluded a quantitative analysis was not required for the Applied Technology and Engineered Films reporting units. This was based on the Company's qualitative analysis and the fact that the estimated fair value in the Company's most recent impairment test substantially exceeded its carrying value for each of these reporting units.

For the Aerostar reporting unit, the Company determined the excess of the fair value of the reporting unit over its carry value in the previous year's annual impairment assessment was not significant enough based on the current macroeconomic conditions to perform a qualitative analysis. As such, the Company performed a quantitative analysis for the annual impairment assessment of the Aerostar reporting unit. In determining the estimated fair value of the Aerostar reporting unit, the Company was required to estimate a number of factors, including future revenues and expenses, projected capital expenditures, changes in net working capital and the discount rate. On the basis of these estimates, the November 30, 2017 analysis indicated that the estimated fair value of the Aerostar reporting unit exceeded the reporting unit carrying value by approximately $11,600 or approximately 41%, as such there were no goodwill impairment losses reported in the year ended January 31, 2018.

Fiscal 2017 Goodwill Impairment Testing
In the fiscal 2017 third quarter, the Company determined that a triggering event occurred for its Aerostar reporting unit, which had $789 of goodwill as of October 31, 2016. The triggering event was caused by lowering the financial expectations for net sales and operating income of the reporting unit and certain asset groups due to delays and uncertainties regarding the reporting unit’s pursuit of certain opportunities, including aerostat orders, certain classified stratospheric balloon pursuits, and radar pursuits. Aerostar was still actively pursuing these opportunities and some were in active negotiations, but the timing of certain aerostat and classified stratospheric balloon opportunities were being delayed more than previously expected and the likelihood of radar sales is lower due to the Company's decision to no longer actively pursue certain radar product opportunities**.**

A quantitative impairment analysis was completed using fair value techniques as of October 31, 2016. In determining the estimated fair value of the Aerostar reporting unit, the Company was required to estimate a number of factors, including projected revenue growth rates, projected operating results, terminal growth rates, economic conditions, anticipated future cash flows, and the discount rate. On the basis of these estimates, the October 31, 2016 analysis indicated that the estimated fair value of the Aerostar reporting unit exceeded the reporting unit carrying value by approximately $9,000, or approximately 30%.

There were no other triggering events during fiscal 2017 for any of the three reporting units, and no impairments were recorded as a result of the annual impairment testing for fiscal 2017.

Fiscal 2016 Goodwill Impairment Testing
In the fiscal 2016 third quarter, the Company determined that a triggering event occurred for its Vista reporting unit. The triggering event was caused by the lowering of financial expectations for sales and operating income of the reporting unit due to delays and uncertainties regarding the reporting unit’s pursuit of large international opportunities. Despite the Company having a pre-authorization letter from the prime contractor and being in negotiations on a large international contract through the fiscal 2016 second quarter, the contract did not materialize in the fiscal 2016 third quarter as expected. Expectations were lowered as the timing and likelihood of completing certain international pursuits became less certain. In addition, the Company made a change in the executive leadership of the reporting unit during the third quarter. The Step 1 impairment analysis was completed using fair value techniques as of October 31, 2015. In determining the estimated fair value of the Vista reporting unit, the Company was required to make assumptions and estimate a number of factors, including projected revenue growth rates (particularly those related to being successful in being awarded large, international contracts and the timing thereof), operating profit margin percentage, and the discount rate. On the basis of these estimates, the October 31, 2015 analysis indicated that the estimated fair value of the

(Dollars in thousands, except per-share amounts)

Vista reporting unit was less than the carrying value. The carrying value exceeded the estimated fair value by approximately $14,000, or 64%.

Pursuant to the applicable accounting guidance, the Company performed a Step 2 impairment analysis. In the Step 2 impairment analysis, the fair value determined was allocated to the assets and liabilities of the reporting unit. Based on this Step 2 impairment analysis the resulting implied fair value of the Vista goodwill was determined to have no value compared to the carrying value recorded for the reporting unit, $11,497. In the fiscal 2016 third quarter an impairment charge to operating income of $11,497 was reported as "Goodwill impairment loss" in the Consolidated Statements of Income and Comprehensive Income.

Intangible Assets
The following table provides the gross carrying amount and related accumulated amortization of definite-lived intangible assets:

	For the years ended January 31,					
	2018			2017		
	Amount	**Accumulated amortization**	**Net**	Amount	Accumulated amortization	Net
Existing technology	**$ 7,290**	**$ (6,996)**	**$ 294**	$ 7,136	$ (6,553)	$ 583
Customer relationships	**13,264**	**(4,834)**	**8,430**	12,987	(3,680)	9,307
Patents and other intangibles	**4,241**	**(2,381)**	**1,860**	4,378	(2,220)	2,158
Total	**$ 24,795**	**$ (14,211)**	**$ 10,584**	$ 24,501	$ (12,453)	$ 12,048

The estimated future amortization expense for these definite-lived intangible assets, as well as definite-lived intangible assets accounted for as part of the equity method investment in SST, during the next five years is as follows:

	2019	2020	2021	2022	2023
Estimated amortization expense	$ 1,988	$ 1,578	$ 1,163	$ 1,111	$ 1,013

Long-lived assets
The Company assesses the recoverability of long-lived assets, including definite-lived intangibles, equity method investments, and property plant and equipment if events or changes in circumstances indicate that an asset might be impaired. For long-lived and intangible assets, the Company performs impairment reviews by asset groups. Management periodically assesses for triggering events and discusses any significant changes in the utilization of long-lived assets. For purposes of recognition and measurement of an impairment loss, a long-lived asset is grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities.

When performing long-lived asset testing, the fair values of assets are determined based on valuation techniques using the best available information. Such valuations are derived from valuation techniques in which one or more significant inputs are not observable (Level 3 fair value measures). An impairment loss is recognized when the carrying amount of an asset is above the estimated undiscounted cash flows used in determining the fair value of the asset.

<u>Fiscal 2018 Long-lived Intangibles and Equity-Method Investment Impairment Assessment</u>
During first quarter of fiscal 2018, the Company determined that the investment in AgEagle, further described in Note 6 *Acquisitions of and Investments in Businesses and Technologies,* was impaired due to lower than expected cash flows. This impairment was determined to be other-than-temporary and an accelerated equity method investment loss of $72 was recorded in the first quarter. This loss was reported in "Other (expense), net" in the Consolidated Statements of Income and Comprehensive Income for the twelve-month period ended January 31, 2018. The Company also determined the customer relationship intangible asset related to the Ag Eagle exclusive distribution agreement was fully impaired. The total impairment loss reported related to this intangible asset was $259 and was recorded in the first quarter. This loss was reported in "Long-lived asset impairment loss" in the Consolidated Statements of Income and Comprehensive Income for the twelve-month period ended January 31, 2018.

The Company did not identify any additional triggering events for any of its assets groups or equity method investments the remainder of fiscal 2018.

<u>Fiscal 2017 Long-lived Intangibles Impairment Assessment</u>
The Company evaluated the triggering events described in the goodwill impairment analysis for fiscal 2017 and determined there were also triggering events with respect to the assets associated with the aerostat and stratospheric programs (Lighter than Air) and the radar product and radar services (Radar) asset groups in the Aerostar reporting unit in the third quarter of fiscal 2017, which resulted in an asset impairment test.

Using the sum of the undiscounted cash flows associated with each of the two asset groups, a quantitative test was performed for each asset group. The undiscounted cash flows for the Lighter than Air asset group exceeded the carrying value of the long-lived assets by approximately $110,000, or 800%, and no Step 2 test was deemed to be necessary based on the recoverability of the long-lived assets. For the Radar asset group, however, the undiscounted cash flows did not exceed the carrying value of the long-lived assets and the Company performed a Step 2 impairment analysis for the long-lived assets.

In the Step 2 impairment analysis, the fair value determined was allocated to the assets and liabilities of the Radar asset group. The resulting estimated fair value of the Radar asset group long-lived assets was $175 compared to the carrying value of $262 for the asset group. The shortfall of $87 was recorded in the fiscal 2017 third quarter as an impairment charge to operating income reported as "Long-lived asset impairment loss" in the Consolidated Statements of Income and Comprehensive Income. The total impairment loss related to property, plant, and equipment and patents was $62 and $25, respectively.

<u>*Fiscal 2016 Long-lived Intangibles Impairment Assessment*</u>
As described in our Annual Report on Form 10-K/A for the fiscal year ended January 31, 2016, the Company determined that the relevant cash flows for long-lived asset testing (the lowest level of cash flows that are largely independent of other assets) were one level below the Vista reporting unit. For Vista, these levels were determined to be asset groups identified for the client private business (CP) and Radar. Based on the assessment of the forecasts of cash flows and these asset groups, the Company concluded that certain long-lived assets of the Vista reporting unit, including finite-lived intangible assets, were impaired as of October 31, 2015.

Using the sum of the undiscounted cash flows associated with each of the two asset groups, a quantitative test was performed for each asset group. The undiscounted cash flows for the CP asset group exceeded the carrying value of the long-lived assets and no Step 2 test was deemed to be necessary based on the recoverability of the long-lived assets. For the Radar asset group, however, the undiscounted cash flows did not exceed the carrying value of the long-lived assets and the Company performed a Step 2 impairment analysis for the long-lived assets.

In the Step 2 impairment analysis, the fair value determined was allocated to the assets and liabilities of the Radar asset group. The resulting implied fair value of the Radar asset group long-lived assets was $103 compared to the carrying value of $3,916 for the asset group. The shortfall of $3,813 was recorded in the third quarter of fiscal 2016 as an impairment charge to operating income reported as "Long-lived asset impairment loss" in the Consolidated Statements of Income and Comprehensive Income. Of the total long-lived asset impairment of $3,813, $3,154 was related to amortizable intangible assets related to radar technology and radar customers, $554 was related to property, plant, and equipment, and $105 was related to patents. In addition, expenditures of $13 for additional patents related to the Radar asset group in the fiscal 2016 fourth quarter were also considered to have been impaired.

Other Charges
<u>*Inventory Write-downs*</u>
Due to the Company's decision to no longer actively pursue certain radar opportunities, during the fiscal 2017 third quarter the Company wrote-down radar inventory, purchased primarily during fiscal 2016. The decision to write-down this inventory is consistent with the triggering event identified during the fiscal 2017 third quarter relating to the Aerostar reporting unit and the Radar asset group. This radar-specific inventory write-down increased "Cost of sales" by $2,278 in fiscal 2017. There were no significant inventory write-downs in fiscal 2018 or 2016.

<u>*Pre-contract Deferred Cost Write-offs*</u>
From time to time, the Company incurs costs before a contract is finalized and such pre-contract costs are deferred to the balance sheet to the extent they relate to a specific project and the Company has concluded that is probable that the contract will be awarded for more than the amount deferred. Pre-contract cost deferrals are common with Vista's business pursuits. As described above, Vista was pursuing international opportunities and was in the process of negotiating a large international contract that did not materialize in the fiscal 2016 third quarter as expected. Expectations were lowered as the timing and likelihood of completing certain international pursuits became less certain. Corresponding to these lower expectations, the pre-contract costs associated with these pursuits were written off during the fiscal 2016 third quarter. Vista recorded a charge of $2,933, (which is comprised of $2,075 of costs capitalized as of July 31, 2015 and additional costs of $858 capitalized during August and September 2015) for the write-off of these pre-contract costs. This charge is recorded in “Cost of sales” in the Consolidated Statements of Income and Comprehensive Income. There were no pre-contract costs written-off in fiscal 2018 or 2017.

(Dollars in thousands, except per-share amounts)

NOTE 8 EMPLOYEE POSTRETIREMENT BENEFITS

Defined contribution 401(k) plan

As of January 1, 2018, the Company has one 401(k) plan covering substantially all employees. This plan, which covers the majority of employees, matches employee contributions up to 5%. Prior to January 1, 2018, the plan matched contributions up to 4%. Under this plan all account balances and future contributions and related earnings can be invested in several investment alternatives as well as the Company's common stock in accordance with each participant's elections. Participants may choose to make separate investment choices for current account balances and for future contributions. As a result of changes to the plan's permissible investment options effective January 1, 2017, participants' contributions to the 401(k) and the employer matching contributions are limited to 10% investment in the Company's common stock. This limit was previously 20%. The plan does not allow a participant to exchange more than 10% of their existing account balance into the Company's common stock nor permit exchanges that would cause the participant's investment in the Company's common stock to exceed 10%. Officers of the Company may not include Raven's common stock in their 401(k) plan elections.

Prior to January 1, 2017, the Company had a second 401(k) plan that was assumed as part of the Vista acquisition. This plan was terminated December 31, 2016 and all participant contributions were merged into the plan previously described. The Company also contributes to post-retirement and pensions as are required or customary for employees in foreign locations.

