

R F INDUSTRIES LTD  
Form 10-K  
January 24, 2018

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

**FORM 10-K**

**FOR ANNUAL AND TRANSITION REPORTS**

**PURSUANT TO SECTIONS 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

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

**For the fiscal year ended October 31, 2017**

**or**

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

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_.**

**Commission File Number 0-13301**

**RF INDUSTRIES, LTD.**

Edgar Filing: R F INDUSTRIES LTD - Form 10-K

(Name of registrant as specified in its charter)

Nevada 88-0168936  
**(State or other jurisdiction (I.R.S. Employer Identification No.)  
of incorporation or organization)**

7610 Miramar Road, Bldg. 6000, San Diego, California 92126-4202

(Address of principal executive offices) (Zip Code)

(858) 549-6340

**(Registrant's telephone number, including area code)**

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

Common Stock, \$.01 par value.

**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 x 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 x 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. x Yes .. No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). x Yes .. No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulations 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, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer "  Accelerated Filer "   
Non-accelerated Filer " (Do not check if a smaller reporting company)  Smaller reporting company   
Emerging Growth Company "

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). "

Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold as of the last business day of the registrant's most recently completed second fiscal quarter was approximately \$9.3 million.

On January 22, 2018, the Registrant had 8,872,246 outstanding shares of Common Stock, \$.01 par value.

**Forward-Looking Statements:**

Certain statements in this Annual Report on Form 10-K, and other oral and written statements made by the Company from time to time are “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, including those that discuss strategies, goals, outlook or other non-historical matters, or projected revenues, income, returns or other financial measures. In some cases forward-looking statements can be identified by terminology such as “may,” “will,” “should,” “except,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “po-” “continue,” the negative of such terms or other comparable terminology. These forward-looking statements are subject to numerous risks and uncertainties that may cause actual results to differ materially from those contained in such statements. Among the most important of these risks and uncertainties are the ability of the Company to continue to source its raw materials and products from its suppliers and manufacturers, the market demand for its products, which market demand is dependent to a large part on the state of the telecommunications industry, the effect of future business acquisitions and dispositions, the incurrence of impairment charges, and competition.

Important factors which may cause actual results to differ materially from the forward-looking statements are described in the Section entitled “Risk Factors” in the Form 10-K, and other risks identified from time to time in the Company’s filings with the Securities and Exchange Commission. The Company assumes no obligation to update these forward-looking statements to reflect actual results or changes in factors or assumptions affecting such forward-looking statements.

**PART I**

**ITEM 1.**

**BUSINESS**

**General**

RF Industries, Ltd. (together with subsidiaries, the “Company”) is a national manufacturer and marketer of interconnect products and systems, including coaxial and specialty cables and connectors, fiber optic cables and connectors, and electrical and electronic specialty cables and components. Through its four manufacturing and production facilities, the Company provides a wide selection of interconnect products and solutions primarily to telecommunications carriers and equipment manufacturers, wireless and network infrastructure carriers and manufacturers, Data Center and Co-location companies, and to various original equipment manufacturers (OEMs) in several market segments.

The Company operates through two reporting segments: (i) the “RF Connector and Cable Assembly” segment, and (ii) the “Custom Cabling Manufacturing and Assembly” segment. The RF Connector and Cable Assembly segment primarily designs, manufactures, markets and distributes a broad range of connector and cable products, including coaxial connectors and cable assemblies that are integrated with coaxial connectors, used in telecommunications, information technology, OEM markets and other end markets. The Custom Cabling Manufacturing and Assembly segment designs, manufactures, markets and distributes custom copper and fiber cable assemblies, complex hybrid fiber optic and power solution cables, electromechanical wiring harnesses, data center products, and wiring harnesses for a broad range of applications in a diverse set of end markets.

Until its sale on December 22, 2015, the Company also operated the Aviel Electronics Division, a Nevada based division that designed, manufactured and distributed specialty and custom RF connectors primarily for aerospace and military customers. In March 2016, the Company commenced the shutdown of its Bioconnect division, which comprised the entire operations of its medical cabling and interconnect operations. The closure of the Bioconnect division was part of the Company’s plan to close or dispose of underperforming divisions that are not part of the Company’s core operations.

## **Operating Segments**

### RF Connector and Cable Assembly Segment.

The Company’s RF Connector and Cable Assembly segment consists of the RF Connector and Cable Assembly division that is based at the Company’s headquarters in San Diego, California. Although most of the Company’s RF connector and cable products are inventoried and distributed from its San Diego facilities, some of these products also are inventoried and distributed from some of the Company’s other facilities. The RF Connector and Cable Assembly division is engaged in the design, manufacture and distribution of coaxial connector solutions for companies that design, build, operate, maintain and use wireless voice, data, messaging, and location tracking systems. Coaxial connector products consist primarily of connectors which, when attached to a coaxial cable, facilitate the transmission of analog and digital signals in various frequencies.

Although most of the connectors are designed to fit standard products, the RF Connector and Cable Assembly division also sells custom connectors specifically designed and manufactured to suit its customers’ requirements such as the Distributed Area Systems (DAS), Wi-Fi and broadband wireless markets. The Company’s RF Connector and Cable Assembly division typically carries over 1,500 different types of connectors, adapters, tools, and test and measurements kits. This division’s RF connectors are used in thousands of different devices, products and types of equipment. Since the RF Connector and Cable Assembly division’s standard connectors can be used in a number of different products and devices, the discontinuation of one product typically does not make the Company’s connectors obsolete. Accordingly, most connectors carried by the Company can be marketed for a number of years and are only gradually phased out. Furthermore, because the Company’s connector products are not dependent on any single line of products or any market segment, the Company’s overall sales of connectors tend to fluctuate less materially when there are material changes or disruption to a product line or market segment. Sales of the Company’s connector products can, however, be influenced by the infrastructure spend of wireless and telecommunications firms and on the

Company's ability to market its products into these firms and the related ecosystem. The current deployment of wireless through DAS and Small Cells provides the Company with a market opportunity for the use of its connectors and cable assemblies.

