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

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

(Registrant's Telephone Number, Including Area Code)

FORM 10-K	
x ANNUAL REPORT PURSUANT TO S	SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended <u>December 31, 2</u>	018
OR	
TRANSITION REPORT PURSUANT o 1934	TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
For the transition period fromt	
Commission file number 1-11916	
WIRELESS TELECOM GROUP, INC	
(Exact name of registrant as specified in i	ts charter)
New Jersey (State or other jurisdiction of incorporation or organization)	22-2582295 (I.R.S. Employer Identification No.)
25 Eastmans Road, Parsippany, New Jersey (Address of principal executive offices)	<u>07054</u> (Zip Code)
<u>(973) 386-9696</u>	

Name of each exchange

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

Title of each class

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 o No x

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 o

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 x No o

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 x No o

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. x

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 o Accelerated filer o

Non-accelerated filer o Smaller reporting company x Emerging growth company o

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. o

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

Yes o No x

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.

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#### 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 cyclicality 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 manufacturers' 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 manufacturers' 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.

If these risks materialize, we could be required to spend significant amounts to defend our rights and to divert critical managerial resources. In addition, our proprietary methodologies could decline in value or our rights to them could become unenforceable. If any of the foregoing were to occur, our business could be materially adversely affected.

We have incurred indebtedness and may incur additional indebtedness.

On February 16, 2017, we obtained an asset-based lending agreement with a bank. We may incur additional indebtedness in the future.

The future incurrence of indebtedness, among other things, could:

•make it difficult to make payments on our current indebtedness and our other obligations;
•make it difficult to obtain other necessary financing;
require the dedication of a substantial portion of cash flow from operations to service the indebtedness, thereby
reducing the amount of cash flow available for other purposes, including capital expenditures; and
•limit our flexibility in planning for, or reacting to, changes in our business and the industries in which we compete.

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Restrictive covenants in the agreement governing our credit facility could restrict our ability to pursue business strategies.

The agreement governing our current credit facility limits our ability, among other things, to: incur additional secured indebtedness; incur liens; pay dividends; enter into transactions with our affiliates; and sell assets. In addition, our credit facility contains financial and other restrictive covenants that limit our ability to engage in activities that might be in our long term best interest, such as, subject to permitted exceptions, making capital expenditures in excess of certain thresholds, investments and acquisitions, and loans and other advances to affiliates. Our failure to comply with financial and other restrictive covenants could result in an event of default, which if not cured or waived, could result in the lenders requiring immediate payment of all outstanding borrowings or foreclosing on collateral pledged to them to secure the indebtedness.

Our business and operations could suffer in the event of security breaches.

Attempts by others to gain unauthorized access to information technology systems are becoming more sophisticated and are sometimes successful. These attempts, which might be related to industrial or other espionage, include covertly introducing malware to our computers and networks and impersonating authorized users, among others. We seek to detect and investigate all security incidents and to prevent their recurrence, but in some cases, we might be unaware of an incident or its magnitude and effects. The theft, unauthorized use or publication of our intellectual property and/or confidential business information could harm our competitive position, reduce the value of our investment in research and development and other strategic initiatives or otherwise adversely affect our business. To the extent that any security breach results in inappropriate disclosure of our customers' or licensees' confidential information, we may incur liability as a result. In addition, we might be required to devote significant additional resources to the security of our information technology systems.

We rely on our information technology systems to manage numerous aspects of our business and a disruption of these systems could adversely affect our business.

Our information technology, or IT, systems are an integral part of our business. We depend on our IT systems for scheduling, sales order entry, purchasing, materials management, accounting, and production functions. Our IT systems also allow us to ship products to our customers on a timely basis, maintain cost-effective operations and provide a high level of customer service. Some of our systems are not fully redundant, and our disaster recovery planning does not account for all eventualities. A serious disruption to our IT systems could significantly limit our ability to manage and operate our business efficiently, which in turn could have a material adverse effect on our business, results of operations and financial condition.

Environmental and other disasters, such as flooding, large earthquakes, hurricanes, volcanic eruptions or nuclear or other disasters, or a combination thereof, may negatively impact our business.

Although we manufacture our products in New Jersey, we both source and ship our products globally. Environmental and other disasters could cause disruption to our supply chain or impede our ability to ship product to certain regions of the world. There can be no assurance that environmental and/or other such natural disasters will not have an adverse impact on our business in the future.