Deferred compensation plan

Effective January 1, 2018, the Company established a section 409A non-qualified deferred compensation plan. The purpose of the deferred compensation plan is to attract and retain key employees by providing them with an opportunity to defer receipt of a portion of their compensation, and there is no standard Company contribution or match. Participants are approved by the Board of Director's Personnel and Compensation Committee which is also responsible for the deferred compensation plan's general administration. A *rabbi trust* was also established in January 2018 which the Company may elect to make contributions to in order to provide a source of funds to assist the Company in meeting its obligation. Any assets held by the deferred compensation plan are still part of the Company's general assets and are subject to creditor's claims. The Company's common stock is not an investment option.

Total contribution expense to all such plans was $2,263, $2,030, and $1,952 for fiscal 2018, 2017, and 2016, respectively, and all of these contributions were to the 401(k) plan.

Defined benefit postretirement plan

In addition, the Company provides postretirement medical and other benefits to senior executive officers and senior managers. The accumulated benefit obligation is as follows:

	For the years ended January 31,	
	2018	2017
Benefit obligation at beginning of year	**$ 8,416**	$ 7,991
Service cost	**74**	80
Interest cost	**312**	333
Actuarial loss (gain) and assumption changes	**112**	341
Retiree benefits paid	**(343)**	(329)
Benefit obligation at end of year	**$ 8,571**	$ 8,416

(Dollars in thousands, except per-share amounts)

The following tables set forth the plan's pre-tax adjustment to accumulated other comprehensive income/loss:

	For the years ended January 31,	
	2018	2017
Amounts not yet recognized in net periodic benefit cost:		
Net actuarial loss	**$ 2,714**	$ 2,699
Prior service cost	**(572)**	(732)
Total pre-tax accumulated other comprehensive loss	**$ 2,142**	$ 1,967
Pre-tax accumulated other comprehensive loss - beginning of year related to benefit obligation	**$ 1,967**	$ 1,612
Reclassification adjustments recognized in benefit cost:		
Recognized net (loss)	**(96)**	(146)
Amortization of prior service cost	**159**	160
Amounts recognized in AOCI during the year:		
Net actuarial loss (gain)	**112**	341
Pre-tax accumulated other comprehensive loss - end of year related to benefit obligation	**$ 2,142**	$ 1,967

The net actuarial loss for fiscal year 2018 was the result of a decrease in the discount rate and unfavorable demographic experience partially offset by medical costs trending lower than expected. The net actuarial loss for fiscal year 2017 was the result of a decrease in the discount rate, a decrease in the average life expectancy by approximately half a year based on the application of an updated mortality projection scale, and census changes.

The liability and net periodic benefit cost reflected in the Consolidated Balance Sheets and Consolidated Statements of Income and Comprehensive Income were as follows:

	For the years ended January 31,	
	2018	2017
Beginning liability balance	**$ 8,416**	$ 7,991
Net periodic benefit cost	**323**	399
Other comprehensive loss	**175**	355
Total recognized in net periodic benefit cost and other comprehensive income	**498**	754
Retiree benefits paid	**(343)**	(329)
Ending liability balance	**$ 8,571**	$ 8,416
Current portion in accrued liabilities	**$ 307**	$ 362
Long-term portion in other liabilities	**$ 8,264**	$ 8,054
Assumptions used to calculate benefit obligation:		
Discount rate	**3.75%**	4.00%
Rate of compensation increase	**4.00%**	4.00%
Health care cost trend rates:		
Health care cost trend rate assumed for next year	**6.50%**	6.67%
Ultimate health care cost trend rate	**4.50%**	4.50%
Year that the rate reaches the ultimate trend rate	**2030**	2030
Assumptions used to calculated the net periodic benefit cost:		
Discount rate	**4.00%**	4.25%
Rate of compensation increase	**4.00%**	4.00%

The discount rate is based on matching rates of return on high-quality fixed-income investments with the timing and amount of expected benefit payments. No material fluctuations in retiree benefit payments are expected in future years. The total estimated cost to be recognized from AOCI into net periodic benefit cost over the next fiscal year is $(31); $129 of recognized net loss and
$(160) of amortized prior service cost.

(Dollars in thousands, except per-share amounts)

The assumed health care cost trend rate has a significant effect on the amounts reported. The impact of a one-percentage point change in assumed health care rates would have the following effects:

	January 31, 2018	
	One-percentage-point increase	One-percentage-point decrease
Effect on total of service and interest cost components	**$ 71**	**$ (58)**
Effect on accumulated postretirement benefit obligation	**$ 1,180**	**$ (1,045)**

The Company expects to make $313 in postretirement medical and other benefit payments in fiscal 2019. The following postretirement other than pension benefit payments, which reflect expected future service as appropriate, are expected to be paid:

	2019	2020	2021	2022	2023 - 2028
Expected postretirement medical and other benefit payments	$ 313	$ 323	$ 332	$ 341	$ 2,192

NOTE 9 **WARRANTIES**

Changes in the warranty accrual were as follows:

	For the years ended January 31,		
	2018	2017	2016
Beginning balance	**$ 1,547**	$ 1,835	$ 3,120
Change in provision	**1,762**	1,597	1,945
Settlements made	**(2,146)**	(1,885)	(3,230)
Ending balance	**$ 1,163**	$ 1,547	$ 1,835

NOTE 10 **INCOME TAXES**

The reconciliation of income tax computed at the federal statutory rate to the Company's effective income tax rate was as follows:

	For the years ended January 31,		
	2018	2017	2016
Tax at U.S. federal statutory rate	**33.8 %**	35.0 %	35.0 %
Impact of the Tax Cuts and Jobs Act	**(0.1)**	—	—
State and local income taxes, net of U.S. federal tax benefit	**1.6**	0.7	(2.8)
Tax credit for research activities	**(1.8)**	(3.7)	(24.2)
Tax benefit on qualified production activities	**(3.0)**	(2.8)	(13.7)
Tax benefit on insurance premiums	**(1.3)**	(1.5)	(10.3)
Change in uncertain tax positions	**0.1**	(0.3)	1.8
Foreign tax rate difference	—	(0.3)	(2.9)
Impact of settlement of stock-based awards	**1.2**	—	—
Other, net	—	0.4	(1.7)
	30.5 %	27.5 %	(18.8)%

The increase in the fiscal 2018 effective tax rate is primarily due to higher pre-tax income in the current year and recognition of discrete tax expense related to the Company's adoption of ASU 2016-09 in fiscal 2018 as further discussed in Note 1 *Summary of Significant Accounting Policies*. This ASU requires that the tax effects resulting from the settlement of stock-based awards be recognized as a discrete income tax expense or benefit in the income statement in the reporting period in which they occur. Additionally, the Tax Cuts and Jobs Act (TCJA), effective January 1, 2018, lowered the Company's federal statutory rate by 1.2 percentage points for the fiscal year. The TCJA reduces the federal statutory rate to 21% for fiscal 2019.

(Dollars in thousands, except per-share amounts)

The TCJA imposes a one-time mandatory transition tax on accumulated foreign earnings, which resulted in a provisional amount of $265 for the Company. The Company re-measured its ending deferred tax assets and liabilities to reflect the realization at the new 21% corporate tax rate. The re-measurement resulted in a provisional $312 reduction to fiscal 2018 tax expense.

In addition, the SEC staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the TCJA (“SAB 118”), which allows the Company to record provisional amounts during a measurement period not to extend beyond one year from the enactment date. Since the TCJA was passed late in the fourth quarter of fiscal 2018, ongoing guidance and accounting interpretation are expected over the next year, and significant data and analysis is required to finalize amounts recorded pursuant to the TCJA, the Company considers the accounting of the transition tax, deferred tax re-measurements, indefinite reinvestment assertion, and other items to be incomplete due to the forthcoming guidance and its ongoing analysis of final year-end data and tax positions. Also, the Company has not yet determined its policy election as to whether it will recognize deferred taxes for basis differences expected to reverse as Global Intangible Low Taxed Income (“GILTI”) or whether GILTI will be accounted for as a period cost if and when incurred. The Company expects to complete its analysis within the measurement period in accordance with SAB 118.

The Company's fiscal 2017 effective rate is lower than the federal statutory rate primarily due to a $779 tax benefit for qualified production activities and a $1,044 tax benefit from the R&D tax credit.

The negative fiscal 2016 effective rate is lower than the federal statutory rate primarily due to the combination of a significantly lower book income year-over-year, a $560 tax benefit for qualified production activities, and a $989 tax benefit from the R&D tax credit extension passed by Congress in fiscal 2016. The qualified production deduction is based on estimated taxable income. Taxable income is higher in comparison to pre-tax income for fiscal 2016 primarily due to $14,756 of goodwill and long-lived asset impairment losses recorded in net income which are not currently deductible but are amortizable for income tax purposes.

Significant components of the Company's income tax provision were as follows:

	For the years ended January 31,		
	2018	2017	2016
Income tax provision:			
Currently payable	**$ 18,754**	$ 7,354	$ 5,272
Deferred expense (benefit)	**(787)**	307	(6,039)
Income tax expense (benefit)	**$ 17,967**	$ 7,661	$ (767)

(Dollars in thousands, except per-share amounts)

Deferred Tax Assets (Liabilities)
Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities were as follows:

	As of January 31,	
	2018	2017
Deferred tax assets:		
Accounts receivable	**$ 184**	$ 212
Inventories	**664**	978
Accrued vacation	**647**	887
Insurance obligations	**137**	383
Accrued benefit liabilities	**—**	41
Warranty obligations	**262**	565
Postretirement benefits	**1,929**	3,072
Uncertain tax positions	**491**	803
Share-based compensation	**1,761**	3,201
Other accrued liabilities	**54**	68
	6,129	10,210
Deferred tax (liabilities):		
Depreciation and amortization	**(6,082)**	(10,565)
Other	**(643)**	(1,048)
	(6,725)	(11,613)
Net deferred tax (liability)	**$ (596)**	$ (1,403)

Uncertain Tax Positions
A summary of the activity related to the gross unrecognized tax benefits (excluding interest and penalties) is as follows:

	For the years ended January 31,	
	2018	2017
Gross unrecognized tax benefits at beginning of year	**$ 2,110**	$ 2,327
Increases in tax positions related to the current year	**426**	279
Decreases in tax positions related to prior years	**—**	(193)
Decreases as a result of lapses in applicable statutes of limitation	**(320)**	(303)
Gross unrecognized tax benefits at end of year	**$ 2,216**	$ 2,110

Fiscal year 2018 changes to uncertain tax positions related to prior years resulted from lapses of applicable statutes of limitations.
Fiscal year 2017 included a decrease to prior period tax positions primarily related to a favorable determination by a state tax authority impacting the Company's estimated liability.

The total unrecognized tax benefits (including interest and penalty) that, if recognized, would affect the Company's effective tax rate were $2,143, $1,806, and $2,140 as of January 31, 2018, 2017, and 2016, respectively. The Company recognizes interest and penalties accrued related to unrecognized tax benefits in income tax expense. At January 31, 2018, 2017, and 2016, accrued interest and penalties were $418, $500, and $672, respectively. The Company does not expect any significant change in the amount of unrecognized tax benefits in the next fiscal year.

Additional Tax Information
The Company files tax returns, including returns for its subsidiaries, with various federal, state, and local jurisdictions. Uncertain tax positions are related to tax years that remain subject to examination. As of January 31, 2018, federal tax returns filed in the U.S. for fiscal years ended January 31, 2015 through January 31, 2017 remain subject to examination by federal tax authorities. In state and local jurisdictions, tax returns for fiscal years ended January 31, 2012 through January 31, 2017 remain subject to examination by state and local tax authorities. International jurisdictions have open tax years varying by location beginning in fiscal 2013.

Pre-tax book income for the U.S. companies and the foreign subsidiaries was $58,757 and $229, respectively. As of January 31, 2018, the Company has recorded United States income taxes of $265 on $3,242 of undistributed earnings from its Canadian and

(Dollars in thousands, except per-share amounts)

European subsidiaries. The Company plans to reinvest its foreign earnings internationally and as a result has not recorded additional income or withholding tax on undistributed foreign earnings. The Company will continue to assess if there is a need in the future to bring back a portion of the foreign cash which was subject to the transition tax.

NOTE 11 **FINANCING ARRANGEMENTS**

The Company entered into a credit facility on April 15, 2015 with JPMorgan Chase Bank, N.A., Toronto Branch as Canadian Administrative Agent, JPMorgan Chase Bank, National Association, as administrative agent, and each lender from time to time party thereto (the Credit Agreement). The Credit Agreement provides for a syndicated senior revolving credit facility up to $125,000 with a maturity date of April 15, 2020. Loan proceeds may be utilized by Raven for strategic business purposes, such as business acquisitions, and for net working capital needs.

Simultaneous with execution of the Credit Agreement, Raven, Aerostar, Vista, and Integra entered into a guaranty agreement in favor of JPMorgan Chase Bank National Association in its capacity as administrator under the Credit Agreement for the benefit of JPMorgan Chase Bank N.A., Toronto Branch and the lenders and their affiliates under the Credit Agreement.

The unamortized debt issuance costs associated with this Credit Agreement were as follows:

	As of January 31,	
	2018	2017
Unamortized debt issuance costs[(a)]	**$ 242**	$ 352

[(a)] Unamortized debt issuance costs are reported as "Other assets" in the Consolidated Balance Sheets.