Cable assembly products manufactured and sold by the RF Connector and Cable Assembly division consist of various types of coaxial cables that are attached to connectors (usually the Company's connectors) for use in a variety of communications applications. Cable assemblies manufactured for the RF Connector and Cable Assembly division are primarily manufactured at the Company's San Diego, California facilities using state-of-the-art automation equipment and are sold through distributors or directly to major OEMs. Cable assemblies consist of both standard cable assemblies and assemblies that are custom manufactured for the Company's clients. The Company offers a line of cable assemblies with over 100,000 cable product combinations. The cable assembly operation was launched in 2000.

The Company designs its connectors at its headquarters in San Diego, California. However, most of the RF connectors are manufactured for the Company by third party foreign manufacturers located in Asia.

#### Custom Cabling Manufacturing and Assembly Segment.

The Custom Cabling Manufacturing and Assembly Segment currently consists of three wholly-owned subsidiaries located in the Northeastern United States. The three subsidiaries were acquired by the Company in the recent past. Each of the three provides products and solutions to a diverse and distinct customer set from each other and from the RF Connector and Cable Assembly Segment.

Cables Unlimited Division Cables Unlimited, Inc. is a custom cable manufacturer that RF Industries, Ltd. purchased in 2011. Cables Unlimited's offices and manufacturing facilities are located in Yaphank, New York. Cables Unlimited is a Corning Cable Systems CAH Connections SM Gold Program member, authorized to manufacture fiber optic products that are backed by Corning Cable Systems' extended warranty. Cables Unlimited designs, develops and manufactures custom connectivity solutions for the industrial, defense, telecommunications and wireless markets. The products sold by Cables Unlimited include custom and standard copper and fiber optic cable assemblies, adapters and electromechanical wiring harnesses for communications, computer, LAN, automotive fiber optic and medical equipment. In 2012, Cables Unlimited introduced a custom cabling solution known as OptiFlex. The OptiFlex cable is a hybrid power and communications cable primarily designed and built for wireless service providers who are updating their network infrastructure to support current and next generation wireless technologies including 4G and 5G.

Comnet Telecom Supply Division RF Industries, Ltd. purchased Comnet Telecom Supply, Inc. in January 2015. Comnet Telecom's offices and manufacturing facilities are located in East Brunswick, New Jersey. Formed in 1995, Comnet Telecom is a Corning Cable Systems CAH Connections SM Gold Program member that is authorized to manufacture fiber optic telecommunications products that are backed by Corning Cable Systems' extended warranty and is a Telcordia GR-326 certified manufacturer. Comnet Telecom manufactures and distributes telecommunications equipment and cabling infrastructure products used by telecommunications carriers, co-location service companies, and other telecommunication and data center companies in the U.S. across multiple industries. Comnet Telecom is

also a supplier of Hot/Cold Aisle Containment as well as Technology Furnishing Solutions in addition Comnet has developed an offering of data center filler panel containment products.

Rel-Tech Electronics Division RF Industries, Ltd. purchased Rel-Tech Electronics, Inc. in June 2015. Rel-Tech's offices and manufacturing facilities are located in Milford, Connecticut. Founded in 1986, Rel-Tech is a designer and manufacturer of cable assemblies and wiring harnesses for blue chip industrial, oilfield, instrumentation, medical and military customers. Wire and cable assembly products include custom wire harnesses, ribbon cable, electromechanical and kitted assemblies, and networking and communications cabling. DIN and Mini-DIN connector assemblies include power cord, coaxial, Mil-spec, and testing.

## **Product Description**

The Company produces a broad range of interconnect products and assemblies. The products that are offered and sold by the Company consist of the following:

### *Connector and Cable Products*

The Company's RF Connector and Cable Assembly division designs, manufactures and markets a broad range of coaxial connectors, coaxial adapters and coaxial cable assemblies for the numerous products with applications in commercial, industrial, automotive, transportation, scientific, aerospace and military markets. Various types of products/connectors are offered including passive DAS related items such as connectors, adapters, splitters, couplers and loads. These connectors are offered in several configurations and cable attachment methods for customer applications. There are numerous applications for these connectors, some of which include digital applications, 2.5G, 3G, 4G, 5G, LTE and other broadband wireless infrastructure, GPS (Global Positioning Systems), mobile radio products, aircraft, video surveillance systems, cable assemblies and test equipment. Users of the Company's connectors include telecommunications companies, circuit board manufacturers, OEMs, consumer electronics manufacturers, audio and video product manufacturers and installers, and satellite companies. The Company markets over 1,500 types of connectors, adapters, tools, assembly, test and measurement kits, which range in price from under \$1 to over \$1,000 per unit. The kits satisfy a variety of applications including, but not limited to, lab operations, site requirements and adapter needs.



The Company designs and sells a variety of connector tools and hand tools that are assembled into kits used by lab and field technicians, R&D technicians and engineers. The Company also designs and offers some of its own tools, which differ from those offered elsewhere in the market. These tools are manufactured for the Company by outside contractors. Tool products are carried as an accommodation to the Company's customers and have not materially contributed to the Company's revenues.

In addition and as a result of the acquisition of the CompPro Product Line, the Company markets and manufactures a patented compression technology that offers revolutionary advantages for a water-tight, ruggedized connection, providing easier installation, and improved system reliability on braided cables. CompPro is used by wireless network operators, installers and distributors in North America and other parts of the world.

The Cable Assembly component of the Connector and Cable Assembly division markets and manufactures cable assemblies in a variety of sizes and combinations of RF coaxial connectors and coax cabling. Cabling is purchased from a variety of major unaffiliated suppliers and is assembled predominately with the Company's connectors or other brands of connectors as complete cable assemblies. Coaxial cable assemblies have numerous applications including low PIM, wireless and wireless local area networks, wide area networks, internet systems, cellular systems including 2.5G, 3G, 4G, 5G, LTE wireless infrastructure, DAS and Small Cell implementations, TV/dish network systems, test equipment, military/aerospace (mil-standard and COTS (Commercial Off The Shelf)) and entertainment systems. Cable assemblies are manufactured to customer requirements.

