

WIRELESS TELECOM GROUP INC
Form 10-K
March 12, 2019
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K

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

For the fiscal year ended December 31, 2018

OR

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

For the transition period from _____ to _____

Commission file number 1-11916

WIRELESS TELECOM GROUP, INC.

(Exact name of registrant as specified in its charter)

New Jersey (State or other jurisdiction of incorporation or organization)	<u>22-2582295</u> (I.R.S. Employer Identification No.)
---	--

25 Eastmans Road, Parsippany, New Jersey (Address of principal executive offices)	<u>07054</u> (Zip Code)
---	----------------------------

(973) 386-9696
(Registrant's Telephone Number, Including Area Code)

Edgar Filing: WIRELESS TELECOM GROUP INC - Form 10-K

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

<u>Title of each class</u>	Name of each exchange on which registered
Common Stock, par value \$.01 per share	NYSE American

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

none
(Title of Class)

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 Web site, 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.

Edgar Filing: WIRELESS TELECOM GROUP INC - Form 10-K

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

Large accelerated filer Accelerated filer

Non-accelerated filer Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standard 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 registrants' Common Stock, \$.01 par value, held by non-affiliates and computed by reference to the closing price as reported by NYSE American on June 30, 2018: \$36,988,004

Number of shares of Wireless Telecom Group, Inc. Common Stock, \$.01 par value, outstanding as of March 1, 2019: 21,300,252

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement relating to the 2019 Annual Meeting of Stockholders (the "2019 Proxy Statement") are incorporated by reference into Part III of this Annual Report on Form 10-K.

TABLE OF CONTENTS

	<u>Page</u>
<u>PART I</u>	
<u>Item 1. Business</u>	3
<u>Item 1A. Risk Factors</u>	8
<u>Item 1B. Unresolved Staff Comments</u>	17
<u>Item 2. Properties</u>	17
<u>Item 3. Legal Proceedings</u>	17
<u>Item 4. Mine Safety Disclosures</u>	17
<u>PART II</u>	
<u>Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	18
<u>Item 6. Selected Financial Data</u>	18
<u>Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	19
<u>Item 7A. Quantitative and Qualitative Disclosures About Market Risk</u>	26
<u>Item 8. Financial Statements and Supplementary Data</u>	26
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	61
<u>Item 9A. Controls and Procedures</u>	61
<u>Item 9B. Other Information</u>	61
<u>PART III</u>	
<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	62
<u>Item 11. Executive Compensation</u>	62
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	62
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	62
<u>Item 14. Principal Accountant Fees and Services</u>	62

PART IV

Item 15. Exhibits and Financial Statement Schedules

63

Signatures

66

2

PART I

Item 1. Business

Overview

Wireless Telecom Group, Inc., a New Jersey corporation, together with its subsidiaries (“we”, “us”, “our” or the “Company”), specializes in the design and manufacture of advanced radio frequency and microwave devices which enable the development, testing and deployment of wireless technology. The Company provides unique, highly customized and configured solutions which drive innovation across a wide range of traditional and emerging wireless technologies.

Wireless Telecom Group is comprised of four brands – Microlab, Boonton, Noisecom, and CommAgility – organized into three reporting segments – Network Solutions, Test and Measurement and Embedded Solutions.

Our customers include wireless carriers, defense contractors, military and government agencies, satellite communication companies, network equipment manufacturers, tower companies, semiconductor device manufacturers and system integrators.

Our products include components, modules, systems and instruments used across the lifecycle of wireless connectivity and communication development, deployment and testing. Our customers use these products in relation to commercial infrastructure development, the expansion and upgrade of distributed antenna systems, deployment of small cell technology and private long term evolution (“LTE”) networks. In addition, the Company’s products are used in the development and testing of satellite communication systems, radar systems, semiconductor devices, automotive electronics and avionics.

The consolidated financial statements include the accounts of Wireless Telecom Group, Inc., doing business as, and operating under the trade name Noise Com, Inc., and its wholly owned subsidiaries including Boonton Electronics Corporation, Microlab/FXR, Wireless Telecommunications Ltd. and CommAgility Limited. The corporate website address is www.wirelesstelecomgroup.com. Noise Com, Inc., Boonton Electronics Corporation, Microlab/FXR and CommAgility Limited Ltd. are hereinafter referred to as “Noisecom”, “Boonton”, “Microlab” and “CommAgility”, respectively.

Market

Since the Company's incorporation in the State of New Jersey in 1985, it has been primarily engaged in supplying noise source components and instruments, electronic testing and measurement instruments, and radio frequency ("RF") passive components to customers. With the CommAgility acquisition in February of 2017 the Company expanded to include the delivery of signal processing modules and the delivery, implementation and configuration of LTE physical layer and stack software. Approximately 90% and 85% of the Company's consolidated revenues in fiscal years 2018 and 2017, respectively, were derived from commercial customers. The remaining consolidated revenues (approximately 10% and 15% in 2018 and 2017, respectively) were comprised of revenues from the United States government (particularly the armed forces) and prime defense contractors.