Our operating results may suffer because of our exposure to foreign currency exchange rate fluctuations.

Substantially all of our sales contracts with our U.S. and international based customers provide for payment in U.S. dollars. A strengthening of the U.S. dollar relative to other foreign currencies could increase the effective cost of our products to our international customers as their functional currency is typically not the U.S. dollar. This could have a potential adverse effect on our ability to increase or maintain average selling prices of our products to our foreign-based customers.

Our exposure to the currency fluctuations increased as a result of the acquisition of CommAgility. Our future revenue and expenses may be subject to volatility due to exchange rate fluctuations that could result in foreign exchange gains and losses associated with foreign currency transactions and the translation of assets and liabilities denominated in foreign currencies.

The success of our ability to grow revenues and develop relationships in Europe and Asia may be limited by risks related to conducting business in European and Asian markets.

Part of our strategy is to increase revenues and build our relationships in European and Asian markets. Risks inherent in marketing, selling and developing relationships in European and Asian markets include those associated with:

economic conditions in European and Asian markets, including the impact of recessions in European and Asian economies and fluctuations in the relative values of the U.S. dollar, the Euro and Asian currencies;

•axes and fees imposed by European and Asian governments that may increase the cost of products and services; greater difficulty in accounts receivable collection and longer collection periods;

seasonal reductions in business activities in some parts of the world;

laws and regulations imposed by individual countries and by the European Union, particularly with respect to intellectual property, license requirements and environmental requirements; and political and economic instability, terrorism and war.

In addition, European and Asian intellectual property laws are different than and might not protect our proprietary rights to the same extent as do U.S. intellectual property laws, and we will have to ensure that our intellectual property is adequately protected in foreign jurisdictions and in the United States. If we do not adequately protect our intellectual property rights, competitors could use our proprietary technologies in non-protected jurisdictions and put us at a competitive disadvantage.

Political and economic uncertainty arising from the outcome of the referendum on the membership of the United Kingdom in the European Union could adversely impact our financial results.

In June 2016, a majority of voters in the U.K. elected to withdraw from the European Union (E.U.) in a national referendum (also referred to as "Brexit"). CommAgility is located in the U.K. The announcement of Brexit caused significant volatility in global stock markets and currency exchange rate fluctuations that resulted in the strengthening of the U.S. dollar against foreign currencies in which we conduct business, including the British pound.

As a result of the referendum being passed into law, a negotiation process to determine the future terms of the U.K.'s relationship with the E.U. is ongoing, including the terms of trade between the U.K. and the E.U. The effects of Brexit will depend on any agreements the U.K. makes to retain access to E.U. markets either during a transitional period or more permanently. The measures could potentially disrupt the markets we serve and may cause us to lose customers, suppliers and employees. Additionally, disruptions and uncertainty caused by Brexit may cause our customers to closely monitor their costs and reduce their spending budget on our products and services. Brexit may also lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which E.U. laws to replace or replicate. Any of these effects of Brexit, among others, could adversely affect our business, financial condition or future results.

Our results of operations could be affected by changes in tax-related matters.

A number of factors could cause our tax rate to increase, including a change in the jurisdictions in which our profits are earned and taxed; a change in the mix of profits from those jurisdictions; changes in available tax credits; changes in applicable tax rates; changes in accounting principles. We have deferred tax assets on our balance sheet. Changes in applicable tax laws and regulations or in our business performance could affect our ability to realize those deferred tax assets, which could also affect our results of operations.

Our stock price is volatile and the trading volume in our common stock is less than that of other larger companies in the wireless and advanced communications industries.

The market price of our common stock has experienced significant volatility and may continue to be subject to rapid swings in the future. From January 1, 2015 to February 22, 2019, the trading prices of our stock have ranged from \$1.30 to \$3.21 per share. There are several factors which could affect the price of our common stock unrelated to our financial performance, including announcements of technological innovations for new commercial products by us or our competitors, developments concerning propriety rights, new or revised governmental regulation or general conditions in the market for our products, and the entrance of additional competitors into our markets.