#### *Cables Unlimited Products*

Cables Unlimited is an International Standards Organization (ISO) approved factory that manufactures custom cable assemblies. Cables Unlimited is also a Corning Cable Systems CAH Connections SM Gold Program member, authorized to manufacture fiber optic products that are backed by Corning Cable Systems' extended warranty. Products manufactured by Cables Unlimited include custom copper and fiber optic cable assemblies, adapters and electromechanical wiring harnesses for telecommunications, computer, LAN, automotive and medical equipment companies. Cables Unlimited also provides cable installation services in the New York regional area. In April 2012, Cables Unlimited commercially released a cabling solution for wireless service providers engaged in upgrading their cell towers for 4G technologies. The custom hybrid cable, called OptiFlex, is significantly lighter and possesses greater flexibility than cables previously used for wireless service. Most of the products that Cables Unlimited develops and sells are built specifically for its customers' needs.

The acquisition of Cables Unlimited in 2011 gave the Company the ability to offer a broad range of interconnect products and systems to the Company's largest customers. These interconnect systems have the ability to combine radio frequency and fiber optic interconnect components, with various connectors and power cables through customized solutions for these customers. The Company continues to actively market its ability to provide these fiber

optic interconnect solutions to its larger customers.

#### *Comnet Telecom Products*

Comnet Telecom manufactures and distributes both standard and custom equipment and cabling products used by telecommunications carriers, co-location center operators and other telecommunication and data center companies in the U.S. Such products include fiber optics cable, copper cabling, custom patch cord assemblies, transceivers/converters, data center consoles and other data center equipment (such as server cabinets and network racks). The acquisition of Comnet Telecom expands the Company's fiber optic cabling capabilities and the customer base to which the Company can sell its other cabling products. The opportunities are further enhanced to sell Comnet data center infrastructure and telecom products into our cable product customer base.

#### *Rel-Tech Electronics Products*

Rel-Tech is a designer and manufacturer of cable assemblies and wiring harnesses for blue chip industrial, oilfield, instrumentation, medical and military customers. Wire and cable assembly products include custom wire harnesses, ribbon cable, electromechanical and kitted assemblies, networking and communications cabling. DIN and Mini DIN connector assemblies include power cord, coaxial, Mil-spec and testing.

#### **Foreign Sales**

Net sales to foreign customers accounted for \$700,000 (or approximately 2%) of the Company's net sales, and \$1.0 million (or approximately 3%) of the Company's sales, respectively, for the fiscal years ended October 31, 2017 and 2016. The majority of the export sales during these periods were to Canada and Mexico.

The Company does not own, or directly operate any manufacturing operations or sales offices in foreign countries.

## **Distribution, Marketing and Customers**

The Company deploys various sales methods depending upon the market being serviced. The Company currently sells products primarily through warehousing distributors to address the wireless, telecom, and data center markets and direct to OEM customers who utilize coaxial connectors and cable assemblies and harnesses in the manufacture of their own products and solutions.

## **Backlog**

The Company estimates that its backlog of unfulfilled orders as of October 31, 2017 was approximately \$4.0 million on a consolidated basis, compared with a backlog of approximately \$3.3 million as of October 31, 2016. The Company does not have any long-term supply agreements, and most of its purchase orders have short lead times. Therefore, backlog may not be indicative of future demand. The Company expects that all or substantially all of the backlog will be filled within the next 12 months.

## **Manufacturing**

The RF Connector and Cable Assembly division contracts with outside third parties for the manufacture of a significant portion of its coaxial connectors. However, virtually all of the RF cable assemblies sold by the RF Connector and Cable Assembly division during the fiscal year ended October 31, 2017 were assembled by the Cable Assembly side of the RF Connector and Cable Assembly division at the Company's approved ISO factory in California. The RF Connector and Cable Assembly division procures its raw cable from manufacturers with ISO approved factories in the United States, China and Taiwan. The Company is dependent primarily on twelve manufacturers for its coaxial connectors, tools and other passive components and several plants for raw cable. Although the Company does not have manufacturing agreements with these manufacturers for its connectors and cable products, the Company does have long-term purchasing relationships with these manufacturers. There are certain risks associated with the Company's dependence on third-party manufacturers for some of its products. See "Risk Factors" below. The Company has in-house design engineers who create the engineering drawings for fabrication and assembly of connectors and cable assemblies. Accordingly, the manufacturers are not primarily responsible for design work related to the manufacture of the connectors and cable assemblies.

Cables Unlimited manufactures its custom cable assemblies, adapters and electromechanical wiring harnesses and other products in its Yaphank, New York manufacturing facility. Cables Unlimited is an ISO approved factory, as well as a Corning Cable Systems CAH Connections SM Gold Program member, authorized to manufacture fiber optic products and assemblies that are backed by Corning Cable Systems' extended warranty. Cables Unlimited outsources

the assembly of a portion of its proprietary OptiFlex cable to a third party manufacturer. The final assembly and termination of the OptiFlex cable is completed by Cables Unlimited at its Yaphank, New York facilities.

Comnet Telecom manufactures, assembles and tests its cabling products at its facilities in East Brunswick, New Jersey. Comnet Telecom is a Corning Cable Systems CAH Connections SM Gold Program approved fiber optic member and a Telcordia GR-326 approved manufacturer also authorized to produce fiber optic products and assemblies that are backed by Corning Cable Systems' extended warranty.

Rel-Tech Electronics manufactures its cable assemblies, electromechanical assemblies, wiring harnesses and other products in its Milford, Connecticut, ISO approved manufacturing facility.