Products

Our Network Solutions segment is comprised of our **Microlab** business.

Microlab designs and manufactures a wide selection of RF components and integrated subsystems for signal conditioning and distribution in the wireless infrastructure markets. Microlab products are used in small cell deployments, distributed antenna systems, in-building wireless solutions and cellular base-stations. Microlab is a leader in low passive intermodulation ("PIM") radio frequency and microwave products for these purposes.

Microlab components possess unique capabilities in the area of broadband frequency coverage, minimal loss and low passive intermodulation. High performance components – such as power combiners, directional couplers, attenuators, terminators and filters – are developed for broadband applications to support commercial in-building wireless networks, public safety networks, rail and transportation deployments, corrosive salt/fog environment build-outs and global positioning system ("GPS") signal distribution.

Along with components and integrated subsystems, the Microlab portfolio also includes system performance monitoring and timing synchronization solutions. These products include a portfolio of GPS digital repeaters and splitters for cellular timing synchronization as well as a passive systems monitor for real-time diagnostics of an in-building distributed antenna system.

Our Test and Measurement segment is comprised of the **Boonton** and **Noisecom** brands.

Boonton

Boonton is a leader in high performance RF and microwave test equipment for radar, avionics, electronic warfare, electromagnetic interference compatibility, and satellite and wireless communications applications. Used across the semiconductor, military, aerospace, medical and commercial communications industries, Boonton products enable a wide range of radio frequency power measurements and signal analysis for radio frequency product design, production, maintenance and testing.

Boonton designs and produces electronic test and measurement equipment including power meters, power sensors, voltmeters, and audio and modulation analyzers. These products measure and analyze the performance of radio frequency and microwave systems used by the military and commercial sectors. Boonton products are also used to test terrestrial and satellite communications, radar and telemetry. Certain power meter products are designed for measuring signals based on wideband modulation formats, allowing a variety of measurements to be made, including maximum power, peak power, average power and minimum power.

Noisecom

Noisecom is a leader in radio frequency and microwave noise sources for signal jamming, system impairment, reference level comparison and calibration, receiver robustness testing, and jitter injection. Noisecom designs and produces noise generation instruments, calibrated noise sources, noise modules and diodes. Noisecom noise products are used to provide wide band interference and test signals for sophisticated commercial communication and defense applications, and as a stable reference standard for advanced systems found in radar applications and satellite communications. Noise source products:

- simulate challenging signaling conditions in data and radio frequency transmission systems, such as jitter testing for high speed data lines used in modern computer architecture;
- send signals for noise measurement to allow wireless receivers and transmitters to be optimized;
- are used for jamming radio frequency signals, blocking or disturbing enemy radar and other communications and insulating and protecting friendly communications; and
- comprise components in radar systems as part of built-in test equipment to continuously monitor the radar receiver and in-satellite communications where the use of back-up receivers are becoming more common.

Electronic noise generation devices from Noisecom come in a variety of product types including noise diodes, built-in-test modules (“BITE”), calibrated noise sources, jitter sources, cryogenic noise standards and programmable instruments. Calibrated noise sources are available from audio to millimeter wavelengths in coaxial or waveguide modules. Programmable instruments are highly configurable and able to generate precise carrier-to-noise, signal-to-noise and broadband white noise levels. Noisecom products are customizable to meet the unique needs of challenging applications and can be designed for high power, high crest factor, and specific filtering.

Our Embedded Solutions segment consists of our subsidiary **CommAgility**.

CommAgility develops embedded signal processing and radio frequency modules, as well as LTE physical layer and stack software, for 4G and emerging 5G mobile network and related applications. Combining the latest digital signal processing (“DSP”), field programmable gate array (“FPGA”) and radio frequency technologies with advanced, industry-leading software, CommAgility provides compact, powerful and reliable products for integration into high performance test equipment, specialized radio and intelligence systems, and R&D demonstrators.

CommAgility engineers work closely with customers to provide hardware and software solutions for the most demanding real-time signal processing, test and control challenges in wireless baseband, semiconductor processing, medical imaging, radar and sonar applications. Additionally, CommAgility licenses, implements and customizes LTE physical layer and stack software for private LTE networks supporting satellite communications, the military and aerospace industries, offering our customers unique implementation capabilities built on the LTE standard.