Although our common stock is listed for trading on the NYSE American, the trading volume in our common stock is less than that of other, larger companies in the wireless and advanced communications industries. Traditionally, the trading volume of our common stock has been limited. For example, for the 90 trading days ending on February 12, 2019, the average daily trading volume

was approximately 21,000 shares per day and ranged from between 100 shares per day and approximately 107,600 shares per day. Furthermore, we only have 21,300,252 shares of common stock outstanding as of the date of this report. A public trading market having the desired characteristics of depth, liquidity and orderliness depends on the presence in the marketplace of willing buyers and sellers of our common stock at any given time. Because of our limited trading volume, holders of our common stock may not be able to sell quickly any significant number of such shares, and any attempted sales of a large number of our shares will likely have a material adverse impact on the price of our common stock.

New Jersey corporate law may delay or prevent a transaction that stockholders would view as favorable.

We are subject to the New Jersey Shareholders' Protection Act, which could delay or prevent a change of control of us. In general, that Act prevents a shareholder owning 10% or more of a New Jersey public corporation's outstanding voting stock from engaging in business combinations with that corporation for five years following the date the shareholder acquired 10% or more of the corporation's outstanding voting stock, unless board approval is obtained prior to the time that the shareholder reaches the 10% threshold.

Failure to maintain effective internal controls in accordance with Sarbanes-Oxley could have a material adverse effect on our business and common stock price.

As a public company with SEC reporting obligations, we are required to document and test our internal control procedures to satisfy the requirements of Section 404(a) of Sarbanes-Oxley, which require annual assessments by management of the effectiveness of our internal control over financial reporting. As a smaller reporting company, we are exempt from the auditor attestation requirement of Section 404(b) of Sarbanes-Oxley.

During the course of our assessment, we may identify deficiencies that we are unable to remediate in a timely manner. Testing and maintaining our internal control over financial reporting may also divert management's attention from other matters that are important to the operation of our business. We may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404(a) of Sarbanes-Oxley. If we conclude that our internal control over financial reporting is not effective, we cannot be certain as to the timing of completion of our evaluation, testing and remediation actions or its effect on our operations. Moreover, any material weaknesses or significant deficiencies in our internal control over financial reporting may impede our ability to file timely and accurate reports with the SEC. Any of the above could cause investors to lose confidence in our reported financial information or our common stock listing on the NYSE American exchange to be suspended or terminated, which could have a negative effect on the trading price of our common stock.

The Company is subject to compliance with the policies and procedures of the NYSE American Exchange with respect to continued listing on the stock exchange and our failure to maintain our listing would make trades in our securities difficult for shareholders.

In considering whether a security warrants continued trading and/or listing on the NYSE American Exchange, many factors are taken into account, such as the degree of investor interest in the company, its prospects for growth, the reputation of its management, the degree of commercial acceptance of its products, and whether its securities have suitable characteristics for auction market trading. Thus, any developments which substantially reduce the size of a company, the nature and scope of its operations, the value or amount of its securities available for the market, or the number of holders of its securities, might occasion a review of continued listing by the Exchange. Moreover, events such as the sale, destruction, loss or abandonment of a substantial portion of a company's business, the inability to continue its business, steps towards liquidation, or repurchase or redemption of its securities, may also give rise to such a review. The loss of our listing on the Exchange could have a material adverse effect on our shareholders' ability to sell our shares or for others to purchase our shares. This could have an adverse effect on the market price of our stock.

We incur significant costs as a result of operating as a public company, and our management devotes substantial time to compliance initiatives.

We have incurred and will continue to incur significant legal, accounting and other expenses as a public company, including costs resulting from public company reporting obligations under the Exchange Act and regulations regarding corporate governance practices. The listing requirements of the NYSE American require that we satisfy certain corporate governance requirements relating to director independence, distributing annual and interim reports, stockholder meetings, stockholder approvals and voting, and soliciting proxies. Our management and other personnel will need to devote a substantial amount of time to ensuring compliance with all of these requirements.

If securities or industry analysts do not publish research or reports about our business or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock might be influenced by the research and reports that industry or securities analysts publish about us or our business. If any analysts issue an adverse or misleading opinion regarding us, our business model, products or stock performance, our stock price could decline.