## **Raw Materials**

Connector materials are typically made of commodity metals such as copper, brass and zinc and include small applications of precious materials, including silver and gold. The RF Connector and Cable division purchases most of its connector products from contract manufacturers located in Asia and the United States. The Company believes that the raw materials used in its products are readily available and that the Company is not currently dependent on any supplier for its raw materials. The Company does not currently have any long-term purchase or supply agreements with its connector or suppliers. The Cable Assembly group obtains coaxial connectors from the RF Connector group. The Company believes there are numerous domestic and international suppliers of coaxial connectors.

The Cables Unlimited division, Comnet Telecom division and the Rel-Tech Electronics division purchase all of their products from manufacturers located in the United States. Fiber optic cables are available from various manufacturers located throughout the United States; however, both Cables Unlimited and Comnet Telecom purchase most of their fiber optic cables from Corning Cables Systems LLC. The Company believes that the raw materials used by Cables Unlimited and Comnet Telecom in their products are readily available and that neither division is not currently dependent on any supplier for its raw materials except where Corning Extended Warranty certification is required. Neither Cables Unlimited, nor Comnet Telecom nor Rel-Tech Electronics currently have any long-term purchase or supply agreements with their connector and cable suppliers.

## **Employees**

As of October 31, 2017, the Company employed 195 full-time employees, of whom 43 were in accounting, administration, sales and management, 146 were in manufacturing, distribution and assembly, and 6 were engineers engaged in design, engineering and research and development. The employees were based at the Company's offices in San Diego, California (64 employees), Yaphank, New York (35 employees), Milford, Connecticut (66 employees) and East Brunswick, New Jersey (30 employees). The Company also occasionally hires part-time employees. The

Company believes that it has a good relationship with its employees. The Cables Unlimited division employs five cable installers who are currently represented by a union. Other than the foregoing installers that belong to a union, none of the Company's other employees are unionized.

## **Research and Development**

The Company's research and development expenses relate to its engineering activities, which consist of the design and development of new products for specific customers, as well as the design and engineering of new or redesigned products for the industry in general. During the years ended October 31, 2017 and 2016, the Company recognized \$845,000 and \$747,000 in engineering expenses, respectively. Research and development costs are expensed as incurred.

## **Patents, Trademarks and Licenses**

The Company owns 14 patents (ten U. S. and four foreign) and there are two foreign patents pending approval related to CompPro Product Line that it acquired in May 2015. The CompPro Product Line utilizes a patented compression technology that offers revolutionary advantages for a water-tight connection, easier installation, and improved system reliability on braided cables. The CompPro Product Line is used by wireless network operators, installers and distributors in North America and other parts of the world. The Company also owns the "CompPro" registered trademark associated with the compression cable product line.

The Company uses "OptiFlex™" as a trademark for its hybrid cable wireless tower cable solution.

Because the Company carries thousands of separate types of connectors and other products, most of which are available in standard sizes and configuration and are also offered by the Company's competitors, the Company does not believe that its business or competitive position is dependent on patent protection.

Under its agreements with Corning Cables Systems LLC, Cables Unlimited and Comnet Telecom are permitted to advertise that they are Corning Cables System CAH Connections Gold Program members.

## **Warranties and Terms**

The Company warrants its products to be free from defects in material and workmanship for varying warranty periods, depending upon the product. Products are generally warranted to the dealer for one year, with the dealer responsible for any additional warranty it may make. The RF Connector products are warranted for the useful life of the

connectors. Although the Company has not experienced any significant warranty claims to date, there can be no assurance that it will not be subjected to such claims in the future.

The Company usually sells to customers on 30-day terms pursuant to invoices and does not generally grant extended payment terms. Sales to most foreign customers are made on cash terms at time of shipment. Customers may delay, cancel, reduce, or return products after shipment subject to a restocking charge.

Under its agreements with Corning Cables Systems LLC, Cables Unlimited and Comnet Telecom are authorized to manufacture optic cable assemblies that are backed by Corning Cables Systems' extended warranty (referred to as the "Gold Certified Warranty").

## **Competition**

The Company and industry analysts estimate worldwide sales of connector products of approximately \$59 billion in 2017. The Company believes that the worldwide industry for connector products is highly fragmented, with no one competitor having over a 20% share of the total market. The Company and industry analysts estimate worldwide sales of cable assembly products totaled nearly \$140 billion in 2016. In North America, there are an estimated 1,105 companies participating in the cable assembly business with approximately 23% of the companies serving the industrial market sector. Many of the competitors of the RF Connector and Cable Assembly division have significantly greater financial resources and broader product lines. The RF Connector and Cable Assembly division competes on the basis of product quality, product availability, price, service, delivery time and value-added support to its distributors and OEM customers. Since the Company's strategy is to provide a broad selection of products in the areas in which it competes and to have a ready supply of those products available at all times, the Company normally carries a significant amount of inventory of its connector products.

Cables Unlimited competes on the basis of product quality, custom design, service, delivery time and value-added support to its customers. Since Cables Unlimited and Comnet Telecom are Corning Cables System CAH Connections Gold Program members, along with 13 companies permitted to manufacture fiber optic cable assemblies that are backed by Corning Cables Systems' extended warranty. Cables Unlimited and Comnet Telecom believes that being part of a limited number of Corning Cables System CAH Connections Gold Program members provides a competitive advantage in certain fiber optic markets.

Cables Unlimited, Comnet Telecom and Rel-Tech Electronics compete with both smaller, local cable assembly houses as well as large, national manufacturers and distributors of telecommunications equipment and products.

## **Government Regulations**

The Company's products are designed to meet all known existing or proposed governmental regulations. Management believes that the Company currently meets existing standards for approvals by government regulatory agencies for its principal products.

The Company's products are Restriction on Hazardous Substances ("RoHS") compliant.

## **Investor Information.**

The Company's principal executive office is currently located at 7610 Miramar Road, Building #6000, San Diego, California. The Company was incorporated in the State of Nevada on November 1, 1979, completed its initial public offering in March 1984 under the name Celltronics, Inc., and changed its name to RF Industries, Ltd. in November 1990. Unless the context requires otherwise, references to the "Company" in this report include RF Industries, Ltd. and its three wholly-owned subsidiaries, Cables Unlimited, Inc., Comnet Telecom Supply, Inc., and Rel-Tech Electronics, Inc.