Marketing and Sales

The Company's products are sold globally through our in-house sales force, industry-specific manufacturers' representatives and through a network of authorized distributors. The Company promotes the sale of its products through its website, product literature, published articles, technical conference presentations, direct mailings, trade advertisements and trade show exhibitions.

The Company's relationships with its manufacturers' representatives and distributors are governed by written contracts that either run for one-year renewable periods terminable by either party on 30 to 60 days prior notice or have indefinite lives terminable by either party on 30 to 60 days prior notice. The contracts generally provide for territorial and product representation.

Customers

The Company currently sells the majority of its products to telecommunications service providers, systems integrators, neutral host operators, distributors, large defense contractors, global technology and services companies and the U.S. and foreign governments. For the years ended December 31, 2018 and 2017 one customer, Aeroflex Limited, accounted for 22.0% and 10.4% of total consolidated revenues, respectively.

Competition

We compete against many companies which utilize similar technology, some of which are larger and have substantially greater resources and expertise in financial, technical and marketing areas than us. Some of these companies include Keysight Technologies, Inc., Rohde & Schwarz GmbH & Co. KG, Anritsu Corporation, Kathrein, Commscope, Westell Technologies, Inc, Qualcomm and Azcom.

The Company believes its competitive strengths include:

- long-standing relationships with a core group of diverse customers in the wireless, telecommunication, satellite, military, aerospace, semiconductor and medical industries
- agility in providing highly customized and configured solutions to the customer's technical specifications
- a long tradition of developing highly engineered wireless solutions through our strong design capabilities and technology know-how

long-standing, well-established sales channels and relationships which allow us to bring new solutions to market quickly

diversification across multiple customer segments, providing solutions to enable development, testing and deployment

being an approved vendor at all four of the major U.S. carriers with hundreds of approved Network Solutions products

an embedded base of products and instruments in our Test & Measurement segment which leads to recurring purchases of our products

Backlog

The Company's consolidated backlog of firm orders to be shipped in the next twelve months was approximately \$8.2 million at December 31, 2018, compared to approximately \$9.9 million at December 31, 2017. It is anticipated that the majority of the backlog orders at December 31, 2018 will be filled during the current year. The stated backlog is not necessarily indicative of Company revenues for any future period nor is a backlog any assurance that the Company will realize a profit from the orders.

Inventory, Supplies and Manufacturing

The Company purchases components, devices and subassemblies from a wide variety of sources. The Company's procurement policy requires maintaining adequate levels of raw materials inventory to minimize the Company's production lead times with third-party suppliers and to improve the Company's capacity to expedite fulfillment of customer orders. Although the procurement team focuses its efforts to work closely with its suppliers to avoid adverse effects of shortages or delays in delivery of inventories, delays in the future may have an adverse impact on the Company's operations. For the year ended December 31, 2018, two suppliers accounted for 15% and 13%, respectively, of total consolidated inventory purchases. For the year ended December 31, 2017, no one single third-party supplier accounted for 10% or more of the Company's total consolidated inventory purchases.

The Company is not party to any long term contracts regarding the deliveries of its supplies and components. It generally purchases such items pursuant to written purchase orders of both the individual and blanket variety. Blanket purchase orders usually cover the purchase of a larger amount of items at fixed prices for delivery and payment on specific dates.

For Boonton and Noisecom products, the Company develops, designs, manufactures, assembles, calibrates and tests the products at our facility in Parsippany, New Jersey. Testing of Boonton and Noisecom products is generally accomplished at the end of the manufacturing process and is performed in-house, as are all quality control processes.

Approximately 49% of Microlab products are sourced from contract manufacturers based on Microlab designs or technical and quality specifications with the remainder designed and manufactured by the Company in Parsippany, New Jersey. All Microlab products are tested by the Company in Parsippany, New Jersey.

CommAgility hardware products are built by contract manufacturers to CommAgility designs, and tested either by the contract manufacturer or by CommAgility. Software products are licensed to customers through a system that allows the customer to download the software once access has been granted.

Warranty and Service

The Company typically provides one to three year warranties on all of its products covering both parts and labor. The Company, at its option, repairs or replaces products that are defective during the warranty period if the proper preventive maintenance procedures have been followed by its customers.

In cases of defective products the customer typically returns them to the Company's facility. The Company's service personnel replace or repair the defective items and ship them back to the customer. Generally, all servicing is done at the Company's facility, and the Company charges its customers a fee for those service items that are not covered by warranty. The Company typically does not offer their customers any formal written service contracts.

Product Liability Coverage

The testing of electronic communications equipment and the accurate transmission of information entail a risk of product liability to the Company. Product liability claims could be asserted against the Company by end-users of any of the Company's products. The Company maintains product liability insurance coverage and no claims have been asserted for product liability due to a defective or malfunctioning device in the past 5 years.