Loans or borrowings defined under the Credit Agreement bear interest and fees at varying rates and terms defined in the Credit Agreement based on the type of borrowing as defined. The Credit Agreement includes annual administrative and unborrowed capacity fees. Such fees were $211, $215, and $213 for the years ended January 31, 2018, 2017, and 2016, respectively.

The Credit Agreement also contains customary affirmative and negative covenants, including those relating to financial reporting and notification, limits on levels of indebtedness and liens, investments, mergers and acquisitions, affiliate transactions, sales of assets, restrictive agreements, and change in control as defined in the Credit Agreement. The Company requested and received the necessary covenant waivers relating to its late filing of financial information in fiscal 2017. Financial covenants include an interest coverage ratio and funded indebtedness to earnings before interest, taxes, depreciation, and amortization as defined in the Credit Agreement.

Letters of credit (LOC) issued and outstanding were as follows:

	As of January 31,	
	2018	2017
Letters of credit outstanding [(a)]	**$ 1,097**	$ 514

[(a)]Any draws required under the LOC' would be settled with available cash or borrowings under the Credit Agreement.

There have been no borrowings under any of the credit agreements and there were no borrowings outstanding for any of the fiscal periods covered by this Annual Report on Form 10-K. Availability under the Credit Agreement for borrowings as of January 31, 2018 was approximately $124,000.

<u>*Capital leases*</u>
The Company's recent asset acquisition of CLI further described in Note 6 *Acquisition of and Investments in Businesses and Technologies* included a fleet of vehicles under capital leases to support Engineered Film's new design-build and installation service capabilities. The Company had no leased assets under capital leases in fiscal 2017.

(Dollars in thousands, except per-share amounts)

Future minimum lease payments under capital leases and the present value of the net minimum lease payments as of January 31, 2018 were as follows:

	2019	2020	2021	2022	Thereafter	Total
Minimum lease payments	$ 237	$ 169	$ 90	$ 32	$ —	$ 528

Less amount representing estimated executory costs such as taxes, license and insurance including profit thereon.	(17)
Net minimum lease payments	511
Less amounts representing interest	(63)
Present value of net minimum lease payments	**$ 448**

At January 31, 2018, the present value of net minimum lease payments due within one year is $196. Amortization and interest expense for the year ended January 31, 2018 was $65 and $13, respectively.

Operating leases
The Company leases certain vehicles, equipment, and facilities under operating leases. Total rent and lease expense was $2,104, $2,028, and $2,095 in fiscal 2018, 2017, and 2016, respectively.

Future minimum lease payments under non-cancelable operating leases are as follows:

	2019	2020	2021	2022	2023	Thereafter
Minimum lease payments	$ 2,012	$ 1,925	$ 1,780	$ 501	$ 437	$ —

NOTE 12 COMMITMENTS AND CONTINGENCIES

The Company is involved as a party in lawsuits, claims, regulatory inquiries, or disputes arising in the normal course of its business, the potential costs and liability of which cannot be determined at this time. Management does not believe the ultimate outcomes of its legal proceedings are likely to be material to its results of operations, financial position, or cash flows. The previously disclosed patent infringement lawsuit in which Capstan Ag Systems, Inc. made certain infringement claims against the Company has been settled on a confidential basis.

The Company has insurance policies that provide coverage to various degrees for potential liabilities arising from legal proceedings.

The Company entered into a Gift Agreement (the Agreement) effective in January 2018 with the South Dakota State University Foundation, Inc. (the Foundation). The Agreement states that the Company will make a $5,000 gift to the Foundation, conditional on certain other actions that had not occurred as of January 31, 2018. This gift will be used by South Dakota State University (SDSU), located in Brookings, SD, for the establishment of a precision agriculture facility to support SDSU's Precision Agriculture degrees and curriculum. This facility will assist the Company in further collaboration with faculty, staff, and students on emerging technology in support of the growing need for precision agriculture practices and tools. As the Agreement is conditional upon certain other actions yet to occur, the gift will not be recorded as an expense or liability until those contingencies are satisfied. The Company expects these contingencies to be satisfied during fiscal 2019.

In addition to commitments disclosed elsewhere in the Notes to the Consolidated Financial Statements, the Company has unconditional purchase obligations for inventory and other obligations that arise in the normal course of business operations. The majority of these obligations are related to the Applied Technology and Engineered Films divisions and arise from the purchase of raw materials inventory.

NOTE 13 RESTRUCTURING COSTS

The Company has no ongoing restructuring plans or unpaid restructuring costs at January 31, 2018. No restructuring costs were incurred in fiscal 2018 or 2017.

In addition to Applied Technology reducing its international sales infrastructure, scaling back marketing initiatives, lowering general manufacturing overhead, and focusing R&D spending on core product lines, the Company initiated the exit of Applied

(Dollars in thousands, except per-share amounts)

Technology's non-strategic St. Louis, Missouri contract manufacturing operations in fiscal 2015. In fiscal 2016 first quarter, the Company announced that Applied Technology successfully sold and transferred its contract manufacturing operations in the St. Louis, Missouri area. Proceeds from the sale of these assets were $1,288 and gains of $611 were recorded in fiscal 2016 as a result of the exit activity.

This exit strategy of Applied Technology was fully completed in fiscal 2017 with the sale of the idle St. Louis manufacturing facility. Proceeds from the sale of this facility were $960 and gains of $160 were recognized in "Selling, general, and administrative expenses in the Consolidated Statements of Income and Comprehensive Income for fiscal 2017.

With continued weak end-market demand in the Engineered Films and Applied Technology divisions, the Company announced and implemented a restructuring plan in fiscal 2016 first quarter to lower its cost structure. The cost reductions covered all divisions and included the corporate offices, but were weighted to Applied Technology as a result of the decline in this business and the expectation of continued end-market weakness for this division. As a result of this action, the Company incurred restructuring costs for severance benefits of $588 for the year ended January 31, 2016. The Company reported $407 of restructuring expense in "Cost of sales" and $181 in "Selling, general, and administrative expenses" in the Consolidated Statements of Income and Comprehensive Income for fiscal 2016. Substantially all of these restructuring costs related to Applied Technology. This restructuring plan was completed during the fiscal 2016 second quarter.

In the fiscal 2016 third quarter, the Company's Aerostar Division implemented a restructuring plan at Vista to lower its cost structure due to reduced demand expectations primarily related to delays and uncertainty surrounding international pursuits. Restructuring costs for severance benefits were $73 for the year ended January 31, 2016. The Company reported $58 of this expense in "Cost of sales" and $15 in "Research and development expenses" in the Consolidated Statements of Income and Comprehensive Income. This restructuring plan was completed during fiscal 2016 fourth quarter and there were no unpaid costs at January 31, 2016.

NOTE 14 SHARE-BASED COMPENSATION

At January 31, 2018, the Company had two shareholder approved share-based compensation plans, which are described below. The compensation cost and related income tax benefit for these plans were as follows:

	For the years ended January 31,		
	2018	2017	2016
Share-based compensation cost	**$ 3,725**	$ 3,071	$ 2,311
Tax benefit	**1,275**	1,103	819

Share-based compensation cost capitalized as part of inventory is not significant.

Equity Compensation Plans
The Company reserved shares of its common stock for issuance to directors, officers, employees, and certain advisors of the Company through incentive stock options and non-statutory stock options, stock appreciation rights, stock awards, restricted stock, restricted stock units (RSUs), and performance awards to be granted under the Amended and Restated 2010 Stock Incentive Plan (the Plan) which was approved by shareholders on May 22, 2012. The aggregate number of shares initially available for grant under the Plan was 2,000,000. As of January 31, 2018, the number of shares available for grant under the Plan was 1,163,074. Option exercises under the Plan are settled in newly issued common shares.

The Plan is administered by the Personnel and Compensation Committee of the Board of Directors (the Committee), consisting of two or more independent directors of the Company. The Committee determines the option exercise prices and the term of each grant. The Committee may accelerate the exercisability of awards under the Plan or extend the term of such awards to the extent allowed by the Plan to a maximum term of ten years. Two types of awards were granted under the Plan in fiscal 2018, stock options and restricted stock units.

Stock Option Awards
The Company granted 85,800 non-qualified stock options during fiscal 2018. Options are granted with exercise prices not less than the market value of the Company's common stock at the date of grant. The stock options vest over a four-year period and expire after five years. Options contain retirement and change-in-control provisions that may accelerate the vesting period. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model. The Company uses historical data to estimate option exercises, employee terminations, and volatility within this valuation model.

(Dollars in thousands, except per-share amounts)

The weighted average assumptions used for the Black-Scholes option pricing model by grant year are as follows:

	For the years ended January 31,		
	2018	2017	2016
Risk-free interest rate	**1.68%**	1.05%	1.33%
Expected dividend yield	**1.78%**	3.33%	2.59%
Expected volatility factor	**33.87%**	32.61%	36.81%
Expected option term (in years)	**4.25**	4.00	3.75
Weighted average grant date fair value	**$ 7.35**	$ 3.05	$ 4.77

Outstanding stock options as of January 31, 2018 and activity for the year then ended are presented below:

	Number of options	Weighted average exercise price	Aggregate intrinsic value	Weighted average remaining contractual term (years)
Outstanding, January 31, 2017	**990,900**	**$ 24.58**		
Granted	**85,800**	**29.20**		
Exercised	**(206,000)**	**31.01**		
Forfeited	**(43,600)**	**19.05**		
Expired	**(124,150)**	**31.70**		
Outstanding, January 31, 2018	**702,950**	**$ 22.34**	**$ 11,396**	**2.49**
Outstanding exercisable, January 31, 2018	**331,717**	**$ 23.43**	**$ 5,014**	**1.95**
Options vested, or expected to vest, January 31, 2018	**702,950**	**$ 22.34**	**$ 11,396**	**2.49**

The intrinsic value of a stock award is the amount by which the fair value of the underlying stock exceeds the exercise price of the award. The total intrinsic value of options exercised was $1,036, $0, and $172 during the years ended January 31, 2018, 2017, and 2016, respectively. The total fair value of options vested was $1,312, $1,323, and $1,755 during the years ended January 31, 2018, 2017, and 2016, respectively. As of January 31, 2018, the total unrecognized compensation cost for non-vested awards was $838. This amount is expected to be recognized over a weighted average period of 1.93 years.

Restricted Stock Unit Awards

The Company granted 61,270 time-vested RSUs during the year ended January 31, 2018. The fair value of a time-vested RSU is measured based upon the closing market price of the Company's common stock on the day prior to the date of grant. Time-vested RSUs will vest if, at the end of the vesting period, the employee remains employed by the Company. RSUs contain retirement and change-in-control provisions that may accelerate the vesting period. Dividends are cumulatively earned on the time-vested RSUs over the vesting period and are forfeited if such RSUs do not vest.

Activity for time-vested RSUs under the Plan in fiscal 2018 was as follows:

	Number of restricted stock units	Weighted average grant date fair value per share
Outstanding, January 31, 2017	**126,729**	**$ 19.19**
Granted	**61,270**	**29.33**
Vested	**(23,122)**	**29.62**
Forfeited	**(18,028)**	**18.92**
Outstanding, January 31, 2018	**146,849**	**$ 21.81**
Cumulative dividends, January 31, 2018	**5,129**	

(Dollars in thousands, except per-share amounts)

The Company also granted performance-based RSUs during the year ended January 31, 2018. The exact number of performance shares to be issued will vary from 0% to 150% of the target award, depending on the Company's actual performance over the vesting period in comparison to the target award. The target awards for the fiscal 2016, 2017 and 2018 grants are based on return on equity (ROE), which is defined as net income divided by the average of beginning and ending shareholders' equity for the fiscal year. The performance-based RSUs will vest if, at the end of the performance period, the Company has achieved certain performance goals and the employee remains employed by the Company. Performance-based RSUs contain retirement and change-in-control provisions that may accelerate the vesting period. Dividends are cumulatively earned on performance-based RSUs over the vesting period and are forfeited if such RSUs do not vest.

The fair value of the performance-based restricted stock units is based upon the closing market price of the Company's common stock on the day prior to the grant date. The number of restricted stock units granted is based on 100% of the target award. The number of RSUs that will vest is determined by the estimated ROE target over the performance period. The estimated performance factor used to estimate the number of restricted stock units expected to vest is evaluated quarterly. The number of restricted stock units issued at the vesting date will be based on actual results.