The Company's principal Internet website is located at <http://www.rfindustries.com>. The Company's annual reports, quarterly reports, current reports on Form 8-K and amendments to such reports filed or furnished pursuant to section 13(a) or 15(d) of the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), and other information related to the Company, are available, free of charge, on that website as soon as we electronically file those documents with, or otherwise furnish them to, the Securities and Exchange Commission ("SEC"). The Company's Internet website and the information contained therein, or connected thereto, are not and are not intended to be incorporated into this Annual Report on Form 10-K.

### **ITEM 1.A**

### **RISK FACTORS**

Investors should carefully consider the risks described below and all other information in this Form 10-K. The risks and uncertainties described below are not the only ones facing the Company. Additional risks and uncertainties not presently known to the Company or that it currently deems immaterial may also impair the Company's business and operations.



If any of the following risks actually occur, the Company's business, financial condition or results of operations could be materially adversely affected. In such case, the trading price of the Company's common stock could decline and investors may lose all or part of the money they paid to buy the Company's common stock.

***The Company Is Heavily Dependent Upon Wireless And Broadband Communications Providers.***

The revenues and profitability of the Company are, to a significant extent, dependent upon the wireless and broadband communications industries. Accordingly, revenues and profits have decreased during the past two years as these markets have experienced an industry-wide slowdown in growth. The Company's operations are expected in the future to continue to be heavily dependent upon the wireless and broadband industries. The Company acquired Comnet Telecom in January 2015 and Rel-Tech Electronics in June 2015 in part to reduce the Company's dependence on the wireless and broadband customers and to provide other communications products that are not as dependent upon the wireless and broadband markets. However, because the Company anticipates that sales to the wireless and broadband markets will continue to represent a large portion of the Company's revenues, the Company's revenues and profits will continue to be heavily dependent on the wireless and broadband markets.

***The Company Depends On Third-Party Contract Manufacturers For A Majority Of Its Connector Manufacturing Needs. If They Are Unable To Manufacture A Sufficient Quantity Of High-Quality Products On A Timely And Cost-Efficient Basis, The Company's Net Revenue And Profitability Would Be Harmed And Its Reputation May Suffer.***

Substantially all of the Company's RF Connector and Cable Division's connector products are manufactured by third-party contract manufacturers. The Company relies on them to procure components for RF Connectors and in certain cases to design, assemble and test its products on a timely and cost-efficient basis. If the Company's contract manufacturers are unable to complete design work on a timely basis, the Company will experience delays in product development and its ability to compete may be harmed. In addition, because some of the Company's manufacturers have manufacturing facilities in Taiwan and China, their ability to provide the Company with adequate supplies of high-quality products on a timely and cost-efficient basis is subject to a number of additional risks and uncertainties, including political, social and economic instability and factors that could impact the shipment of supplies. If the Company's manufacturers are unable to provide it with adequate supplies of high-quality products on a timely and cost-efficient basis, the Company's operations would be disrupted and its net revenue and profitability would suffer. Moreover, if the Company's third-party contract manufacturers cannot consistently produce high-quality products that are free of defects, the Company may experience a higher rate of product returns, which would also reduce its profitability and may harm the Company's reputation and brand.

The Company does not currently have any long-term supply agreements with any of its contract manufacturers, and such manufacturers could stop manufacturing products for the Company at any time. Although the Company believes that it could locate alternate contract manufacturers if any of its manufacturers terminated their business, the Company's operations could be impacted until alternate manufacturers are found.



***The Company's Prior Acquisitions And Potential Additional Future Acquisitions Could Increase Operating Costs And Expose The Company To Additional Risks.***

As part of its plan to operate businesses that are profitable and that reflect the changing market, the Company from time to time sells unprofitable divisions and purchases new businesses. During the past few years, the Company has sold its Aviel, RadioMobile and RF Neulink divisions, and has shutdown its Bioconnect division. The Company has also purchased the Cables Unlimited, Comnet Telecom, and Rel-Tech subsidiaries. While the Company believes that restructuring its operations to address changes in its principal markets will benefit the Company in the longer term, these dispositions and acquisitions have in the short term caused the Company to incur additional legal, accounting and administrative expenses, including the cost of integrating the various accounting systems of its new subsidiaries, upgrading its information systems, and the cost of managing various divisions in separate locations and states. The Company may in the future make additional acquisitions. Accordingly, the Company will be subject to numerous risks associated with the acquisition of additional businesses, including:

- diversion of management's attention;
  
- the effect on the Company's financial statements of the amortization of acquired intangible assets;
  
- the cost associated with acquisitions and the integration of acquired operations;
  
- the Company may not be able to secure capital to finance future acquisitions to the extent additional debt or equity is needed; and
  
- assumption of unknown liabilities, or other unanticipated events or circumstances.

Any of these risks could materially harm the Company's business, financial condition and results of operations. There can be no assurance that any business that the Company acquires will achieve anticipated revenues or operating results.

***The Company's Dependence On Third-Party Manufacturers Increases The Risk That It Will Not Have An Adequate Supply Of Products Or That Its Product Costs Will Be Higher Than Expected.***

The risks associated with the Company's dependence upon third parties which develop and manufacture and assemble the Company's products, include:

- reduced control over delivery schedules and quality;
- risks of inadequate manufacturing yields and excessive costs;
- the potential lack of adequate capacity during periods of excess demand; and
- potential increases in prices due to raw material and/or labor costs.

These risks may lead to increased costs or delay product delivery, which would harm the Company's profitability and customer relationships.