Intellectual Property

We believe that our intellectual property, including its methodologies, is critical to our success and competitive position. We rely on a combination of U.S. and foreign patents, copyrights, trademarks and trade secrets, as well as confidentiality agreements to establish and protect our proprietary rights. All employees are subject to the Company's policies to ensure that all of the Company's intellectual property and business information are maintained in confidence. Key employees have signed non-disclosure and non-competition agreements.

Regulation

Environmental

The Company's operations are subject to various federal, state and local environmental laws, ordinances and regulations that limit discharges into the environment, establish standards for the handling, generation, use, emission, release, discharge, treatment, storage and disposal of, or exposure to, hazardous materials, substances and waste, and require cleanup of contaminated soil and groundwater.

The New Jersey Department of Environmental Protection (the "NJDEP") conducted an investigation in 1982 concerning disposal at a facility previously leased by the Company's Boonton operations. The focus of the investigation involved certain materials formerly used by Boonton's manufacturing operations at that site and the possible effect of such disposal on the aquifer underlying the property. The disposal practices and the use of the materials in question were discontinued in 1978. The Company has cooperated with the NJDEP investigation and has diligently pursued the matter to resolve it in accordance with applicable NJDEP operating procedures. The above referenced activities were conducted by Boonton prior to our acquisition of that entity in 2000.

In 1982, Boonton and the NJDEP agreed upon a plan to correct ground water contamination at the site, located in the township of Parsippany-Troy Hills, pursuant to which wells have been installed by Boonton. The plan contemplates that the wells will be operated and that soil and water samples will be taken and analyzed until such time that contamination levels are satisfactory to the NJDEP. In 2014, the Company received approval for a groundwater permit from the NJDEP to carry out the final remedial action work plan and report. Under the final phase of the plan, there will be limited and reduced monitoring and testing as long as concentrations at the site continue on a decreasing trend.

Expenditures incurred by the Company during the year ended December 31, 2018 and 2017 in connection with monitoring and testing at the site amounted to approximately \$8,000 and \$1,000, respectively. While management anticipates that the expenditures in connection with this site will not be substantial in future years, the Company could be subject to significant future liabilities and may incur significant future expenditures if further contaminants from Boonton's testing are identified and the NJDEP requires additional remediation activities. Our estimate of future monitoring and testing costs is \$35,000 through 2027 when we expect final release from the NJDEP. The Company will continue to be liable under the plan, in all future years, until such time as the NJDEP releases the Company from all obligations.

At this time, the Company believes that it is in material compliance with all environmental laws, does not anticipate any material expenditure to meet current or pending environmental requirements, and generally believes that its processes and products do not present any unusual environmental concerns. Besides the matter referred to above with the NJDEP, the Company is unaware of any existing, pending or threatened contingent environmental liability that may have a material adverse effect on its ongoing business operations.

Workplace Safety

The Company's operations are also governed by laws and regulations relating to workplace safety and worker health. The Company believes it is in material compliance with these laws and regulations and does not believe that future compliance with such laws and regulations will have a material adverse effect on its results of operations or financial condition.

ITAR and Export Controls

The Company is subject to International Traffic in Arms Regulation, or ITAR. ITAR requires export licenses from the U.S. Department of State for products shipped outside the U.S. that have military or strategic applications. Because some of the Company's products could have military or strategic applications, it must ensure its compliance with ITAR.

In addition, the Company is subject to the Export Administration Regulations, or EAR, which regulates the export of certain “dual use” items and technologies and, in some instances, requires a license from the U.S. Department of Commerce in connection with sales of the Company’s products.

FAR and DFARS

The Company’s contracts with the U.S. Government are subject to Federal Acquisition Regulations (“FAR”) regarding government procurement. Further, certain of the Company’s contracts are subject to the IT security requirements of Defense Federal Acquisition Regulation Supplement (“DFARS”) for controlled unclassified information.

Employees

As of February 22, 2019, the Company has 156 full time employees. The Company is not subject to collective bargaining agreements in the United States or internationally and considers its relationship with its employees to be good.

Investor Information

The Company is subject to the disclosure requirements of the Securities Exchange Act of 1934, as amended (“Exchange Act”). Therefore, the Company files periodic reports, proxy statements and other information with the Securities and Exchange Commission (“SEC”). The SEC maintains an Internet site (<http://www.sec.gov>) that contains reports, proxy and information statements and other information regarding issuers that file electronically.

You can access financial and other information, including copies of our recent SEC filings, at the Company’s Investor Relations page on its website. The address of the website is www.wirelesstelecomgroup.com. The Company makes available, free of charge, copies of its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports

filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the SEC.

Item 1A. Risk Factors

Our business is dependent on capital spending on data and communication networks by customers or end users of our products and reductions in such capital spending could adversely affect our business.