#### **Forward-Looking Statements**

The statements contained in this Annual Report on Form 10-K that are not historical facts, including, without limitation, the statements under "Management's Discussion and Analysis of Financial Condition and Results of Operations," are forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. Such forward-looking statements may be identified by, among other things, the use of forward-looking terminology such as "believes," "expects," "intends," "plans," "may," "will," "should," "anticipates" or "continues" or the negative thereof of other thereon or comparable terminology, or by discussions of strategy that involves risks and uncertainties. These statements are based on the Company's current expectations of future events and are subject to a number of risks and uncertainties that may cause the Company's actual results to differ materially from those described in the forward-looking statements. These risks and uncertainties are set forth above in this Item 1A and elsewhere in this Annual Report on Form 10-K. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or projected. The Company assumes no obligation to update any forward-looking statements as a result of new information or future events or developments.

# **Item 1B.** <u>Unresolved Staff Comments</u>

None.

#### Item 2. <u>Properties</u>

The Company leases a 45,700 square foot facility located in Hanover Township, Parsippany, New Jersey, which is currently being used as its principal corporate headquarters and manufacturing plant with respect to the Network Solutions and Test and Measurement Segments. In May 2015, the Company and its landlord entered into a lease agreement to extend the lease term for its principal corporate headquarters in New Jersey through March 31, 2023.

Pursuant to the Share Purchase Agreement dated February 17, 2017 the Company assumed leases for office space in
Leicestershire, England consisting of 4,900 square feet and Duisburg, Germany consisting of 7,446 square feet for the
Embedded Solutions segment operations. The Leicestershire lease expires in November 2020 and the Duisburg lease
is renewable every 3 months.

The Company believes its properties are suitable and adequate for its current purposes.
Item 3. <u>Legal Proceedings</u>
None.
Item 4. Mine Safety Disclosures
Not applicable.
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#### **PART II**

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

The common stock of the Company is traded on the NYSE American under the name Wireless Telecom Group, Inc. (Symbol: WTT). On February 22, 2019, the Company had 378 stockholders of record. These stockholders of record do not include beneficial owners whose shares are held in "nominee" or "street name".

#### Recent Sales of Unregistered Securities

A portion of the purchase price for the acquisition of CommAgility on February 17, 2017 was paid to the sellers through the issuance of 3,487,528 shares of the Company's common stock. Pursuant to the Share Purchase Agreement, 2,092,516 shares were forfeited during the three months ended March 31, 2018 as certain financial metrics for the year ended 2017 were not achieved. As a result of the forfeiture the final amount of shares issued to the sellers was 1,395,012 valued at \$2,399,421 based upon a 10 day volume weighted average price for the Company shares of stock. The Company relied on an exemption from registration under the Securities Act, as set forth in Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated thereunder, based upon (a) each seller's representation that it is an "accredited investor" within the meaning of Rule 501 under the Securities Act and that the shares received by each seller were acquired for such seller's own account, and not with a view to any distribution thereof, (b) appropriate legends were affixed to the securities, and (c) because the transaction did not involve any public offering.

#### Issuer Purchases of Equity Securities

The Company did not repurchase any securities during the year ended December 31, 2018.

#### **Equity Compensation Plan Information**

Set forth below is certain aggregated information with respect to the Company's equity compensation plans.

Plan category

Number of Weighted-average Number of securities securities
securities exercise price of remaining available to be issued upon exercise of warrants and rights

Veighted-average Number of securities remaining available to be issued upon warrants and rights

	outstanding options, warrants and rights		equity compensation plan (excluding securities reflected in the previous columns)		
Equity compensation plans approved by security holders	2,280,000	\$1.51	1,808,499		
Equity compensation plans not approved by security holders	-	-	-		
Total	2,280,000	\$1.51	1,808,499		

# **Item 6. Selected Financial Data**

Not applicable.

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

#### **Overview**

The Company is a global designer and manufacturer of advanced RF, microwave and millimeter wave components, modules, systems and instruments. Serving the wireless, telecommunication, satellite, military, aerospace, semiconductor and medical industries, Wireless Telecom Group products enable innovation across a wide range of traditional and emerging wireless technologies. With a unique set of high-performance products including peak power meters, signal analyzers, signal processing modules, LTE physical layer and stack software, power splitters and combiners, GPS repeaters, public safety monitors, noise sources, and programmable noise generators, Wireless Telecom Group supports the development, testing and deployment of wireless technologies around the globe.