***An impairment in the carrying value of goodwill, tradenames and other long-lived assets could negatively affect the Company's consolidated results of operations and net worth.***

Goodwill and indefinite-lived intangible assets, such as trade names, are recorded at fair value at the time of acquisition and are not amortized, but are reviewed for impairment annually or more frequently if impairment indicators arise. In evaluating the potential for impairment of goodwill and trade names, we make assumptions regarding future operating performance, business trends and market and economic conditions. There are inherent uncertainties related to these factors and in applying these factors to the assessment of goodwill and trade name recoverability. Goodwill reviews are prepared using estimates of fair value based on the estimated present value of future discounted cash flows. The Company could be required to evaluate the recoverability of goodwill or tradenames prior to the annual assessment upon unexpected significant declines in operating results, the divestiture of a significant component of the Company's business or other factors.

The Company has determined as of October 31, 2017 that the goodwill of Cables Unlimited, Inc., Comnet, Rel-Tech and CompPro have not been impaired.

However, in the fourth quarter of the fiscal year ended October 31, 2016, the Company recognized \$2.6 million and \$150,000 of impairment charges on goodwill and tradename, respectively, related to its Cables Unlimited, Inc. subsidiary.

No assurance can be given that events or circumstances will not change regarding the carrying value of goodwill of the Cables Unlimited, Comnet and Rel-Tech subsidiaries or the CompPro product line. Should the Company in the future determine that the carrying value of the goodwill associated with some or all of these assets no longer is recoverable, the Company will have to record additional impairment losses. In the event that the Company does have to record material impairment charges on either of the Cables Unlimited, Comnet and Rel-Tech subsidiaries or the CompPro product line, such future charges could materially reduce future earnings, which would negatively affect the Company's stock price.



***If The Manufacturers Of The Company's Coaxial Connectors Or Other Products Discontinue The Manufacturing Processes Needed To Meet The Company's Demands Or Fail To Upgrade Their Technologies, The Company May Face Production Delays.***

The Company's coaxial connector and other product requirements typically represent a small portion of the total production of the third-party manufacturers. As a result, the Company is subject to the risk that a third-party manufacturer will cease production of some of the Company's products or fail to continue to advance the process design technologies on which the manufacturing of the Company's products are based. Each of these events could increase the Company's costs, harm its ability to deliver products on time, or develop new products.

***While The Company Has In The Past Paid Dividends, No Assurance Can Be Given That The Company Will Declare Or Pay Cash Dividends In The Future.***

During fiscal 2017, the Company made four dividends distributions to its stockholders (for a total of \$0.08 per share). Dividends are declared and paid at the discretion of the Board of Directors subject to applicable laws, and depend on a number of factors, including our financial condition, results of operations, capital requirements, plans for future acquisitions, contractual restrictions, general business conditions and other factors that our Board of Directors may deem relevant. If the Company does not pay a cash dividend, the Company's stockholders will not realize a return on their investment in the Common Stock except to the extent of any appreciation in the value of the Common Stock.

***The Company's Dependence Upon Independent Distributors To Sell And Market The Company's Products Exposes The Company To The Risk That Such Distributors May Decrease Their Sales Of The Company's Products Or Terminate Their Relationship With The Company.***

The Company's sales efforts are primarily affected through independent distributors. Although the Company has entered into written agreements with most of the distributors, the agreements are nonexclusive and generally may be terminated by either party upon 30-60 days' written notice. The Company's distributors are not within the control of the Company, are not obligated to purchase products from the Company, and may also sell other lines of products. There can be no assurance that these distributors will continue their current relationships with the Company or that they will not give higher priority to the sale of other products, which could include products of competitors. A reduction in sales efforts or discontinuance of sales of the Company's products by its distributors would lead to reduced sales and could materially adversely affect the Company's financial condition, results of operations and business. Selling through indirect channels such as distributors may limit the Company's contact with its ultimate customers and the Company's ability to assure customer satisfaction.

***A Portion Of The Company's Sales Is Dependent Upon A Few Principal Customers, The Loss Of Whom Could Materially Negatively Affect The Company's Total Sales.***

Two customers accounted for approximately 20% and 11% of the Company's net sales for the fiscal year ended October 31, 2017, and one customer accounted for approximately 15% of the Company's net sales for the fiscal year ended October 31, 2016. Although these customers have been on-going major customers of the Company continuously in the past, the written agreements with these customers do not have any minimum purchase obligations and the customers could stop buying the Company's products at any time and for any reason. A reduction, delay or cancellation of orders from these customers or the loss of these customers could significantly reduce the Company's future revenues and profits. The Company cannot provide assurance that this customer or any of its current customers will continue to place orders, that orders by existing customers will continue at current or historical levels or that the Company will be able to obtain orders from new customers.

***Difficult Conditions In The Global Economy May Adversely Affected the Company's Business And Results Of Operations.***

A prolonged economic downturn, both in the U.S. and worldwide, could lead to lower sales or reduced sales growth, reduced prices, lower gross margins, and increased bad debt risks, all of which could adversely affect the Company's results of operations, financial condition and cash flows. Slowing economic activity, particularly in the telecommunication and data communication and wireless communications industries that represent the Company's largest target market, may adversely impact the demand for the Company's products. If the current economic condition in the U.S. deteriorates, the Company's results could be adversely affected as demand for wireless products lessens. There could also be a number of other adverse follow-on effects on the Company's business from a deterioration of economic conditions or from a credit crisis, including insolvency of certain key distributors, key suppliers, contract manufacturers and customers.

***Because The Markets In Which The Company Competes Are Highly Competitive, A Failure To Effectively Compete Could Result In An Immediate And Substantial Loss Of Market Share.***

The markets in which the Company operates are highly competitive and the Company expects that competition will increase in these markets. In particular, the wireless and telecommunications markets in which most of the Company's products are sold are intensely competitive. A failure to effectively compete in this market could result in an immediate and substantial loss of revenues and market share. Because most of the Company's sales are derived from products that are not proprietary or that can be used to distinguish the Company from its competitors, the Company's ability to compete successfully in these markets depends on a number of factors, including:

- product quality;
- reliability;
- customer support;





- time-to-market;
- price;
- market acceptance of competitors' products; and
- general economic conditions.