Our performance is dependent on customers' or end users' capital spending for constructing, rebuilding, maintaining or upgrading data and communication networks, which can be volatile or hard to forecast. Capital spending in the communications industry is cyclical and can be curtailed or deferred on short notice. A variety of factors affect the amount of capital spending, and, therefore, our revenues and profits, including:

- competing technologies;
- timing and adoption of global rollout of new technologies, including 4G/LTE/5G;
- customer specific financial or market conditions;
- governmental budget levels and regulation;
- demands for network services; and
- acceptance of new services offered by our customers.

Our customers or the end users of our products may not purchase new equipment at levels we have seen in the past or expect in the future. If our product portfolio and product development plans do not position us well to capture an increased portion of the capital spending of customers, our revenue may decline. As a result of these issues, we may not be able to maintain or increase our revenue in the future, and our business, financial condition, results of operations and cash flows could be materially adversely affected.

We depend on a limited number of customers for a significant portion of our revenues. The loss of, or a significant decrease in business from, these customers could seriously harm our financial condition and results of operations.

We currently derive and expect to continue to derive, a significant portion of our revenues from a limited number of customers. On a segment basis, client concentration may be of even greater significance. Two customers account for approximately 71% and 18%, respectively, of the Embedded Solutions segment revenues for 2018. In addition, in our Test and Measurement segment, we have one customer representing approximately 12% of the 2018 revenues for that segment. And in the Network Solutions segment, one customer accounts for 13% of the 2018 revenues for that segment. The loss of, or a significant decrease in, business from one or more of our more significant customers could seriously harm our financial condition and results of operations. We expect to continue to depend upon some of these larger customers for a significant percentage of our revenues.

The cyclical nature of our end-user markets could harm our financial results.

Many of the end markets we serve, including but not limited to the commercial wireless market, have historically been cyclical and have experienced periodic downturns. The factors leading to and the severity and length of a downturn are very difficult to predict and there can be no assurance that we will appropriately anticipate changes in the underlying end markets we serve or that any increased levels of business activity will continue as a trend into the future. If we fail to anticipate changes in the end markets we serve, our business, results of operations and financial condition could be materially adversely affected. We are subject to fluctuations in technology spending by existing and potential customers.

Our industry is highly competitive and if we are not able to successfully compete, we could lose market share and our revenues could decline.

We operate in industries characterized by aggressive competition, rapid technological change, evolving technology standards and short product life cycles. Current and prospective customers for our products evaluate our capabilities against the merits of our direct competitors. We compete primarily on the basis of technology and performance. We also compete on price. Many of our competitors utilize similar technologies to ours and have substantially greater resources and expertise in financial, technical and marketing areas than we have. Our competitors may introduce products that are competitively priced, have increased performance or functionality or incorporate technological advances that we have not yet developed or implemented.

To remain competitive, we must continue to develop, market and sell new and enhanced products at competitive prices, which will require significant research and development expenditures. If we do not develop new and enhanced products or if we are not able to invest adequately in our research and development activities, our business, financial condition and results of operations could be negatively impacted.

Many of our competitors are substantially larger than we are, and have greater financial, technical, marketing and other resources than we have. Many of these large enterprises are in a better position to withstand any significant reduction in capital spending by customers in our markets. They often have broader product lines and market focus, and may not be as susceptible to downturns in a single market. These competitors may also be able to bundle their products together to meet the needs of a particular customer, and may be capable of delivering more complete solutions than we are able to provide. To the extent large enterprises that currently do not compete directly with us choose to enter our markets by acquisition or otherwise, competition would likely intensify.

We are exposed to risks associated with acquisitions and investments which could cause us to incur unanticipated costs and liabilities and harm our business and results of operations.

In the future we may make acquisitions of, or significant investments in, businesses with complementary products, services and/or technologies. Acquisitions and investments involve numerous risks, including, but not limited to:

- difficulties and increased costs in connection with integration of the personnel, operations, technologies and products of acquired businesses;
- diversion of management's attention from other operational matters;
- the potential loss of key employees of acquired businesses;
- lack of synergy, or the inability to realize expected synergies, resulting from the acquisition;
- implementation or remediation of controls, procedures and policies of the acquired company;
- failure to commercialize purchased technology;
- liability for activities of the acquired company prior to the acquisition, including violations of law, commercial disputes, escheat and tax and other known and unknown liabilities; and
- the impairment of acquired intangible assets and goodwill that could result in significant charges to operating results in future periods.

If we are unable to address these difficulties and challenges or other problems encountered in connection any future acquisition or investment, we might not realize the anticipated benefits of that acquisition or investment and we could incur unanticipated costs, liabilities or otherwise suffer harm to our business generally. The difficulties and challenges of successful integration of any acquired company are increased when the integration involves companies with operations or material vendors outside the United States.