Activity for performance-based RSUs under the Plan in fiscal 2018 was as follows:

	Number of restricted stock units expected to vest	Weighted average grant date fair value per share
Outstanding, January 31, 2017	**146,519**	**$ 16.78**
Granted	**22,745**	**29.20**
Vested	—	—
Forfeited	**(16,164)**	**16.89**
Performance-based adjustment	**26,629**	**23.96**
Outstanding, January 31, 2018	**179,729**	**$ 19.40**
Cumulative dividends, January 31, 2018	**7,130**	

The weighted average grant date fair values of the time-based and performance-based RSUs by grant year are as follows:

	For the years ended January 31,		
	2018	2017	2016
Weighted average grant date fair value: time-based RSUs	**$ 29.33**	$ 15.94	$ 19.25
Weighted average grant date fair value: performance-based RSUs	**$ 29.20**	$ 15.61	$ 20.09

The total intrinsic value of RSUs vested (or converted to shares) was $685, $754, and $1,437 during the years ended January 31, 2018, 2017, and 2016, respectively. The total fair value of RSUs vested (or converted to shares) was $678, $761, and $1,411, during the years ended January 31, 2018, 2017, and 2016, respectively. 326,578 outstanding RSUs with a weighted average term of 1.81 years and an aggregate intrinsic value of $12,590 at January 31, 2018 are expected to vest. None of the outstanding RSUs are vested as of January 31, 2018. The total unrecognized compensation cost for nonvested RSU awards at January 31, 2018 was $3,054. This amount is expected to be recognized over a weighted average period of 1.81 years.

(Dollars in thousands, except per-share amounts)

Deferred Stock Compensation Plan for Directors
The Company reserved 100,000 shares of its common stock for issuance to certain members of its Board of Directors under the Deferred Stock Compensation Plan for Directors of Raven Industries, Inc. (the Director Plan). The Director Plan is administered by the Personnel and Compensation Committee of the Board of Directors. Under the Director Plan, any non-employee director receives a grant of a number of stock units as deferred compensation to be converted into common stock after retirement from the Board of Directors and may elect to have a specified percentage of their annual retainer converted to stock units. Under the Director Plan, a stock unit is the right to receive one share of the Company's common stock as deferred compensation, to be distributed from an account established by the Company in the name of the non-employee director. Stock units have the same value as a share of common stock but cannot be sold. Stock units are a component of the Company's equity.

Stock units granted under the Director Plan vest immediately and are expensed at the date of grant. When dividends are paid on the Company's common shares, stock units are added to the directors' balances and a corresponding amount is removed from retained earnings. The intrinsic value of a stock unit is the fair value of the underlying shares.

Outstanding stock units as of January 31, 2018 and changes during the year then ended are presented below:

	Number of stock units	Weighted average price
Outstanding, January 31, 2017	**98,649**	**$ 20.82**
Granted	**12,000**	**35.00**
Deferred retainers	**1,143**	**35.00**
Dividends	**1,547**	**33.98**
Converted into common shares	**(25,725)**	**33.88**
Outstanding, January 31, 2018	**87,614**	**$ 19.35**

NOTE 15 NET INCOME PER SHARE

Basic net income per share is computed by dividing net income by the weighted average common shares and stock units outstanding. Diluted net income per share is computed by dividing net income by the weighted average common and common equivalent shares outstanding which includes the shares issuable upon exercise of employee stock options (net of shares assumed purchased with the option proceeds), stock units, and restricted stock units outstanding. Performance share awards are included in the diluted calculation based upon what would be issued if the end of the most recent reporting period was the end of the term of the award.

Certain outstanding options and restricted stock units were excluded from the diluted net income per-share calculations because their effect would have been anti-dilutive under the treasury stock method. The options and restricted stock units excluded from the diluted net income per share calculation were as follows:

	For the years ended January 31,		
	2018	2017	2016
Anti-dilutive options and restricted stock units	**344,774**	884,099	1,107,733

(Dollars in thousands, except per-share amounts)

The computation of earnings per share is presented below:

	For the years ended January 31,		
	2018	2017	2016
Numerator:			
Net income attributable to Raven Industries, Inc.	**$ 41,022**	$ 20,191	$ 4,776
Denominator:			
Weighted average common shares outstanding	**35,945,225**	36,142,416	37,237,717
Weighted average stock units outstanding	**104,980**	100,019	86,745
Denominator for basic calculation	**36,050,205**	36,242,435	37,324,462
Weighted average common shares outstanding	**35,945,225**	36,142,416	37,237,717
Weighted average stock units outstanding	**104,980**	100,019	86,745
Dilutive impact of stock options and RSUs	**399,620**	129,480	75,481
Denominator for diluted calculation	**36,449,825**	36,371,915	37,399,943
Net income per share - basic	**$ 1.14**	$ 0.56	$ 0.13
Net income per share - diluted	**$ 1.13**	$ 0.56	$ 0.13

NOTE 16 BUSINESS SEGMENTS AND MAJOR CUSTOMER INFORMATION

The Company's operating segments, which are also its reportable segments, are defined by their product lines which have been generally grouped based on technology, manufacturing processes, and end-use application. The Company's reportable segments are Applied Technology Division, Engineered Films Division, and Aerostar Division. Separate financial information is available for each reportable segment and regularly evaluated by the Company's chief operating decision-maker, the President and Chief Executive Officer, in making resource allocation decisions for the Company's reportable segments. Segment information is reported consistent with the Company's management reporting structure.

Applied Technology designs, manufactures, sells, and services innovative precision agriculture products and information management tools that help growers reduce costs, save time, and improve farm yields around the world. Their product families include field computers, application controls, GPS-guidance and assisted-steering systems, automatic boom controls, injection systems, yield monitoring controls, planter and seeder controls, and an integrated real-time kinematic (RTK) and information platform called Slingshot™. Applied Technology services include high-speed, in-field internet connectivity and cloud-based data management.

The Company's Engineered Films Division manufactures high-performance plastic films and sheeting for major markets throughout the United States and abroad. An important part of this business is highly technical, engineered geomembrane films that protect environmental resources through containment linings and coverings for energy, agriculture, construction, and industrial markets. Engineered Films expanded its business model in the fiscal 2018 third quarter by adding new design-build and installation service solutions to its geomembrane market with the asset purchase of Colorado Lining International, Inc.

Aerostar designs and manufactures proprietary products including high-altitude balloons, tethered aerostats, and radar systems. These products can be integrated with additional third-party sensors to provide research, communications, and situational awareness to government and commercial customers. Aerostar's product lines such as manufacturing military parachutes and electronics manufacturing services were phased out during fiscal 2016 as the Company focused its growth strategy on its proprietary products and largely completed its exit of contract manufacturing operations.

Through Vista and AIS, Aerostar pursues potential product and support services contracts for agencies and instrumentalities of the U.S. government and to foreign governments as direct commercial sales and foreign military sales through the U.S. Government. Vista positions the Company to meet the global demand for lower-cost detection and tracking systems used by government agencies.

(Dollars in thousands, except per-share amounts)

The Company measures the performance of its segments based on their operating income excluding administrative and general expenses. The accounting policies of the operating segments are the same as those described in Note 1 *Summary of Significant Accounting Policies*. Other income, interest expense, and income taxes are not allocated to individual operating segments, and assets not identifiable to an individual segment are included as corporate assets.

Business segment financial performance and other information is as follows:

	For the years ended January 31,		
	2018	2017	2016
APPLIED TECHNOLOGY DIVISION			
Sales	**$ 124,688**	$ 105,217	$ 92,599
Operating income[(a)(f)]	**31,257**	26,643	18,319
Assets[(b)]	**66,555**	67,911	65,490
Capital expenditures	**1,489**	1,017	664
Depreciation and amortization	**3,365**	3,828	4,428
ENGINEERED FILMS DIVISION			
Sales[(c)]	**$ 213,298**	$ 138,855	$ 129,465
Operating income[(f)]	**47,324**	22,966	17,892
Assets[(b)]	**168,797**	133,309	134,942
Capital expenditures	**8,128**	2,768	10,780
Depreciation and amortization	**8,761**	8,580	7,735
AEROSTAR DIVISION			
Sales	**$ 39,915**	$ 34,113	$ 36,368
Operating income (loss)[(d)(f)]	**4,122**	(1,560)	(14,801)
Assets[(b)]	**22,127**	23,515	32,689
Capital expenditures	**343**	547	941
Depreciation and amortization	**1,386**	1,720	3,297
INTERSEGMENT ELIMINATIONS			
Sales			
Applied Technology Division	**$ —**	$ (1)	$ (8)
Engineered Films Division	**(584)**	(789)	(195)
Aerostar Division	**—**	—	—
Operating income[(f)]	**20**	(12)	91
Assets	**(3,380)**	(69)	(57)
REPORTABLE SEGMENTS TOTAL			
Sales	**$ 377,317**	$ 277,395	$ 258,229
Operating income[(f)]	**82,723**	48,037	21,501
Assets	**254,099**	224,666	233,064
Capital expenditures	**9,960**	4,332	12,385
Depreciation and amortization	**13,512**	14,128	15,460
CORPORATE & OTHER			
Operating (loss) from administrative expenses[(g)]	**$ (23,553)**	$ (19,624)	$ (17,110)
Assets[(b)(e)]	**72,704**	76,843	65,624
Capital expenditures	**2,051**	464	661
Depreciation and amortization	**1,290**	1,308	1,676
TOTAL COMPANY			
Sales	**$ 377,317**	$ 277,395	$ 258,229
Operating income	**59,170**	28,413	4,391
Assets	**326,803**	301,509	298,688
Capital expenditures	**12,011**	4,796	13,046
Depreciation and amortization	**14,802**	15,436	17,136

[(a)] The fiscal year ended January 31, 2016 includes gains of $611 on disposal of assets related to the exit of contract manufacturing operations.

[(b)] Certain facilities owned by the Company are shared by more than one reporting segment. All facilities are reported as an asset based on the segment that acquired the asset as we believe this better reflects total assets of the business segment. Expenses and costs related to these facilities including depreciation expense, are allocated and reported in each reporting segment's operating income for each fiscal year presented.

[(c)] Fiscal year 2018 sales include $13,088 in net sales related to the CLI asset acquisition further described in Note 6 "Acquisitions of and Investments in Businesses and Technologies", and $24,225 of recovery film sales related to the hurricane recovery effort.

[(d)] The fiscal year 2017 includes inventory write-downs of $2,278 for Vista as a result of discontinuing sales activities for a specific radar product line within its business. The fiscal year ended January 31, 2016 includes pre-contract cost write-offs of $2,933, a goodwill impairment loss of $11,497, a long-lived asset

(Dollars in thousands, except per-share amounts)

impairment loss of $3,826, and a $2,273 reduction of an acquisition-related contingent liability for Vista as a result of lower financial expectations for net sales and operating income. These items are further described in Note 7 "Goodwill, Long-Lived Assets, and Other Charges ".
(e) *Assets are principally cash, investments, deferred taxes, and other receivables.*
(f) *At the segment level, operating income does not include an allocation of general and administrative expenses.*
(g) *At the segment level, operating income does not include an allocation of general and administrative expenses and, as a result, general and administrative expenses are reported as "Operating (loss) from administrative expenses" in Corporate & Other.*

No customers accounted for 10% or more of consolidated sales in fiscal 2018, 2017 or 2016.

Substantially all of the Company's long-lived assets are located in the United States. Foreign sales are attributed to countries based on location of the customer. Net sales to customers outside the United States were as follows:

	For the years ended January 31,		
	2018	2017	2016
Canada	**$ 12,940**	$ 13,969	$ 11,789
Europe	**13,864**	13,924	10,526
Latin America	**4,439**	3,402	2,676
Asia	**4,074**	1,535	482
Other foreign sales	**6,239**	2,698	2,376
Total foreign sales	**41,556**	35,528	27,849
United States	**335,761**	241,867	230,380
	$ 377,317	$ 277,395	$ 258,229

NOTE 17 **SUBSEQUENT EVENTS**

On February 5, 2018, the Company sold its equity ownership interest in SST. The Company held approximately a 22% interest in SST, and the initial cash received at close was in excess of its carrying value which approximated $1,900. The Company's analysis and accounting for this transaction will be completed in the first quarter of fiscal 2019.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) are our controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 (the Exchange Act) is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), as appropriate to allow timely decisions regarding required disclosure. As of January 31, 2018, the end of the period covered by this report, management evaluated the effectiveness of the Company's disclosure controls and procedures as of such date. Based on their evaluation, the CEO and CFO have concluded that the Company's disclosure controls and procedures were effective at a reasonable assurance level as of January 31, 2018.

Management's Report on Internal Control Over Financial Reporting

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, the Company included management's assessment of the design and effectiveness of its internal controls over financial reporting as part of this Annual Report on Form 10-K for the fiscal year ended January 31, 2018. Management's report and the report of the Company's independent registered public accounting firm are included in Part II, Item 8. captioned "Management's Report on Internal Control Over Financial Reporting" and "Report of Independent Registered Public Accounting Firm" and are incorporated herein by reference.

Remediation of Prior Material Weakness

We completed our remediation plan designed to address the material weaknesses related to the Company's controls relating to the response to the risks of material misstatement, controls related to accounting for goodwill and long-lived assets, including finite-lived intangible assets, and controls related to the completeness and accuracy of spreadsheets and system-generated reports used in internal control over financial reporting that were identified during our fiscal year 2016. As part of our assessment of internal control over financial reporting, management tested and evaluated all controls to assess whether they were designed and operating effectively as of January 31, 2018. Based on this assessment, management concluded that the material weaknesses were remediated.