# **Key 2018 Developments and Financial Results**

- Consolidated revenue increase of 15% led by the Embedded Solutions segment which had increased sales of digital signal processing hardware
- ·Consolidated gross profit of 46% in 2018 as compared to 42% in 2017
- ·Cash flow from operations of \$4.0 million in 2018 as compared to \$1.4 million in 2017
- ·Income before taxes of \$83 thousand in 2018 as compared to loss before taxes of \$3.2 million in 2017 Loss on fair value of contingent consideration of \$0.6 million recorded in 2018 as compared to gain of \$0.3 million
- ·recorded in 2017. \$1.4 million contingent consideration liability included in accrued expenses and other current liabilities as of December 31, 2018
- ·Backlog of \$8.2 million as of December 31, 2018 as compared to \$9.9 million as of December 31, 2017

The Company presents its operations in three reportable segments: (1) Network Solutions, (2) Test and Measurement and (3) Embedded Solutions. The Network Solutions segment is comprised primarily of the operations of Microlab. The Test and Measurement segment is comprised of the operations of Boonton and Noisecom. The Embedded Solutions segment is comprised of CommAgility.

The financial information presented herein includes: (i) Consolidated Balance Sheets as of December 31, 2018 and 2017; (ii) Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2018 and 2017; (iii) Consolidated Statement of Changes in Shareholders' Equity for the years ended December 31, 2018 and 2017; and (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2018 and 2017.

#### **Critical Accounting Policies**

Management's discussion and analysis of the financial condition and results of operations are based upon the consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses for each period. The following represents a summary of the Company's critical accounting policies, defined as those policies that the Company believes are: (a) the most important to the portrayal of our financial condition and results of operations, and (b) that require management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effects of matters that are inherently uncertain. Estimates and assumptions are made by management to assess the overall likelihood that an accounting estimate or assumption may require adjustment. It is reasonably possible that these estimates may ultimately differ materially from actual results. See Note 1 in the Notes to the Consolidated Financial Statements included elsewhere on Form 10-K for a description of all of our significant accounting policies.

## Revenue Recognition

Effective January 1, 2018 the Company adopted Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers (Topic 606)", ("Topic 606") using the "modified retrospective" method, meaning the standard is applied only to the most current period presented in the financial statements. Topic 606 requires the Company to identify the performance obligations in our revenue arrangements – that is, those promised goods and services (or bundles of promised goods or services) that are distinct – and allocate the transaction price of the revenue arrangement to those performance obligations on the basis of estimated standalone selling prices ("SSP's").

Sales of hardware which include sales of radio frequency solutions in the Network Solutions segment, digital signal processing hardware in the Embedded Solutions segment and power meters and analyzers and noise generators and components in the Test and Measurement segment generally consist of one performance obligation which is satisfied upon shipment to the customer. When contract terms require transfer of control upon delivery at a customer's location, revenue is recognized on the date of delivery. Sales of hardware to distributors that include a limited right of return are recorded net of expected returns.

Sale of software licenses in the Embedded Solutions segment may involve multiple performance obligations including multiple software releases and consultancy services. In these cases transaction price is allocated to each distinct performance obligation on the basis of SSP and revenue is recognized when the distinct performance obligation is satisfied. The company determines performance obligations and SSP's in arrangements with multiple performance obligations in accordance with Topic 606 which requires significant judgement.

Services arrangements involving repairs and calibrations in the Company's Test and Measurement segment are generally considered a single performance obligation and revenue is recognized as the services are rendered.

Certain software arrangements in the Embedded Solutions segment may involve the transfer of software along with significant customization services. In these cases the customization services and software licenses are combined as one distinct performance obligation and revenue is recognized over time as the project is completed. The duration of these performance obligations are typically one year or less.

## **Business Combinations**

Business combinations are accounted under the acquisition method of accounting in accordance with Accounting Standards Codification ("ASC") 805, "Business Combinations" which requires assets acquired and liabilities assumed be recorded at their fair values on the acquisition date. Goodwill represents the excess of the purchase price over the fair value of the net assets acquired. The fair values of the assets acquired and liabilities assumed are determined based upon management's valuation and involves making significant estimates and assumptions based on facts and circumstances that existed as of the acquisition date. We use a measurement period following the acquisition date to gather information that existed as of the acquisition date that is needed to determine the fair value of the assets acquired and liabilities assumed. The measurement period ends once all information is obtained, but no later than one year from the acquisition date.