To the extent that we pay the consideration for any future acquisitions or investments in cash or any potential earn outs, it would reduce the amount of cash available to us for other purposes. Such payments also may increase our cash flow and liquidity risk and could result in increased borrowings under our Credit Facility. See the Risk Factor titled "We have incurred indebtedness and may incur additional indebtedness." Future acquisitions or investments could also result in dilutive issuances of our equity securities or the incurrence of debt, contingent liabilities, amortization expenses or impairment charges against goodwill or intangible assets on our balance sheet, any of which could have a material adverse effect on our business, results of operations and financial condition.

Our future success depends on our ability to anticipate and to adapt to technological changes and develop, implement and market product innovations.

Many of our markets are characterized by advances in information processing and communications capabilities that require increased transmission speeds and greater bandwidth. These advances require ongoing improvements in the capabilities of our products. However, we may not be successful in our ongoing improvement efforts if, among other things, our products:

- are not cost effective;
- are not brought to market in a timely manner;
- are not in accordance with evolving industry standards; or
- fail to achieve market acceptance or meet customer requirements.

There are various competitive wireless technologies that could be a substitute for the products we sell. The failure to successfully introduce new or enhanced products on a timely and cost-competitive basis or the inability to continue to market existing products on a cost-competitive basis could have a material adverse effect on our results of operations and financial condition. In addition, revenues from new products may replace revenues from some of our existing products, mitigating the benefits of new product introductions and possibly resulting in excess levels of inventory.

Furthermore, we must make long-term investments and commit significant resources before knowing whether our investments will eventually result in products that the market will accept. We must accurately forecast volumes, mix of products and configurations that meet customer requirements, and we may not succeed. If we do not succeed, we may be left with inventories of obsolete products or we may not have enough of some products available to meet customer demand, which could lead to reduced revenues and higher expenses.

Our revenues are dependent in part on commercial upgrades of 4G and 5G wireless communications equipment, products and services. Our business may be harmed, and our investments in our technologies may not provide us an adequate return if:

- LTE, a wireless standard, is not widely deployed or commercial deployment is delayed;
- wireless operators delay moving customers to 4G or 5G devices;
- wireless operators delay 4G or 5G deployments, expansions or upgrades;
- government regulators delay the reallocation of spectrum to allow wireless operators to upgrade to 4G or 5G, which will restrict the expansion of 4G or 5G wireless connectivity;
- wireless operators are unable to drive improvements in 4G or 5G network performance and/or capacity;
- wireless operators and other industries using these technologies deploy other technologies; or
- wireless operators choose to spend their capital on their core network or limit their expenditures on radio access network (RAN).

Our business is dependent on our ability to increase our share of components sold and to continue to drive the adoption of our products and services into LTE, 4G and 5G wireless networks. If commercial deployment of our technologies, and upgrade of subscribers to 4G or 5G wireless communications equipment, products and services using our technologies do not continue or are delayed, our revenues could be negatively impacted, and our business could suffer.

Further, if we do not have competitively priced, market accepted products available to meet the wireless operators planned roll-out of 5G wireless communications systems, we may miss a significant opportunity and our business, financial condition and results of operations could be materially and adversely impacted.

Our future research and development projects might not be successful.

The successful development of telecommunications products can be affected by many factors. Products that appear to be promising at their early phases of research and development may fail to be commercialized for various reasons, including the failure to obtain the necessary regulatory approvals. There is no assurance that any of our future research and development projects will be successful or completed within the anticipated time frame or budget or that we will receive the necessary approvals from relevant authorities, customers, or prospective customers, for the production of these newly developed products, or that these newly developed products will achieve commercial success. Even if such products can be successfully commercialized, they may not achieve the level of market acceptance that we expect.

Dependence on contract manufacturing and outsourcing other portions of our supply chain might adversely affect our ability to bring products to market and could damage our reputation.

As part of our efforts to streamline operations and to minimize costs, we outsource aspects of our manufacturing processes and other functions and continue to evaluate additional outsourcing. If our contract manufacturers or other outsourcers fail to perform their obligations in a timely manner or at satisfactory quality levels, our ability to bring products to market and our reputation could suffer. For example, during a market upturn, our contract manufacturers might be unable to meet our demand requirements, which could preclude us from fulfilling our customers' orders on a timely basis. The ability of these manufacturers to perform is largely outside of our control. Additionally, changing or replacing our contract manufacturers or other outsourcers could cause disruptions or delays.

If our products do not perform as promised, we could experience increased costs, lower margins and harm to our reputation.