The Company's revenues may suffer if the Company is not able to effectively satisfy its customers in each of the foregoing ways. In addition, the Company's competitors or customers may offer enhancements to its existing products or offer new products based on new technologies, industry standards or customer requirements that have the potential to replace or provide lower-cost or higher performance alternatives to the Company's products. The introduction of enhancements or new products by the Company's competitors could render its existing and future products obsolete or unmarketable.

Many of the Company's competitors have significantly greater financial and other resources. In certain circumstances, the Company's customers or potential customers have internal manufacturing capabilities with which the Company may compete.

***If The Industries Into Which The Company Sells Its Products Experience Recession Or Other Cyclical Effects Impacting The Budgets Of Its Customers, The Company's Operating Results Could Be Negatively Impacted.***

The primary customers for the Company's connector and cable products are in the wireless communications industries. Any significant downturn in the Company's customers' markets, in particular, or in general economic conditions which result in the cut back of budgets would likely result in a reduction in demand for the Company's products and services and could harm the Company's business. Historically, the communications industry has been cyclical, affected by both economic conditions and industry-specific cycles. Depressed general economic conditions and cyclical downturns in the communications industry have each had an adverse effect on sales of communications equipment, OEMs and their suppliers, including the Company. No assurance can be given that the wireless communications industry will not experience a material downturn in the near future. Any cyclical downturn in the communications industry could have a material adverse effect on the Company.

***Because The Company Sells Its Products To Foreign Customers, The Company Is Exposed To All Of The Risks Associated With International Sales, Including Foreign Currency Exposure.***

Sales to customers located outside the United States, either directly or through U.S. and foreign distributors, accounted for approximately 2% and 3% of the net sales of the Company during the years ended October 31, 2017 and 2016, respectively. International revenues are subject to a number of risks, including:

- longer accounts receivable payment cycles;
- difficulty in enforcing agreements and in collecting accounts receivable;
- tariffs and other restrictions on foreign trade;
- economic and political instability; and the
- burdens of complying with a wide variety of foreign laws.

The Company's foreign sales are also affected by general economic conditions in its international markets. A prolonged economic downturn in its foreign markets could have a material adverse effect on the Company's business. There can be no assurance that the factors described above will not have an adverse material effect on the Company's future international revenues and, consequently, on the financial condition, results of operations and business of the Company.

Since sales made to foreign customers or foreign distributors have historically been in U.S. dollars, the Company has not been exposed to the risks of foreign currency fluctuations. However, if the Company in the future is required to accept sales denominated in the currencies of the countries where sales are made, the Company will thereafter also be exposed to currency fluctuation risks.

***Changes Of Key Personnel Could Adversely Affect The Company's Operations.***

The Company's success is dependent to a significant extent on the service of the Company's senior executives. On July 17, 2017, the Company hired Robert D. Dawson as President and Chief Executive Officer. Howard Hill, the Company's interim President and Chief Executive Officer, remained with the Company as a member of its Board of Director. The Company believes that Mr. Dawson's experience as well as his knowledge of the wireless market is highly valuable to the Company. In addition, the Company's operations are dependent upon the continued services of Mark Turfler, its Chief Financial Officer, and the presidents of the Company's four divisions. The loss of the services of these officers could materially adversely affect the Company's business, operating results, and financial condition. The Company has an employment agreement in place for Mr. Dawson and no other officers.

***The Company Has Few Patent Rights In The Technology Employed In Its Products, Which May Limit the Company's Ability To Compete.***

Other than the patents that the Company owns related to its CompPro proprietary product line, the Company does not hold any other United States or foreign patents, and does not have any patents pending. The Company does not seek to protect its rights in the technology that it develops or that the Company's third-party contract manufacturers develop by means of the patent laws, although it does protect some aspects of its proprietary products and technologies by means of copyright and trade secret laws. Accordingly, competitors can and do sell many of the same products as the Company, and the Company cannot prevent or restrict such competition.



***Volatility of Trading Prices Of The Company's Stock Could Result In A Loss On An Investment In The Company's Stock.***

The market price of the Company's common stock has varied greatly, and the trading volume of the Company's common stock has fluctuated greatly as well. These fluctuations often occur independently of the Company's performance or any announcements by the Company. Factors that may result in such fluctuations include:

· any shortfall in revenues or net income from revenues or net income expected by securities analysts, or a net loss in the Company's quarterly or annual operations;

· fluctuations in the Company's financial results or the results of other connector and communications-related companies, including those of the Company's direct competitors;

· changes in analysts' estimates of the Company's financial performance, the financial performance of the Company's competitors, or the financial performance of connector and communications-related public companies in general;

· general conditions in the connector and communications industries;

· changes in the Company's revenue growth rates or the growth rates of the Company's competitors;

· sales of large blocks of the Company's common stock; and

· conditions in the financial markets in general.

In addition, the stock market may, from time to time, experience extreme price and volume fluctuations, which may be unrelated to the operating performance of any specific company. Accordingly, the market prices of the Company's common stock may be expected to experience significant fluctuations in the future.

***Failure to maintain an effective system of internal control over financial reporting or to remediate weaknesses could materially harm the Company's revenues, erode stockholder confidence in the Company's ability to pursue business and report its financial results/condition, and negatively affect the trading price of the Company's common stock.***

As a public reporting company, the Company is required to establish and maintain effective internal control over financial reporting. Failure to establish such internal control, or any failure of such internal control once established, could adversely impact the Company's public disclosures regarding its business, financial condition or results of operations. Any failure of our internal control over financial reporting could also prevent the Company from maintaining accurate accounting records and discovering accounting errors and financial frauds.

Rules adopted by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 require annual assessment of our internal control over financial reporting. The standards that must be met for management to assess the internal control over financial reporting as effective are complex, and require significant documentation, testing and possible remediation to meet the detailed standards. Management's assessment that there are weaknesses in the Company's internal control over financial reporting may raise concerns for investors. Any actual or perceived weaknesses and conditions that need to be addressed in the internal controls over financial reporting (including those weaknesses identified in periodic reports), or disclosure of management's assessment of the internal controls over financial reporting may have an adverse impact on the price of the Company's common stock.