Valuation of Goodwill

Goodwill represents the excess of the aggregate purchase price over the fair value of the net assets acquired in a purchase business combination. Goodwill is evaluated for impairment annually by first performing a qualitative

assessment to determine whether a quantitative goodwill test is necessary. After assessing the totality of events or circumstances, if we determine it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then we perform additional quantitative tests to determine the magnitude of any impairment.

As of December 31, 2018 the Company's consolidated goodwill balance of \$9.8 million is comprised of \$1.4 million related to the Microlab reporting unit and \$8.4 million related to the CommAgility reporting unit. As of December 31, 2017 the Company's consolidated goodwill balance of \$10.3 million was comprised of \$1.4 million related to the Microlab reporting unit and \$8.9 million related to the CommAgility reporting unit. Management's qualitative assessment performed in the fourth quarters of 2018 and 2017 did not indicate any impairment of goodwill.

## Intangible and Long-lived Assets

Intangible assets include patents, non-competition agreements, customer relationships and trademarks. Intangible assets with finite lives are amortized using the straight-line method over the estimated economic lives of the assets, which range from five to seven years. Long-lived assets, including intangible assets with finite lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. Measurement of an impairment loss for long-lived assets that management expects to hold and use is based on the estimated fair value of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or estimated fair value less costs to sell. The estimated useful lives of intangible and long-lived assets are based on many factors including assumptions regarding the effects of obsolescence, demand, competition and other economic factors, expectations regarding the future use of the asset, and our historical experience with similar assets. The assumptions used to determine the estimated useful lives could change due to numerous factors including product demand,

market conditions, technological developments, economic conditions and competition. Intangible assets determined to have indefinite useful lives are not amortized but are tested for impairment annually and more frequently if events occur or circumstances change that indicate an asset may be impaired.

#### Income taxes

The Company records deferred taxes in accordance with ASC 740, "Accounting for Income Taxes." ASC 740 requires recognition of deferred tax assets and liabilities for temporary differences between tax basis of assets and liabilities and the amounts at which they are carried in the financial statements, based upon the enacted rates in effect for the year in which the differences are expected to reverse. The Company establishes a valuation allowance when necessary to reduce deferred tax assets to the amount expected to be realized. The Company periodically assesses the value of its deferred tax assets and determines the necessity for a valuation allowance.

Realization of the Company's deferred tax assets is dependent upon the Company generating sufficient taxable income in the appropriate tax jurisdictions in future years to obtain benefit from the reversal of net deductible temporary differences and from utilization of net operating losses. The amount of deferred tax assets considered realizable is subject to adjustment in future periods if estimates of future taxable income are changed.

On December 22, 2017, the United States enacted the Tax Cuts and Jobs Act ("TCJA"), which instituted fundamental changes to the taxation of multinational corporations, including a reduction the U.S. corporate income tax rate to 21% beginning in 2018. As a result, in 2017, the Company re-measured its U.S. deferred tax assets at the new lower corporate income tax rate. The TCJA also requires a one-time transition tax on the mandatory deemed repatriation of the cumulative earnings of the Company's foreign subsidiary as of December 31, 2017. To determine the amount of this transition tax, the Company must determine the amount of earnings generated since inception by the relevant foreign subsidiary, as well as the amount of non-U.S. income taxes paid on such earnings, in addition to potentially other factors. See note 12 to the Consolidated Financial Statements for a discussion of the impact the TCJA.

#### Uncertain tax position

Under ASC 740, the Company must recognize and disclose uncertain tax positions only if it is more-likely-than-not that the tax position will be sustained on examination by the taxing authority, based on the technical merits of the position. The amounts recognized in the financial statements attributable to such position, if any, are recorded if there is a greater than 50% likelihood of being realized upon the ultimate resolution of the position.

The Company has analyzed its filing positions in all of the jurisdictions where it is required to file income tax returns. As of December 31, 2018 and 2017, the Company has identified its federal tax return and its state tax return in New Jersey as "major" tax jurisdictions, as defined in ASC 740, in which it is required to file income tax returns.