The failure of our products to perform as promised could result in increased costs, lower margins and harm to our reputation. We may not be able to anticipate all of the possible performance or reliability problems that could arise with our existing or new products, which could result in significant product liability or warranty claims. In addition, any defects found in our products could result in a loss of revenues or market share, failure to achieve market acceptance, injury to our reputation, indemnification claims, litigation, increased insurance costs and increased service costs, any of which could discourage customers from purchasing our products and materially harm our business.

Uncertainty over global tariffs, or the financial impact of tariffs, may negatively affect our results.

Recent changes in U.S. domestic and global tariff frameworks have increased our costs of producing goods and resulted in additional risks to our supply chain. Additional tariff changes are possible. We are engaged in efforts to mitigate tariff increases, but there is no assurance we will be successful. Further, uncertainties about future tariff changes could result in mitigation actions that prove to be detrimental to our business.

Shortages or delays of supplies for component parts could adversely affect our operating results until alternate sources can be developed.

Our operations are dependent on the ability of suppliers to deliver quality components, devices and subassemblies in time to meet critical manufacturing and distribution schedules. If we experience any constrained supply of component parts, such constraints, if persistent, could adversely affect operating results until alternate sourcing can be developed. There could be an increased risk of supplier constraints in periods where we are increasing production volume to meet customer demands. Volatility in the prices of these component parts, an inability to secure enough components at reasonable prices to build new products in a timely manner in the quantities and configurations demanded or, conversely, a temporary oversupply of these parts, could adversely affect our future operating results.

The testing and use of electronic communications equipment and the accurate transmission of information entail a risk of product liability claims being asserted by customers and third parties.

Claims may be asserted against us by end-users of any of our products for liability due to a defective or malfunctioning device made by us, and we could be subject to corresponding litigation should one or more of our products fail to perform or meet certain minimum requirements. Such a claim and corresponding litigation could result in substantial costs, diversion of resources and management attention, termination of customer contracts and harm to our reputation.

We are subject to laws and regulations governing government contracts, and failure to address and comply with these laws and regulations could harm our business by leading to a reduction in revenue associated with these customers and subjecting us to civil and criminal penalties.

We have agreements relating to the sale of our products to U.S. government entities and, as a result, we are subject to various statutes and regulations that apply to companies doing business with the U.S. government. The laws governing government contracts differ from the laws governing private contracts. For example, many government contracts contain pricing terms and conditions that are not applicable to private contracts. We are also subject to investigation for compliance with the regulations governing government contracts. A failure to comply with these regulations might result in suspension of these contracts, or civil and criminal penalties.

We could be subject to significant costs related to environmental contamination from past operations, and environmental contamination caused by ongoing operations could subject us to substantial liabilities in the future.

The Company's operations are subject to various federal, state, local, and foreign environmental laws, ordinances and regulations that limit discharges into the environment, establish standards for the handling, generation, use, emission, release, discharge, treatment, storage and disposal of, or exposure to, hazardous materials, substances and waste, and require cleanup of contaminated soil and groundwater.

In 1982, Boonton and the NJDEP agreed upon a plan to correct ground water contamination at a site previously leased by the Company's Boonton operations, pursuant to which wells have been installed by Boonton. The plan contemplates that the wells will be operated and that soil and water samples will be taken and analyzed until such time that contamination levels are satisfactory to the NJDEP. In 2014, the Company received approval for a groundwater permit from the NJDEP to carry out the final remedial action work plan and report. Under the final phase of the plan, there will be monitoring and testing at the site. We cannot be assured that concentrations of contaminants at the site will decrease.

The Company could be subject to significant future liabilities and may incur significant future expenditures if further contaminants from Boonton's testing are identified and the NJDEP requires additional remediation activities. Management estimates that future monitoring and testing costs will be approximately \$35,000 through 2027. The Company will continue to be liable under the plan, in all future years, until such time as the NJDEP releases the Company from all obligations.

Certain of our products and our business are subject to ITAR, Export Administration Regulations, Foreign Corrupt Practices Act and other U.S. and foreign government laws, regulations, policies and practices, and our failure to comply with such regulations could adversely affect our business, results of operations and financial condition.

Our international revenues, for which we also use foreign representatives and consultants, are subject to U.S. laws, regulations and policies, including the ITAR and the U.S. Foreign Corrupt Practices Act, or the FCPA, and other export laws and regulations, as well as foreign government laws, regulations and procurement policies and practices which may differ from the U.S. government regulations in this regard.

Compliance with the directives of the U.S. Department of State may result in substantial legal and other expenses and the diversion of management time. In the event that a determination is made that we or any entity we have acquired has violated the ITAR with respect to any matters, we may be subject to substantial monetary penalties that we are unable to quantify at this time, and/or suspension or revocation of our export privileges and criminal sanctions, which may have a material adverse effect on our business, results of operations and financial condition.