Changes in Internal Control Over Financial Reporting
As described above under "Remediation of Prior Material Weaknesses" there were changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended January 31, 2018 that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEMS 10, 11, 12, 13 and 14. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE; EXECUTIVE COMPENSATION; SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS; CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE; AND PRINCIPAL ACCOUNTING FEES AND SERVICES

The Company will file a definitive proxy statement with the Securities and Exchange Commission pursuant to Regulation 14A under the Securities Exchange Act of 1934 (the Proxy Statement) relating to the Company's 2018 Annual Meeting of Shareholders. Information required by Items 10 through 14 will appear in the Proxy Statement and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULE

LIST OF DOCUMENTS FILED AS PART OF THIS REPORT

Financial Statements
See PART II, Item 8.

Financial Statement Schedule
Schedule II - Valuation and Qualifying Accounts for the years ended January 31, 2018, 2017, and 2016; included on page 79.

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.

Exhibits
See index to Exhibits on the following page.

ITEM 16. FORM 10-K SUMMARY

None.

Exhibit Number	Description
2(a)	Asset Purchase Agreement by and among Colorado Lining International, Inc., John B. Heap, Patrick Elliott, and Raven Industries, Inc., dated as of August 22, 2017 (incorporated herein by reference to Exhibit 2.1 of the Company's Form 10-Q filed November 21, 2017.
3(a)	Articles of Incorporation of Raven Industries, Inc. and all amendments thereto (incorporated herein by reference to the corresponding exhibit of the Company's Form 10-K for the year ended January 31, 1989). ‡
3(b)	Amended and Restated Bylaws of Raven Industries, Inc. (incorporated herein by reference to Exhibit B of the Company's definitive Proxy Statement filed April 12, 2012).
10(a)	Amended and Restated 2010 Stock Incentive Plan adopted May 25, 2017 (incorporated herein by reference to Exhibit A of the Company’s definitive Proxy Statement filed April 19, 2017). †
10(b)	Form of Non-Qualified Stock Option Agreement (incorporated herein by reference to Exhibit 10(r) of the Company's Form 10-Q filed June 4, 2012). †
10(c)	Form of Restricted Stock Unit Agreement (incorporated herein by reference to Exhibit 10(s) of the Company's Form 10-Q filed June 4, 2012). †
10(d)	Raven Industries, Inc. Non-Qualified Deferred Compensation Plan, effective as of January 1, 2018 and filed herewith as Exhibit 10.1. †
10(e)	Raven Industries, Inc. Deferred Compensation Plan for Directors adopted May 23, 2007 (incorporated herein by reference to Exhibit 10.1 of the Company's Form8-K filed May 24, 2006). †
10(f)	Credit Agreement, dated April 15, 2015, by and among Raven Industries, Inc. and JPMorgan Chase Bank, N.A., Toronto Branch, as Canadian Administrative Agent, JPMorgan Chase Bank National Association, as Administrative Agent, and JP Morgan Securities LLC and Wells Fargo Securities, LLC as Joint Bookrunners and Joint Lead Arrangers (incorporated herein by reference to Exhibit 10.1 of the Company's Form 8-K filed April 16, 2015).
10(g)	Guaranty, dated as of April 15, 2015, made by each of the Guarantors (Raven Industries, Inc., Aerostar International, Inc., Vista Research, Inc., and Integra Plastics, Inc.) in favor of JPMorgan Chase Bank, N.A. as Administrative Agent on behalf of the guaranteed parties (incorporated herein by reference to Exhibit 10.2 of the Company's Form 8-K filed April 16, 2015).
10(h)	Amended and Restated Employment Agreement between Raven Industries, Inc. and Daniel A. Rykhus dated as of March 29, 2017 (incorporated herein by reference to Exhibit 10.1 of the Company's Form 10-K filed March 31, 2017). †
10(i)	Amended and Restated Employment Agreement between Raven Industries, Inc. and Steven E. Brazones dated as of March 29, 2017 (incorporated herein by reference to Exhibit 10.2 of the Company's Form 10-K filed March 31, 2017). †
10(j)	Form of Amended and Restated Change in Control Agreement between Raven Industries, Inc. and the following senior executive officers: Anthony D. Schmidt, Brian E. Meyer, and Janet L. Matthiesen dated as of March 28, 2016 (incorporated herein by reference to Exhibit 10.1 of the Company's Form 10-K filed March 29, 2016). †
10(k)	Form of Amended Employment Agreement between Raven Industries, Inc. and the following senior executive officers: Brian E. Meyer and Janet L. Matthiesen dated August 25, 2015 (incorporated herein by reference to Exhibit 10.1 of the Company's Form 8-K filed August 31, 2015). †
10(l)	Employment Agreement between Raven Industries, Inc. and Anthony D. Schmidt dated as of February 1, 2012 (incorporated herein by reference to Exhibit 10.1 of the Company's Form 8-K filed February 1, 2012). †
10(m)	Form of Schedule A to Employment Agreement, revised effective January 1, 2016, between Raven Industries, Inc. and the following senior executive officers: Janet L. Matthiesen, Brian E. Meyer, and Anthony D. Schmidt (incorporated herein by reference to Exhibit 10.3 of the Company's Form 10-K filed March 31, 2017). †
16(a)	Letter of PricewaterhouseCoopers LLP to the Securities and Exchange Commission, dated as of April 6, 2017, (incorporated herein by reference to Exhibit 16.1 of the Company's Form 8-K filed April 6, 2017).
21	Subsidiaries of the Registrant.
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm.
23.2	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101.INS	Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

† Management contract or compensatory plan or arrangement.

‡ Filed in paper.

SIGNATURES

SIGNATURES

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

RAVEN INDUSTRIES, INC.

(Registrant)

By: /s/ DANIEL A. RYKHUS

Daniel A. Rykhus
President and Chief Executive Officer

Date: March 23, 2018

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

/s/ DANIEL A. RYKHUS

Daniel A. Rykhus
President and Chief Executive Officer
(principal executive officer) and Director

/s/ STEVEN E. BRAZONES

Steven E. Brazones
Vice President and Chief Financial Officer
(principal financial and accounting officer)

/s/ THOMAS S. EVERIST

Thomas S. Everist
Director

/s/ MARC E. LEBARON

Marc E. LeBaron
Chairman of the Board

/s/ KEVIN T. KIRBY

Kevin T. Kirby
Director

/s/ JASON M. ANDRINGA

Jason M. Andringa
Director

/s/ RICHARD W. PAROD

Richard W. Parod
Director

/s/ DAVID L. CHICOINE

David L. Chicoine
Director

Date: March 23, 2018

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

for the years ended January 31, 2018, 2017 and 2016

(in thousands)

Column A	Column B	Column C		Column D	Column E
		Additions			
Description	Balance at Beginning of Year	Charged to Costs and Expenses	Charged to Other Accounts	Deductions From Reserves (1)	Balance at End of Year
Deducted in the balance sheet from the asset to which it applies:					
Allowance for doubtful accounts:					
Year ended January 31, 2018	$ 691	$ 357	$ —	$ 70	$ 978
Year ended January 31, 2017	1,034	380	—	723	691
Year ended January 31, 2016	319	1,066	—	351	1,034

Note:

(1) Represents uncollectable accounts receivable written off during the year, net of recoveries.

RAVEN INDUSTRIES, INC.
NON-QUALIFIED DEFERRED COMPENSATION PLAN

Raven Industries, Inc. (the "Company") hereby establishes the Raven Industries, Inc. Non-Qualified Deferred Compensation Plan (the "Plan"), effective on the Effective Date (as defined below). The purpose of the Plan is to attract and retain designated key employees by providing such persons with an opportunity to defer receipt of a portion of their compensation as provided in the Plan.

ARTICLE I
DEFINITIONS

For purposes of the Plan, the following words and phrases shall have the meanings set forth below, unless their context clearly requires a different meaning:

"Account" means the bookkeeping account maintained by the Committee on behalf of each Participant pursuant to this Plan. The sum of each Participant's Sub-Accounts, in the aggregate, shall constitute his or her Account. The Account and each and every Sub-Account shall be a bookkeeping entry only and shall be used solely as a device to measure and determine the amounts, if any, to be paid to a Participant or the Participant's Beneficiary under the Plan.

"Affiliated Group" means (a) the Company, and (b) all entities with whom the Company would be considered a single employer under Sections 414(b) and 414(c) of the Code, provided that in applying Section 1563(a)(l), (2), and (3) of the Code for purposes of determining a controlled group of corporations under Section 414(b) of the Code, the language "at least 50 percent" is used instead of "at least 80 percent" each place it appears in Section 1563(a)(l), (2), and (3), and in applying Treasury Regulation Section 1.414(c)-2 for purposes of determining trades or businesses (whether or not incorporated) that are under common control for purposes of Section 414(c), "at least 50 percent" is used instead of "at least 80 percent" each place it appears in that regulation. Such term shall be interpreted in a manner consistent with the definition of "service recipient" contained in Section 409A of the Code.

"Annual Incentive Compensation" means the annual cash incentive payable to an Eligible Employee pursuant to the Company's management incentive plan (or any successor annual cash incentive plan) and, in the sole discretion of the Committee, such other annual cash incentive compensation plans of the Company or another member of the Affiliated Group which the Committee may designate from time to time.

"Base Salary" means the annual rate of base salary payable by the Affiliated Group to an Eligible Employee during a Plan Year, but specifically excluding any (a) severance pay, (b) cash and non-cash fringe benefits, (c) Annual Incentive Compensation, and (d) stock options, restricted stock, restricted stock units or other equity incentive awards. For purposes of this Plan, any Base Salary payable after the last day of a calendar year solely for services performed during the final payroll period described in Section 3401(b) of the Code containing December 31 of such year shall be treated as earned during the subsequent calendar year.

"Beneficiary" or **"Beneficiaries"** means the person or persons, including one or more trusts, designated by a Participant in accordance with the Plan to receive payment of the remaining balance of the Participant's Account in the event of the death of the Participant prior to the Participant's receipt of the entire amount credited to the Participant's Account.

"Beneficiary Designation Form" means the form established from time to time by the Committee (in a paper or electronic format) that a Participant completes, signs and returns to the Committee to designate one or more Beneficiaries.

"Board" means the Board of Directors of the Company.

"Change in Control" means the occurrence of any of the following events, provided that such event also qualifies as a "change in control event" within the meaning of Section 409A of the Code: (a) a change in the ownership of the Company, which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than 50% of the total fair market value or total voting power of the stock of the Company; or (b) a change in the effective control of the Company, which occurs on the date that (i) any Person acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of the Company possessing 30% or more of the total voting power of the stock of the Company, or (ii) a majority of the members of the Board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of such appointment or election; or (c) a change in the ownership of a substantial portion of the Company's assets, which occurs on the date that any Person acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value of more than 40% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For purposes of clause (c) of the preceding sentence, gross fair market value means the value ofthe assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

"Code" means the Internal Revenue Code of 1986, as amended.

"Committee" means the P&C Committee or such committee of management and/or directors as may be appointed by the P&C Committee to administer the Plan.

"Company" means Raven Industries, Inc. and its successors, including, without limitation, the surviving corporation resulting from any merger or consolidation of Raven Industries, Inc. with any other corporation, limited liability company, joint venture, partnership or other entity or entities.

"Deferral Election" means the Participant's election on a form approved by the Committee (in a paper or electronic format) to defer a portion of the Participant's Annual Incentive Compensation or Base Salary in accordance with the provisions of Article III.

"Disability" means a Participant's "disability" as defined under Section 409A of the Code.

In general, for purposes of Section 409A of the Code, "disability" means a condition

whereby (a) the Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than 12 months; or (b) the Participant is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, receiving income replacement benefits for a period of not less than 3 months under an accident and health plan covering employees ofthe Participant's employer.

"Discretionary Company Contribution" means a credit by the Company to a Participant's Account in accordance with the provisions of Article IV of the Plan, whether as a match of Participant deferrals or otherwise. Discretionary Company Contributions, if any, shall be credited at the sole discretion of the Company and the fact that a Discretionary Company Contribution may be credited in one year shall not obligate the Company to continue to make any such Discretionary Company Contribution in any subsequent year.

"Effective Date" means January 1, 2018.

"Eligible Employee" has the meaning given to such term in Section 2.1 hereof.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended.

"In-Service Sub-Account" means each bookkeeping In-Service Sub-Account maintained by the Committee on behalf of each Participant pursuant to Sections 2.4 and 3.4(b) hereof.

"P&C Committee" means the Personnel & Compensation Committee of the Board.

"Participant" means any Eligible Employee who (a) at any time has elected to defer the receipt of Annual Incentive Compensation or Base Salary in accordance with the Plan or whose Account has been credited with a Discretionary Company Contribution, and (b) in conjunction with his or her Beneficiary, has not received a complete payment of the amount credited to the Participant's Account.