Additionally, as a result of the CommAgility acquisition on February 17, 2017 the Company has identified the United Kingdom as "major" tax jurisdiction as of December 31, 2018 and 2017. Based on the evaluations noted above, the Company has concluded that there are no significant uncertain tax positions requiring recognition or disclosure in its consolidated financial statements.

Based on a review of tax positions for all open years and contingencies as set out in the Company's Notes to the consolidated financial statements, no reserves for uncertain income tax positions have been recorded pursuant to ASC 740 during the years ended December 31, 2018 and 2017, and the Company does not anticipate that it is reasonably possible that any material increase or decrease in its unrecognized tax benefits will occur within the next twelve months.

#### Stock-based compensation

The Company follows the provisions of ASC 718, "Compensation - Stock Compensation" which requires that compensation expense be recognized based on the fair value of the stock awards. The fair value of the stock awards is equal to the fair value of the Company's stock on the date of grant. The fair value of options at the date of grant is estimated using the Black-Scholes option pricing model. When options are granted, the Company takes into consideration guidance under ASC 718 and SEC Staff Accounting Bulletin No. 107 (SAB 107) when determining assumptions. The expected option life is derived from assumed exercise rates based upon historical exercise patterns and represents the period of time that options granted are expected to be outstanding. The expected volatility is based upon historical volatility of our shares using daily price observations over an observation period that approximates the expected life of the options. The risk-free rate is based on the U.S. Treasury yield curve rate in effect at the time of grant for periods similar to the expected option life. The Company accounts for forfeitures when they occur.

Management estimates are necessary in determining compensation expense for stock options with performance-based vesting criteria. Compensation expense for this type of stock-based award is recognized over the period from the date the performance conditions are determined to be probable of occurring through the date the applicable conditions are expected to be met. If the performance conditions are not considered probable of being achieved, no expense is recognized until such time as the performance conditions are considered probable of being met, if ever. Management evaluates whether performance conditions are probable of occurring on a quarterly basis.

#### **Inventories and Inventory Valuation**

Inventories are stated at the lower of cost (average cost) or net realizable value. The Company reviews inventory for excess and obsolescence based on best estimates of future demand, product lifecycle status and product development plans.

# Allowances for doubtful accounts

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. A key consideration in estimating the allowance for doubtful accounts has been, and will continue to be, our customer's payment history and aging of its accounts receivable balance.

#### Impairment of long-lived assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted cash flows resulting from the use of the assets and their eventual disposition. Measurement of an impairment loss for long-lived assets that management expects to hold for sale is based on the fair value of the assets. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less costs to sell.

# Warranties

The Company generally offers standard warranties against product defects. We estimate future warranty costs to be incurred based on historical warranty claims experience including estimates of material and service costs over the warranty period.

# <u>Comparison of the results of operations for the year ended December 31, 2018 with the year ended December 31, 2017</u>

# Net Revenues (in thousands)

	Twelve months ended December 31						
	Revenue		% of Rev	enue	Change		
	2018	2017	2018	2017	Amount Pct.		
Network Solutions	\$22,275	\$23,052	42.2%	50.0%	\$(777)	-3.4 %	
Test and Measurement	14,212	13,380	26.9%	29.0%	832	6.2 %	
<b>Embedded Solutions</b>	16,301	9,646	30.9%	21.0%	6,655	69.0%	
Total Net Revenues	\$52,788	\$46,078	100.0%	100.0%	\$6,710	14.6%	

Net consolidated revenues for the year ended December 31, 2018 were \$52.8 million as compared to \$46.1 million for the year ended December 31, 2017, an increase of \$6.7 million or 14.6%. Embedded Solutions segment revenue increased \$6.7 million primarily due to increased sales of digital processing hardware that is used in wireless network test equipment. Test and Measurement segment revenue increased \$0.8 million or 6.2% due primarily to increased sales of noise generation components and modules to customers in the satellite industry and for use in optical applications offset by lower military and government orders. Network Solutions segment revenue decreased \$0.8 million or 3.4% due primarily to the use of highly competitive pricing and decreases in certain passive RF component demand, which were only slightly offset by increased sales of active components and customized integrated solutions.