We can give no assurance that under either the ITAR or the EAR we will continue to be successful in obtaining the necessary licenses and authorizations or that certain revenues will not be prevented or delayed due to compliance issues related to the ITAR or the EAR.

We are also subject to, and must comply with, the FCPA and similar world-wide anti-corruption laws, including the U.K. Bribery Act of 2010. These acts generally prohibit both us and our third party intermediaries from making improper payments to foreign officials for the purpose of acquiring or retaining business or otherwise obtaining favorable treatment. We are required as well to maintain adequate record-keeping and internal accounting practices to fully and accurately reflect our transactions. We operate in many parts of the world that have experienced government corruption. In certain circumstances, the FCPA and our programs and policies may conflict with local customs and practices. If we or any of our local intermediaries have failed to comply with the requirements of the FCPA, governmental authorities in the United States could seek to impose severe criminal and civil penalties. The assertion of violations of the FCPA or other anti-corruption laws could disrupt our business and have a material adverse effect on our results of operations and financial condition.

We are subject to various other governmental regulations, compliance with which could cause us to incur significant expenses, and if we fail to maintain satisfactory compliance with certain regulations, we could be forced to recall products and cease their distribution, and we could be subject to civil or criminal penalties.

Our business is subject to various other significant international, federal, state and local regulations, including but not limited to health and safety, packaging, product content and labor regulations. These regulations are complex, change frequently and have tended to become more stringent over time. We may be required to incur significant expenses to comply with these regulations or to remedy violations of these regulations. Any failure by us to comply with

applicable government regulations could also result in cessation of our operations or portions of our operations, product recalls or impositions of fines and restrictions on our ability to carry on or expand our operations.

The loss of key personnel could adversely affect our ability to remain competitive; our development of new and upgraded products could be adversely impacted by our inability to hire or retain personnel with appropriate technical abilities.

We believe that the continued service of our executive officers will be important to our future growth and competitiveness. However, other than the employment agreement we entered into with Mr. Whelan, Chief Executive Officer, we currently do not have any other employment agreements with our executive officers. We cannot provide assurance that any named executive officer will remain employed by us. Moreover, the design and manufacture of our products require substantial technical capabilities in many disparate disciplines, from engineering, mechanics and computer science to electronics and mathematics. We believe that the continued employment of key members of our technical and sales staffs will be important to us but, as with our executive officers, we cannot assure you that they will remain employed by us.

Furthermore, our ability to research and develop new technologies and products, or upgraded versions of existing products, will depend, in part, on our ability to hire personnel with knowledge and skills that our current personnel do not have. If we are unable to hire or retain such qualified personnel, our revenues could be negatively impacted, and our business could suffer.

We rely on manufacturer's representatives to sell our products to key large accounts and the loss of a key manufacturer's representative could have a material impact on our revenues

Our products are sold through a small in-house direct sales force as well as a network of industry specific manufacturers' representatives that have established relationships with our largest customers. Our arrangements with our manufacturers' representatives generally can be canceled by either party with advance written notice. The loss of a manufacturer's representative could result in a material decline in revenues.

Third parties could claim that we are infringing on their intellectual property rights which could result in substantial costs, diversion of significant managerial resources and significant harm to our reputation.

The industries in which our company operates are characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement. From time to time, third parties may assert patent, copyright, trademark and other intellectual property rights to technologies in various jurisdictions that are important to our business. Defending claims, including claims without merit, requires allocation of resources, including personnel and capital, which could adversely impact our results of operations. A successful claim of infringement against us could result in our being required to pay significant damages, enter into costly license agreements, or stop the sale of certain products, which could adversely affect our net revenues, gross margins and expenses and harm our future prospects.

We use specialized technologies and know-how to design, develop and manufacture our products. Our inability to protect our intellectual property could hurt our competitive position, harm our reputation and adversely affect our results of operations.

We believe that our intellectual property, including its methodologies, is critical to our success and competitive position. We rely on a combination of U.S. and foreign patent, copyright, trademark and trade secret laws, as well as confidentiality agreements to establish and protect our proprietary rights. If we are unable to protect our intellectual property against unauthorized use by third parties, our reputation among existing and potential customers could be damaged and our competitive position adversely affected.

Attempts may be made to copy aspects of our products or to obtain and use information that we regard as proprietary. Accordingly, we may not be able to prevent misappropriation of our technology or deter others from developing similar technology. Our strategies to deter misappropriation could be undermined if:

- the proprietary nature or protection of our methodologies is not recognized in the United States or foreign countries;
- third parties misappropriate our proprietary methodologies and such misappropriation is not detected; and
- competitors create applications similar to ours but which do not technically infringe on our legally protected rights.