"Performance-Based Compensation" means Annual Incentive Compensation that is based on services performed over a period of at least 12 months and that constitutes "performance-based compensation" within the meaning of Section 409A of the Code. In general, for purposes of Section 409A of the Code, "performance-based compensation" means compensation the amount of which, or the entitlement to which, is contingent on the satisfaction of pre-established organizational or individual performance criteria relating to a performance period of at least 12 consecutive months. For such purposes, organizational or individual performance criteria are considered pre-established if established in writing by not later than 90 days after the commencement of the period of service to which the criteria relates, provided that the outcome is substantially uncertain at the time the criteria are established. Performance-Based Compensation does not include any amount or portion of any amount that will be paid either regardless of performance, or based upon a level of performance that is substantially certain to be met at the time the criteria are established.

"Plan" means this Raven Industries, Inc. Non-Qualified Deferred Compensation Plan, as it may be amended from time to time.

"Plan Year" means the calendar year or, with respect to a Participant's deferrals of Annual Incentive Compensation, the fiscal year of the Company to which such deferrals relate ..

"Separation from Service" means a Participant's termination of employment or service with the Affiliated Group, other than as a result of the Participant's death, in such a manner as to constitute a "separation from service" as defined under Section 409A of the Code.

"Separation Sub-Account" means each bookkeeping Separation Sub-Account maintained by the Committee on behalf of each Participant pursuant to Sections 2.4 and 3.4(a) hereof.

"Specified Employee" means a "specified employee" as determined by the Company in accordance with Section 409A of the Code.

"Sub-Account" means each bookkeeping Separation Sub-Account and In-Service Sub Account maintained by the Committee on behalf of each Participant with respect to a particular Plan Year pursuant to Section 2.4.

"Unforeseeable Emergency" means an "unforeseeable emergency" as defined under Section 409A of the Code. In general, for purposes of Section 409A of the Code, an "unforeseeable emergency" means a severe financial hardship to a Participant resulting from an illness or accident of the Participant, the Participant's spouse, the Participant's Beneficiary, or the Participant's dependent (as defined in Section 152 of the Code, without regard to Sections 152(b)(1), (b)(2), and (d)(1)(B)); loss of the Participant's property due to casualty (including the need to rebuild a home following damage to a home not otherwise covered by insurance, for example, not as a result of a natural disaster); or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant.

ARTICLE II
ELIGIBILITY; SUB-ACCOUNTS

2.1. Selection by Committee. Participation in the Plan is limited to any employee of the Affiliated Group who (a) is expressly selected by the Committee, in its sole discretion, to participate in the Plan, and (b) is a member of a "select group of management or highly compensated employees," within the meaning of Sections 201, 301 and 401 of ERISA (each an **"Eligible Employee"**). In lieu of expressly designating individual Eligible Employees for Plan participation, the Committee may establish eligibility criteria (consistent with the requirements of this Section 2.1) providing for participation of all Eligible Employees who satisfy such criteria. The Committee may at any time, in its sole discretion, change the eligibility criteria for Eligible Employees, or determine that one or
more Participants will cease to be an Eligible Employee. Further, the Committee may provide for different terms and conditions of participation, not inconsistent with this Plan, for different classes of Eligible Employees (for example, the Committee may determine that certain Eligible Employees will not be permitted to elect to defer Base Salary or Annual Incentive Compensation under this Plan

and will only be eligible to receive Discretionary Company Contributions hereunder).

2.2 Enrollment Requirements. Except as otherwise determined by the Committee, as a condition to participation, each Eligible Employee shall complete, execute and return to the Committee a Deferral Election no later than the date or dates specified by the Committee in accordance with the Plan. In addition, the Committee may establish from time to time such other enrollment requirements as it determines in its sole discretion are necessary.

2.3 Commencement Date. Except as otherwise may be provided by the Committee pursuant to Section 3.1, each Eligible Employee shall be eligible to commence participation in accordance with the terms and conditions of this Plan effective as of January 1 of the Plan Year next following the Plan Year in which he or she is selected as an Eligible Employee pursuant to Section 2.1. Notwithstanding the foregoing, the Committee, in its sole discretion, may permit an Eligible Employee to commence participation in the Plan upon such earlier date as may be specified by the Committee, consistent with the Plan and Section 409A of the Code.

2.4 Sub-Accounts. The Committee shall establish and maintain a separate Sub Account for each Participant for amounts credited to a Participant's Account for each Plan Year as deferrals of Annual Incentive Compensation and Base Salary and as Discretionary Company Contributions, as applicable. Each such Sub-Account shall be either a Separation Sub-Account or an In-Service Sub-Account, in accordance with Section 3.4 and the Participant's Deferral Election for the applicable Plan Year. Each Participant's Sub-Account(s) shall be credited with deferrals of Annual Incentive Compensation and Base Salary effective as of the date the Annual Incentive Compensation or Base Salary would otherwise have been paid to the Participant. A Participant's Sub-Accounts shall be credited with gains, losses and earnings as provided in Article V hereof and shall be debited for any payments made to the Participant in accordance with Article VI hereof. Amounts credited to a Separation Sub-Account shall be paid following the Participant's Separation from Service as provided in Articles III and VI hereof, and amounts credited to an In-Service Sub-Account shall be paid in the year specified by the Participant or, if earlier, following the Participant's Separation from Service, as provided in Articles III and VI hereof.

2.5 Termination. An Eligible Employee's right (if any) to defer Annual Incentive Compensation and Base Salary shall cease with respect to the Plan Year following the Plan Year in which such individual ceases to be an Eligible Employee, although such individual shall continue to be subject to all of the terms and conditions of the Plan for as long as he or she remains a Participant.

ARTICLE III
DEFERRAL ELECTIONS

3.1 Certain Newly Eligible Participants. Except as otherwise determined by the Committee, in its sole discretion, newly Eligible Employees shall not be permitted to make a Deferral Election with respect to Annual Incentive Compensation or Base Salary earned during the Plan Year in which the Eligible Employee is first eligible to participate in the Plan. However, notwithstanding the foregoing, the Committee, in its sole discretion, it may permit any Eligible Employee to make a Deferral Election with respect to Annual Incentive Compensation or Base Salary earned during the Plan Year in which the Eligible Employee is first
eligible to participate in the Plan (and in any other plan that would be aggregated with the Plan under Section 409A of the Code), as determined in accordance with Treasury Regulation Section 1.409A-2(a)(7);
provided, however, that such Deferral Election (a) is made and becomes irrevocable no later than

the 30th day after the date that the Eligible Employee first becomes eligible to participate in the Plan (or by such earlier date as specified by the Committee), and (b) shall apply only to Annual Incentive Compensation or Base Salary, as applicable, earned for services performed after the date that the Deferral Election becomes irrevocable, as determined by the Committee in accordance with Section 409A.

3.2 Annual Deferral Elections. Unless the Committee determines to permit an election pursuant to Section 3.1, and except as otherwise determined by the Committee, each Eligible Employee may elect to defer Annual Incentive Compensation or Base Salary for a Plan Year by filing a Deferral Election with the Committee only in accordance with the following rules:

(a) Annual Incentive Compensation.

(i) In General. Except as may otherwise be determined by the Committee with respect to Performance-Based Compensation as provided in Section 3.2(a)(ii), a Deferral Election with respect to Annual Incentive Compensation must be filed with the Committee by, and shall become irrevocable as of, December 31 (or such earlier date as specified by the Committee) next preceding the first day of the Plan Year for which such Annual Incentive Compensation would otherwise be earned, as determined by the Committee in accordance with Section 409A of the Code.

(ii) Certain Elections with Respect toPerformance-Based Compensation. Notwithstanding Section 3.2(a)(i), and only to the extent permitted by the Committee in its sole discretion, a Deferral Election with respect to Annual Incentive Compensation that constitutes Performance-Based Compensation may be made and become irrevocable no later than the date that is six (6) months before the end of the applicable performance period (or by such earlier date as specified by the Committee on the Deferral Election), provided that in no event may such Deferral Election be made after such Annual Incentive Compensation has become "readily ascertainable" within the meaning of Section 409A of the Code. In order to make a Deferral Election under this Section 3.2(a)(ii), the Participant must perform services continuously from the later of the beginning of the performance period or the date the performance criteria are established through the date the Deferral Election becomes irrevocable under this Section 3.2(a)(ii). A Deferral Election made under this Section 3.2(a)(ii) shall not apply to any portion of the Performance-Based Compensation that becomes payable to a Participant without regard to the satisfaction of the applicable performance criteria.

(b) Base Salary. The Deferral Election with respect to Base Salary must be filed with the Committee by, and shall become irrevocable as of, December 31 (or such earlier date as specified by the Committee) of the Plan Year next preceding the Plan Year for which such Base Salary would otherwise be earned.

3.3 Amount Deferred. A Participant shall designate on the Deferral Election the portion of his or her Annual Incentive Compensation or Base Salary that is to be deferred in accordance with this Article III. An Eligible Employee may defer (in 1% increments) up to 60% of his or her Base

Salary for any Plan Year and up to 100% of his or her Annual Incentive Compensation for any Plan Year.

3.4 Elections as to Time and Form of Payment. Each Deferral Election will specify the allocation of the Participant's deferrals for a Plan Year to the Participant's Sub Accounts in accordance with this Plan. With respect to each Plan Year, a Participant may allocate any deferrals either entirely to a Separation Sub-Account in accordance with Section 3.4(a) or entirely to an In-Service Sub-Account in accordance with Section 3.4(b), but a Participant may not allocate a portion of his or her deferrals for a single Plan Year to both a Separation Sub-Account and an In-Service Sub-Account.

(a) Participant Payment Elections-Separation Sub-Accounts. On each Deferral Election pursuant to which deferrals of Annual Incentive Compensation or Base Salary are credited to a Participant's Separation Sub-Account with respect to a Plan Year, the Participant shall elect the time and form of payment of such Sub-Account in the event of the Participant's Separation from Service in accordance with the provisions of this Section 3.4(a) and Article VI. A Participant may elect to receive each such Separation Sub-Account, subject to the provisions of Article VI, either: (i) in a single lump sum payable as soon as practicable following the six-month anniversary of the Participant's Separation from Service or on the 1st, 2nd, or 3rd anniversary of the Participant's Separation from Service, as specified on the Participant's Deferral Election for such Sub-Account; or (ii) in substantially equal annual or monthly installments over a period ofbetween 1-15 years, with such installments commencing as soon as practicable following the six-month anniversary of the Participant's Separation from Service or on the 1st, 2nd, or 3rd anniversary of the Participant's Separation from Service, as specified on the Participant's Deferral Election for such Sub-Account. The time and form of payment designated on each Deferral Election with respect to a Separation Sub-Account for a Plan Year will apply to all amounts credited to that Sub-Account under the Plan, except as otherwise provided in Article VI. A Participant may choose a different time and form of payment for each Separation Sub-Account in accordance with this Section 3.4(a).

(b) Participant Payment Elections-In-ServiceSub-Accounts.On each Deferral Election pursuant to which deferrals of Annual Incentive Compensation or Base Salary are credited to a Participant's In-Service Sub-Account with respect to a Plan Year, the Participant shall elect the calendar year in which payment will be made from that In-Service Sub-Account, which calendar year must be no earlier than the third calendar year after the calendar year in which such Deferral Election is made. Subject to the provisions of Article VI, each In-Service Sub-Account shall be paid in a single lump sum during January of the calendar year specified in the applicable Deferral Election, or, if the Participant's Separation from Service occurs prior to the beginning of the calendar year in which such In-Service Sub-Account is otherwise scheduled to be paid, as soon as practicable following the six-month anniversary of the · Participant's Separation from Service. The calendar year designated on each Deferral Election with respect to an In-Service Account for a Plan Year will apply to all amounts credited to that In-Service Sub-Account under the Plan, except as otherwise provided in Article VI. A Participant may choose a different calendar year for payment of each separate In-Service Sub Account in accordance with this Section 3.4(b).

(c) Participant Payment Elections-Change in Control. In addition to the elections made under Section 3.4(a) and 3.4(b), on the first Deferral Election pursuant to which deferrals of Annual Incentive Compensation or Base Salary is credited to a Participant's Sub Account under the Plan, the Participant shall make a one-time election of whether or not to receive a lump sum payment of the Participant's entire Account within thirty (30) days after a Change in Control, if such Change in Control occurs prior to the Participant's Separation from Service. In the event that a Participant does not timely make such an election, the Participant will be deemed to have elected to receive payment of the balance of his or her Account in a lump sum payment within thirty (30) days after a Change in Control that occurs prior to the Participant's Separation from Service.

(d) Default Time and Form of Payment. To the extent that a Participant does not designate the time and form of payment of a Sub-Account on a Deferral Election as provided in Section 3.4(a) (or such designation does not comply with the terms of the Plan), the applicable Plan Year shall be credited to a Separation Sub-Account and the Participant shall be deemed to have elected that such Sub-Account shall be paid, subject to the provisions of Article VI, in a single lump sum payable as soon as practicable following the six-month anniversary of the Participant's Separation from Service.