As disclosed in Form 10-K for the year ended October 31, 2016, we identified a material weakness in our internal controls specifically in connection with the untimely review of the impairment analysis for goodwill prepared by third party subject matter experts. We determined that the Company did not have adequate design or operation of internal controls to ensure the timely review of its accounting for certain complex estimates. While we believe that we have remediated the foregoing material weakness and that our internal controls were effective as of October 31, 2017, no assurance can be given that there will not be other failures in our internal controls.

***A Cyber Incident Could Result In Information Theft, Data Corruption, Operational Disruption, And/ Or Financial Loss.***

Businesses have become increasingly dependent on digital technologies to conduct day-to-day operations. At the same time, cyber incidents, including deliberate attacks or unintentional events, have increased. A cyber attack could include gaining unauthorized access to digital systems for purposes of misappropriating assets or sensitive information, corrupting data, or causing operational disruption or result in denial of service on websites. We depend on digital technology, including information systems and related infrastructure, to process and record financial and operating data, and communicate with our employees and business partners. Our technologies, systems, networks, and those of our business partners may become the target of cyber attacks or information security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of proprietary and other information, or other disruption of our business operations. Although to date we have not experienced any losses relating to cyber attacks, there can be no assurance that we will not suffer such losses in the future. As cyber threats continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities.

ITEM 1B.

UNRESOLVED STAFF COMMENTS

None.

ITEM 2.

DESCRIPTION OF PROPERTY

The Company currently leases its corporate headquarters and RF connector and cable assembly manufacturing facilities at 7610 Miramar Road, San Diego, California. At that location, the Company leases three buildings, that house the Company's corporate administration, sales and marketing, and engineering departments. The buildings also are used for production and warehousing by the Company's RF Connector and Cable Assembly and Comnet Telecom divisions. On June 5, 2017, the Company entered into a fifth amendment to its lease for its facility in San Diego, California. As a result, the Company now leases a total of approximately 21,908 square feet of office, warehouse and manufacturing space at its San Diego location. The term of the lease expires on July 31, 2022, and the rental payments under the lease currently are \$22,721 per month. The San Diego lease also requires the payment of the Company's pro rata share of real estate taxes and insurance, maintenance and other operating expenses related to the facilities.

(i) On June 9, 2017, the Cables Unlimited division entered into an amendment to its lease with K & K Unlimited, as landlord, under which Cables Unlimited leases its 12,000 square foot manufacturing facility in Yaphank, New York, to extend the term of the lease to June 30, 2018. Cables Unlimited's monthly rent expense under the amended lease remains at \$13,000 per month, plus payments of all utilities, janitorial expenses, routine maintenance costs and costs of insurance for Cables Unlimited's business operations and equipment. The landlord is a company

controlled by Darren Clark, the former owner and current President of Cables Unlimited.

On June 25, 2017, the Comnet Telecom division entered into an amendment to its lease for approximately 15,000 (ii) square feet in two suites located in East Brunswick, New Jersey. Comnet's current monthly rent expense under the leases is \$8,542 per month for these facilities. The amended lease expires in September 2022.

On July 25, 2017, the Rel-Tech Electronic division entered into a lease for approximately 13,750 square feet (iii) located in Milford, Connecticut. Rel-Tech's current net monthly rent expense under the lease is \$8,707 per month for these facilities. The new lease expires in August 2019.

The aggregate monthly rental for all of the Company's facilities currently is approximately \$53,000 per month, plus utilities, maintenance and insurance.

### ITEM 3.

### LEGAL PROCEEDINGS

From time to time, we may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. Litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. As of the date of this report, we are not subject to any proceeding that is not in the ordinary course of business or that is material to the financial condition of our business.

### ITEM 4.

### MINE SAFETY DISCLOSURES

Not applicable.

## **PART II**

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

The Company's Common Stock is listed and trades on the NASDAQ Global Market under the symbol "RFIL."

The price range per share of common stock presented below represents the highest and lowest intraday sales prices for the Company's common stock on the NASDAQ during each quarter of the two most recent years.





Quarter	High	Low
Fiscal 2017		
November 1, 2016 - January 31, 2017	\$2.10	\$1.40
February 1, 2017 - April 30, 2017	1.70	1.40
May 1, 2017 - July 31, 2017	2.00	1.40
August 1, 2017 - October 31, 2017	2.85	1.75
Fiscal 2016		
November 1, 2015 - January 31, 2016	\$4.55	\$3.90
February 1, 2016 - April 30, 2016	4.35	2.09
May 1, 2016 - July 31, 2016	2.54	1.99
August 1, 2016 - October 31, 2016	2.45	1.70

Stockholder. As of October 31, 2017, there were 315 holders of the Company's Common Stock according to the records of the Company's transfer agent, Continental Stock Transfer & Trust Company, New York, New York, not including holders who hold their stock in "street name."

Dividends. The Company paid four quarterly dividends of \$0.02 per share during the year ended October 31, 2017 for a total of \$707,000. The Company paid quarterly dividends of \$0.02, \$0.02, \$0.02 and \$0.07 per share during the three months ended October 31, 2016, July 31, 2016, April 30, 2016 and January 31, 2016, respectively, for a total of \$1.1 million. Dividends are declared and paid from time to time at the discretion of the Board of Directors subject to applicable laws, and depend on a number of factors, including our financial condition, results of operations, capital requirements, plans for future acquisitions, contractual restrictions, general business conditions and other factors that our Board of Directors may deem relevant.

Repurchase of Securities. The Company did not repurchase any securities during the fiscal year October 31, 2017.

Recent Sales of Unregistered Securities. There were no previously unreported sales of equity securities by the Company that were not registered under the Securities Act during fiscal 2017.

## EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of October 31, 2017 with respect to the shares of Company common stock that may be issued under the Company's existing equity compensation plans.

A