3.5 Duration and Cancellation of Deferral Elections.

(a) Duration. Once irrevocable, a Deferral Election shall only be effective for the Plan Year with respect to which such election was timely filed with the Committee. Notwithstanding the preceding sentence, the Committee may provide, in its sole discretion, that any Deferral Elections shall apply from Plan Year to Plan Year, until terminated or modified prospectively by a Participant in accordance with the terms of this Article III. Any such "evergreen" Deferral Elections so provided for by the Committee will become effective with respect to an amount of Annual Incentive Compensation or Base Salary on the date such election becomes irrevocable under this Article III. Except as provided in Section 3.5(b) hereof, a Deferral Election, once irrevocable, cannot be cancelled or modified during a Plan Year.

(b) Cancellation.

(i) The Committee may, in its sole discretion, cancel a Participant's Deferral Election where such cancellation occurs by the later of the end of the Plan Year in which the Participant incurs a "disability" or the 15th day of the third month following the date the Participant incurs a "disability." For purposes of this Section 3.5(b)(i), a disability refers to any medically determinable physical or mental impairment resulting in the Participant's inability to perform the duties of his or her position or any substantially similar position, where such impairment can be expected to result in death or can be expected to last for a continuous period of not less than six months.

(ii) The Committee may, in its sole discretion, cancel a Participant's Deferral Election due to an Unforeseeable Emergency or a hardship distribution pursuant to Treasury Regulation Section 1.401(k)-l(d)(3).

(iii) If a Participant's Deferral Election is cancelled with respect to a particular Plan Year in accordance with this Section 3.5(b), such Participant may make a new Deferral Election for a subsequent Plan Year, as the case may be, only in accordance with Section 3.2 hereof.

3.6. Vested Interest in Deferrals. Except as otherwise provided by the Committee with respect to Discretionary Company Contributions pursuant to Article IV, each Participant shall at all times have a fully vested interest in his or her Account.

ARTICLE IV
DISCRETIONARY COMPANY CONTRIBUTIONS

4.1 In any Plan Year, the Committee, in its sole discretion, may, but shall not be required to, credit Discretionary Company Contributions to a Participant's Account.

4.2 Except as otherwise may be provided in a vesting schedule established by the Committee, in its sole discretion, any Discretionary Company Contributions shall be fully vested as of the date created to a Participant's Account.

4.3. Discretionary Company Contributions, if any, shall be credited to such Sub- Account(s) and paid in such time and form of payment as determined by the Committee. Unless otherwise determined by the Committee at the time of crediting, any Discretionary Company Contributions that are matching contributions shall be credited to a Participant's Sub-Account(s) with respect to the type of compensation for the Plan Year to which the matching contributions relate, and any other Discretionary Contributions shall be credited to a Sub-Account for payment in the default time and form provided pursuant to Section 3.4(d).

ARTICLE V
CREDITING OF GAINS, LOSSES AND EARNINGS TO ACCOUNTS

To the extent provided by the Committee in its sole discretion, each Participant's Account will be credited with gains, losses and earnings based on notional investment directions made by the Participant in accordance with notional investment crediting options and procedures established from time to time by the Committee. The Committee specifically retains the right in its sole discretion to change the notional investment crediting options and procedures from time to time. By electing to defer any amount under the Plan, each Participant acknowledges and agrees that the Affiliated Group is not and shall not be required to make any investment in connection with the Plan, nor is it required to follow the Participant's notional investment directions in any actual investment it may make or acquire in connection with the Plan. Any amounts credited to a Participant's Account with respect to which a Participant does not provide notional investment direction shall be credited with gains, losses and earnings as if such amounts were invested in a notional investment option selected by the Committee in its sole discretion.

ARTICLE VI
PAYMENTS

6.1 Date of Payment of Sub-Accounts. Except as otherwise provided in this Article VI, a Participant's Account shall commence to be paid in accordance with the applicable time and form of payment determined for each Sub-Account pursuant to Section 3.4.

(a) Separation Sub-Account. In general, the amounts credited to a Participant's Separation Sub-Account shall be paid, or commence to be paid, following the Participant's Separation from Service, at the time in the form of payment specified by the Participant for such Sub-Account in accordance with Section 3.4(a) hereof.

(b) In-Service Sub-Account. In general, the amounts credited to a Participant's In-Service Sub-Account shall be paid in at the time specified by the Participant for such Sub-Account in accordance with Section 3.4(b) hereof. Each In-Service Sub-Account shall be paid in a single lump sum during February of the applicable calendar year.

(c) Calculation of Installment Payments. In the event that a Separation Sub- Account is paid in installments: (i) the first installment shall commence at the time specified pursuant to Section 3.4(a); (ii) the amount of each installment shall equal the quotient obtained by dividing the Participant's vested Separation Sub-Account balance as of the date of such installment payment (or as of such earlier date as may be reasonably determined by the Committee to facilitate the administration of the Plan) by the number of installment payments remaining to be paid at the time of the calculation; and (iii) the amount of such vested Separation Sub-Account remaining unpaid shall continue to be credited with gains, losses and earnings as provided in Article V hereof.

(d) Subsequent Payment Elections. A Participant may elect, on a form provided by the Committee in accordance with this Section 6.l(d), to change the time and/or form of payment with respect to one or more of his Sub-Accounts (a "Subsequent Payment Election"). A Participant may make one or more elections to delay the payment date of a Sub Account in accordance with this Section 6.1(d) to a payment date otherwise permitted under the Plan. Each such Subsequent Payment Election must be filed with the Committee at least twelve (12) months prior to the first day of the calendar year that the Sub-Account would otherwise have been paid under the Plan. On such Subsequent Payment Election, the Participant must delay the payment date for a period of at least five (5) years after the first day of the calendar year that the Sub-Account would otherwise have been paid under the Plan.

6.2 Disability of Participant. Except as otherwise provided in this Article VI, in the event of a Participant's Disability prior to the date of his or her Separation from Service, the vested amounts credited to the Participant's Account shall be paid in in a single lump sum as soon as administratively practicable following the determination that the Participant is Disabled.

6.3 Death of Participant. Notwithstanding any other provision of this Plan, in the event of the Participant's death (whether before or after the Participant's Separation from Service or Disability), the remaining vested amount of the Participant's Account shall be paid to the Participant's Beneficiary or Beneficiaries designated on a Beneficiary Designation Form (or, if no such Beneficiary, to the Participant's estate) in a single lump sum as soon as administratively practicable following the date of the Participant's death. Each Participant may file a Beneficiary Designation Form in such manner as provided by the Committee. A Participant's Beneficiary

Designation Form may be changed at any time prior to the Participant's death by the execution and delivery of a new Beneficiary Designation Form in such manner as provided by the Committee. The Beneficiary Designation Form on file with the Committee that bears the latest date at the time of the Participant's death shall govern. If a Participant fails to properly designate a Beneficiary in accordance with this Section 6.3, then payment pursuant to this Section 6.3 shall be made to the Participant's estate.

6.4 Change in Control Prior to Separation or Disability. To the extent so elected by a Participant in accordance with Section 3.4(c), in the event of a Change in Control prior to the Participant's Separation from Service, Disability or death, the remaining vested amount of the Participant's Account shall be paid in a single lump sum within thirty (30) days after the Change in Control.

6.5 Withdrawal Due to Unforeseeable Emergency. A Participant shall have the right to request, on a form provided by the Committee, an accelerated payment of all or a portion of the Participant's vested Account in a lump sum if the Participant experiences an Unforeseeable Emergency. The Committee shall have the sole discretion to determine whether to grant such a request and the amount to be paid pursuant to such request.

(a) Determination of Unforeseeable Emergency. Whether a Participant is faced with an unforeseeable emergency permitting a payment under this Section 6.5 is to be determined by the Committee based on the relevant facts and circumstances of each case, but, in any case, a payment on account of an Unforeseeable Emergency may not be made to the extent that such emergency is or may be relieved through reimbursement or compensation from insurance or otherwise, by liquidation of the Participant's assets, to the extent the liquidation of such assets would not cause severe financial hardship, or by cessation of deferrals under the Plan. Payments because of an Unforeseeable Emergency must be limited to the amount reasonably necessary to satisfy the emergency need (which may include amounts necessary to pay any Federal, state, local, or foreign income taxes or penalties reasonably anticipated to result from the payment). Determinations of amounts reasonably necessary to satisfy the emergency need must take into account any additional compensation that is available upon the cancellation of a Deferral Election upon a payment due to an Unforeseeable Emergency. However, the determination of amounts reasonably necessary to satisfy the emergency need is not required to take into account any additional compensation that due to the Unforeseeable Emergency is available under another nonqualified deferred compensation plan but has not actually been paid, or that is available due to the Unforeseeable Emergency under another plan that would provide for deferred compensation except due to the application of the effective date provisions of Section 409A of the Code.

(b) Payment of Account. Any payment on account of an Unforeseeable Emergency shall be made within ninety (90) days following occurrence of the Unforeseeable Emergency, as determined by the Committee under this Section 6.5.

6.6 Mandatory Six-Month Delay. Notwithstanding any other provision of this Plan to the contrary, in no event may payments triggered by the Separation from Service of a Specified Employee be paid or commence prior to the first business day of the seventh month following the Specified Employee's Separation from Service (or if earlier, within 90 days after the Specified Employee's death).

6.7 Discretionary Acceleration of Payments. The Committee may, in its sole discretion, accelerate the time or schedule of a payment under the Plan to a time or form otherwise permitted under Section 409A of the Code in accordance with the requirements, restrictions and limitations of Treasury Regulation Section 1.409A-3G); provided that in no event may a payment to a Specified Employee be accelerated following the Specified Employee's Separation from Service to a date that is prior to the first business day of the seventh month following the Specified Employee's Separation from Service (or if earlier, within 90 days after the Specified Employee's death) unless otherwise permitted pursuant to Treasury Regulation Section1.409A-3G).

6.8 Discretionary Delay of Payments. The Committee may, in its sole discretion, delay the time or form of a payment under the Plan to a time or form otherwise permitted under Section 409A of the Code in accordance with the requirements, restrictions and limitations of Treasury Regulation Section 1.409A-2(b)(7).

6.9 Actual Date of Payment. To the extent permitted by Section 409A of the Code, the Committee, in its sole discretion, may cause any payment under this Plan to be made or commence on any later date that occurs in the same calendar year as the date on which payment otherwise would be required to be made under this Plan, or, iflater, by the 15th day of the third month after the date on which payment would otherwise would be required to be made under this Plan. Further, to the extent permitted by Section 409A of the Code, the Committee may delay payment in the event that it is not administratively possible to make payment on the date (or within the periods) specified in this Article VI, or the making of the payment would jeopardize the ability of the Company (or any entity which would be considered to be a single employer with the Company under Section 414(b) or Section 414(c) of the Code) to continue as a going concern. Notwithstanding the foregoing, payment must be made no later than the latest possible date permitted under Section 409A of the Code.

6.10 Discharge of Obligations. The payment to a Participant (or to his or her Beneficiary or estate) of a Sub-Account in a single lump sum or the number of installments as provided pursuant to this Plan shall discharge all obligations of the Affiliated Group to such Participant (and Beneficiary or estate) under the Plan with respect to that Sub-Account.

ARTICLE VII
ADMINISTRATION

7.1 General. The Committee shall be responsible for the general administration of the Plan and shall have the full power, discretion and authority to carry out the provisions of the Plan. Without limiting the foregoing, the Committee shall have full discretion to (a) interpret all provisions of the Plan, (b) resolve all questions relating to eligibility for participation in the Plan and the amount in the Account of any Participant and all questions pertaining to claims for benefits and procedures for claim review, (c) resolve all other questions arising under the Plan, including any factual questions and questions of construction, (d) determine all claims for benefits, and (e) adopt such rules, regulations or guidelines for the administration of the Plan and take such further action as the Company shall deem advisable in the administration of the Plan. The actions taken and the decisions made by the Committee hereunder shall be final, conclusive, and binding on all persons, including the Company, its shareholders, the other members of the Affiliated Group, Eligible Employees, Participants, and their estates and Beneficiaries. The Committee may delegate to one or more officers of the Company, subject to such terms as the Committee shall determine, the authority to administer all or any portion of the Plan, or the authority to perform certain functions, including administrative functions. In the event of such delegation, all references to the Committee in this Plan (other than such references in the immediately preceding sentence) shall be deemed references to such officers as it relates to those aspects of the Plan that have been delegated.

7.2 Claims Procedure. Any person who believes he is entitled to receive a benefit under the Plan shall make application in writing on the form and in the manner prescribed by the Committee. If any claim for benefits filed by any person under the Plan (the "claimant") is denied in whole or in part, the Committee shall issue a written notice of such adverse benefit determination to the claimant. The notice shall be issued to the claimant within a reasonable period of time but in no event later than 90 days from the date the claim for benefits was filed or, if special circumstances require an extension, within 180 days of such date. The notice issued by the Committee shall be written in a manner calculated to be understood by the claimant and shall include the following: (a) the specific reason or reasons for any adverse benefit determination,
(b) the specific Plan provisions on which any adverse benefit determination is based, (c) a description of any further material or information which is necessary for the claimant to perfect his or her claim and an explanation of why the material or information is needed and (d) a statement of the claimant's right to seek review of the denial pursuant to Section 7.3 below.

7.3 Review of Claim Denial. If a claim is denied, in whole or in part, the claimant shall have the right to (a) request that the Committee review the denial, (b) review pertinent documents, and (c) submit issues and comments in writing, provided that the claimant files a written request for review with the Committee within 60 days after the date on which the claimant received written notice from the Committee of the denial. Within 60 days after the Committee receives a properly filed request for review, the Committee shall conduct such review and advise the claimant in writing of its decision on review, unless special circumstances require an extension of time for conducting the review. If an extension of time for conducting the review is required, the Committee shall provide the claimant with written notice of the extension before the expiration of the initial 60-day period, specifying the circumstances requiring an extension and the date by which such review shall be completed (which date shall not be later than 120 days after the date on which the Committee received the request for review). The Committee shall inform the claimant of its decision on review in a written notice, setting forth the specific reason(s) for the decision and reference to Plan provisions upon which the decision is based. A decision on review shall be final and binding on all persons for all purposes.

ARTICLE VIII
AMENDMENT AND TERMINATION

8.1 Amendment. The Company reserves the right to amend, terminate or freeze the Plan, in whole or in part, at any time by action of the Board or its delegate(s). In no event shall any such action by the Board or its delegate(s) adversely affect the vested amount credited to any Participant's Account, or result in any change in the timing or manner of payment of the amount of any Account (except as otherwise permitted under the Plan), without the consent of the Participant or Beneficiary, unless the Board or its delegate(s), as the case may be, determines in good faith that such action is necessary to ensure compliance with Section 409A of the Code. To the extent permitted by Section 409A of the Code, the Committee may, in its sole discretion, modify the rules applicable to Deferral Elections to the extent necessary to satisfy the requirements of the Uniformed Service Employment and Reemployment Rights Act of 1994, as amended, 38 U.S.C. 4301-4334.

8.2 Payments Upon Termination of Plan. Except as otherwise provided pursuant to Section 6.6, in the event that the Plan is terminated, the amounts allocated to a Participant's Sub Accounts shall be paid to the Participant or the Participant's Beneficiary, as applicable, on the dates on which the Participant or his or her Beneficiary would otherwise receive payments hereunder without regard to the termination of the Plan.

ARTICLE IX
MISCELLANEOUS

9.1 Non-Alienation of Deferred Compensation. Except as permitted by the Plan, no right or interest under the Plan of any Participant or Beneficiary shall, without the written consent of the Company, be (a) assignable or transferable in any manner, (b) subject to alienation, anticipation, sale, pledge, encumbrance, attachment, garnishment or other legal process, or (c) in any manner liable for or subject to the debts or liabilities of the Participant or Beneficiary. Notwithstanding the foregoing, to the extent permitted by Section 409A of the Code and Section 6.6 hereof, the Committee shall honor a judgment, order or decree from a state domestic relations court which requires the payment of part or all of a Participant's or Beneficiary's interest under this Plan to an "alternate payee" as defined in Section 414(p) of the Code.

9.2 Compliance with Section 409A of the Code. It is intended that the Plan comply with the provisions of Section 409A of the Code, so as to prevent the inclusion in gross income of any amounts deferred hereunder in a taxable year that is prior to the taxable year or years in which such amounts would otherwise actually be paid or made available to Participants (or their Beneficiaries or estates). This Plan shall be construed, administered, and governed in a manner that effects such intent, and the Committee shall not take any action that would be inconsistent with such intent. Although the Committee shall use its best efforts to avoid the imposition of taxation, interest and penalties under Section 409A of the Code, the tax treatment of deferrals under this Plan is not warranted or guaranteed. Neither the Company, the other members of the Affiliated Group, the Board, nor the Committee (nor its delegate(s)) shall be held liable for any taxes, interest, penalties or other monetary amounts owed by any Participant, Beneficiary or other taxpayer as a result of the Plan. Any reference in this Plan to Section 409A of the Code will also include any proposed, temporary or final regulations, or any other guidance, promulgated with respect to such Section 409A by the U.S. Department of Treasury or the Internal Revenue Service. For purposes of the Plan, the phrase "permitted by Section 409A of the Code," or words or phrases of similar import, shall mean that the event or circumstance shall only be permitted to the extent it would not cause an amount deferred or payable under the Plan to be includible in the gross income of a Participant or Beneficiary under Section 409A(a)(l) of the Code.

9.3 Participation by Employees of Affiliated Group Members. Any member of the Affiliated Group may, by action of its board of directors or equivalent governing body and with the consent of the Board, adopt the Plan; provided that the Board may waive the requirement that such board of directors or equivalent governing body effect such adoption. By its adoption of or participation in the Plan, the adopting member of the Affiliated Group shall be deemed to appoint the Company its exclusive agent to exercise on its behalf all of the power and authority conferred by the Plan upon the Company and accept the delegation to the Committee of all the power and authority conferred upon it by the Plan. The authority of the Company to act as such agent shall continue until the Plan is terminated as to the participating affiliate. An Eligible Employee who is employed by a member of the Affiliated Group and who elects to participate in the Plan shall participate on the same basis as an Eligible Employee of the Company. The Account of a Participant employed by a participating member of the Affiliated Group shall be paid in accordance with the Plan solely by such member to the extent attributable to Annual Incentive Compensation or Base Salary, as applicable, that would have been paid by such participating member in the absence of deferral pursuant to the Plan, unless the Board otherwise determines that the Company shall be the obligor.

9.4 Interest of Participant The obligation of the Company and any other participating member of the Affiliated Group under the Plan to make payment of amounts reflected in an Account merely constitutes the unsecured promise of the Company (or, if applicable, the participating members of the Affiliated Group) to make payments from their general assets, and no Participant or Beneficiary shall have any interest in, or a lien or prior claim upon, any property of Company or any other member of the Affiliated Group. Nothing in the Plan shall be construed as guaranteeing continued employment to any Eligible Employee. It is the intention of the Affiliated Group that the Plan be unfunded for tax purposes and for purposes of Title I of ERISA. The Company may create a trust to hold funds to be used in payment of its and the Affiliated Group's obligations under the Plan, and may fund such trust, provided that, in the event of a Change in Control, such a trust shall be funded and shall be or become irrevocable upon such Change in Control; further provided, however, that any funds contained therein shall remain liable for the claims of the general creditors of the Company and the other participating members of the Affiliated Group, and no assets shall be transferred to any such trust at a time or in a manner that would cause an amount to be included in the income of a Participant pursuant to Section 409A(b) of the Code.

9.5 Claims of Other Persons. The provisions of the Plan shall in no event be construed as giving any other person any legal or equitable right as against the Company or any other member of the Affiliated Group or the officers, employees or directors of the Company or any other member of the Affiliated Group, except any such rights as are specifically provided for in the Plan or are hereafter created in accordance with the terms and provisions of the Plan.

9.6 Severability. The invalidity and unenforceability of any particular provision of the Plan shall not affect any other provision hereof, and the Plan shall be construed in all respects as if such invalid or unenforceable provision were omitted.

9.7 Governing Law. Except to the extent preempted by federal law, the provisions of the Plan shall be governed and construed in accordance with the laws of the State of South Dakota.

9.8 Successors. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation, reorganization or otherwise) to all or substantially all of the business and/or assets of the Company expressly to assume this Plan. This Plan shall be binding upon and inure to the benefit of the Company and any successor of or to the Company, including without limitation any persons acquiring directly or indirectly all or substantially all of the business and/or assets of the Company whether by sale, merger, consolidation, reorganization or otherwise (and such successor shall thereafter be deemed the "Company" for the purposes of this Plan), and the heirs, beneficiaries, executors and administrators of each Participant.

9.9 Withholding of Taxes. The Company or any other member of the Affiliated Group may withhold or cause to be withheld from any amounts payable under the Plan, or to the extent permitted pursuant to Section 409A of the Code and Section 6.6 of the Plan, from any amounts deferred under the Plan, all federal, state, local and other taxes as shall be legally required to be withheld. Further, the Company and each other member of the Affiliated Group shall have the right to (a) require a Participant to pay or provide for payment of the amount of any taxes that the Company or any other member of the Affiliated Group may be required to withhold with respect to amounts credited to a Participant's Account under the Plan, or (b) deduct from any amount of Base Salary, Annual Incentive Compensation or other payment otherwise payable in cash to the Participant the amount of any taxes that the Company or any other member of the Affiliated Group may be required to withhold with respect to amounts credited to a Participant's Account under the Plan.

9.10 Electronic or Other Media. Notwithstanding any other provision of the Plan to the contrary, including any provision that requires the use of a written instrument, the Committee may establish procedures for the use of electronic or other media in communications and transactions between the Plan or the Committee and Participants and Beneficiaries. Electronic or other media may include, but are not limited to, e-mail, the Internet, intranet systems and automated telephonic response systems.

9.11 Headings; Interpretation. Headings in this Plan are inserted for convenience of reference only and are not to be considered in the construction of the provisions hereof. Unless the context clearly requires otherwise, the masculine pronoun wherever used herein shall be construed to include the feminine pronoun.

9.12 Participants Deemed to Accept Plan. By accepting any benefit under the Plan, each Participant and each person claiming under or through any such Participant shall be conclusively deemed to have indicated his or her acceptance and ratification of, and consent to, all of the terms and conditions of the Plan and any action taken under the Plan by the Board, the Committee, the Company and the other members of the Affiliated Group, in any case in accordance with the terms and conditions of the Plan.

IN WITNESS WHEREOF, the P&C Committee has caused this Plan to be executed by the Company's undersigned duly authorized officer, to be effective as of the Effective Date.

RAVEN INDUSTRIES, INC.

By:	/s/ Janet L. Matthiesen
Name:	Janet L. Matthiesen
Title:	Vice President of Human Resources
Date:	November 7, 2017

Exhibit 21

RAVEN INDUSTRIES, INC.
SUBSIDIARIES OF THE REGISTRANT

NAME OF SUBSIDIARY	JURISDICTION
Aerostar Integrated Systems, LLC [a]	Delaware, USA
Aerostar International, Inc.	South Dakota, USA
Raven Industries Canada, Inc.	Nova Scotia, Canada
Raven International Holding Company B.V.	Amsterdam, Netherlands
SBG Innovatie BV	Middenmeer, Netherlands
Vista Research, Inc.	California, USA

(a) 75% owned

Pursuant to Item 601(b)(21) of Regulation S-K, we have omitted some subsidiaries that considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary as of January 31, 2018 under Rule 1-02(w) of Regulation S-X.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statement Nos. 333-204796, 333-189009, 333-182051, 333-167290, 333-139063, 333-41352 on Form S-8 of our report dated March 23, 2018, relating to the financial statements and financial statement schedules of Raven Industries, Inc. ("Raven"), and the effectiveness of internal control over financial reporting appearing in this Annual Report on Form 10-K of Raven for the year ended January 31, 2018.

/s/ Deloitte & Touche LLP

Minneapolis, Minnesota
March 23, 2018

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-204796, 333-189009, 333-182051, 333-167290, 333-139063, 333-41352) of Raven Industries, Inc. of our report dated March 31, 2017 relating to the financial statements and financial statement schedules, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Minneapolis, Minnesota
March 23, 2018

Exhibit 31.1

RAVEN INDUSTRIES, INC.

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO RULE 13A-14(A) OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Daniel A. Rykhus, certify that:

1. I have reviewed this Annual Report on Form 10-K of Raven Industries, Inc. (the Registrant);

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; and

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of Registrant's board of directors (or others 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 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 controls over financial reporting.

Dated: March 23, 2018

/s/ DANIEL A. RYKHUS

Daniel A. Rykhus
President and Chief Executive Officer

Exhibit 31.2

RAVEN INDUSTRIES, INC.

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO RULE 13A-14(A) OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Steven E. Brazones, certify that:

1. I have reviewed this Annual Report on Form 10-K of Raven Industries, Inc. (the Registrant);

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; and

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of Registrant's board of directors (or others 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 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 controls over financial reporting.

Dated: March 23, 2018

/s/ STEVEN E. BRAZONES

Steven E. Brazones
Vice President and Chief Financial Officer

Exhibit 32.1

RAVEN INDUSTRIES, INC.

**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**

The undersigned, Daniel A. Rykhus, President and Chief Executive Officer of Raven Industries, Inc., has executed this Certification in connection with the filing with the Securities and Exchange Commission of Raven Industries, Inc.'s Annual Report on Form 10-K for the fiscal year ended January 31, 2018 (the Report).

The undersigned hereby certifies, to his knowledge, that:

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

Dated: March 23, 2018

/s/ DANIEL A. RYKHUS

Daniel A. Rykhus
President and Chief Executive Officer

Exhibit 32.2

RAVEN INDUSTRIES, INC.

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

The undersigned, Steven E. Brazones, the Vice President and Chief Financial Officer of Raven Industries, Inc., has executed this Certification in connection with the filing with the Securities and Exchange Commission of Raven Industries, Inc.'s Annual Report on Form 10-K for the fiscal year ended January 31, 2018 (the Report).

The undersigned hereby certifies, to his knowledge, that:

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

Dated: March 23, 2018

/s/ STEVEN E. BRAZONES

Steven E. Brazones
Vice President and Chief Financial Officer