## Gross Profit (in thousands)

	Twelve months ended December 31						
	Gross Pro	ofit	Gross P	rofit %	Change		
	2018	2017	2018 2017		Amount	Pct.	
<b>Network Solutions</b>	\$9,756	\$9,064	43.8%	39.3%	\$692	7.6 %	
Test and Measurement	7,018	5,854	49.4%	43.8%	1,164	19.9%	
<b>Embedded Solutions</b>	7,393	4,343	45.4%	45.0%	3,050	70.2%	
<b>Total Gross Profit</b>	\$24,167	\$19,261	45.8%	41.8%	\$4,906	25.5%	

Gross Profit increased by \$4.9 million from 41.8% of revenue to 45.8% of revenue due primarily to increased volumes at the Embedded Solutions segment. The increase over 2017 also reflected inventory impairment charges recorded in 2017 related to the Network Solutions segment of \$1.2 million and the Test and Measurement segment of \$0.7 million. Network Solutions gross profit as a percentage of revenue in 2018 was adversely affected by lower volumes resulting from a highly competitive pricing environment and decreases in certain passive RF component demand.

## Operating Expenses (in thousands)

	Twelve months ended December 31						
	Operating		% of Revenue		Change		
	Expenses	3	70 Of Icevenue		Change		
	2018	2017	2018	2017	Amount	Pct.	
Research and Development	\$4,909	\$4,395	9.3 %	9.5 %	\$514	11.7	%
Sales and Marketing	7,595	6,960	14.4%	15.1%	635	9.1	%
General and Administrative	10,306	11,027	19.5%	23.9%	(721)	-6.5	%
Loss on Change in Fair Value of Contingent Consideration	578	(253)	1.1 %	-0.5 %	831	-328.	5%
Total Operating Expenses	\$23,388	\$22,129	44.3%	48.0%	\$1,259	5.7	%

Research and development expenses increased \$0.5 million due to the Embedded Solutions segment. Embedded Solutions segment research and development expenses increased \$0.9 million due to investments in 5G research and development, the impact of a full 12 months of expense in 2018 versus 10.5 months expense in 2017 and the unfavorable impact of foreign exchange. The increase in the Embedded Solutions segment research and development expenses was offset by a \$0.4 million decrease in research and development expenses in the Network Solutions and Test and Measurement segments due to lower third party spend.

Sales and marketing expenses increased \$0.6 million primarily due to increased headcount in the Network Solutions segment offset by lower commission expense in the Network Solutions segment due to lower volumes.

General and administrative expenses decreased \$0.7 million due to lower mergers and acquisitions expenses, and lower severance charges on executive team restructuring, offset by increased stock compensation and bonus expense. The increase also reflected the impact of a full year of CommAgility general and administrative expenses in 2018 versus 10.5 months in 2017 as well as the unfavorable impact of foreign exchange.

In 2018 the Company recorded a loss on change in fair value of contingent consideration of \$0.6 million as our estimate of the earn-out payment related to the CommAgility acquisition was increased from our original estimate recorded at the time of acquisition due to the improved financial results of the business. In 2017 the Company recorded a gain on change in fair value of contingent consideration of \$0.3 million.

# Other income/expense

Other expenses increased \$39 thousand due to higher foreign exchange unrealized and realized losses on transactions denominated in currencies other than our functional currencies.

#### Interest Expense

Interest expense increased \$0.3 million due to a full year of borrowing under our Credit Facility versus 10.5 months in 2017 and an increase in our average borrowing rate due to an increase in Libor. Additionally, the Company recorded higher interest expense related to the CommAgility contingent consideration liability in 2018 due to increases in the liability as a result of higher financial results of the business than previously estimated.

#### Tax

The Company recorded tax expense of \$48,000 in 2018 due primarily to deferred federal taxes in the U.S. offset by current and deferred tax benefits related to our foreign jurisdictions due to a research and development tax deduction and the reduction of the deferred tax liability. Tax expense for the year ended December 31, 2017 was \$1.2 million primarily as a result of reduction of our net deferred tax asset largely driven by U.S. tax rate reductions due to the TCJA enacted in December 2017. The tax rate reductions as a result of TCJA resulted in a \$2.5 million reduction in our U.S. deferred tax assets for the year ended December 31, 2017.

#### Net Loss

For the year ended December 31, 2018 net income was \$35,000 or \$0.00 per share as compared to a net loss of \$4.5 million or \$0.22 loss per share for the year ended December 31, 2017. The increase in net income is due to an increase in income before taxes due to the factors discussed above.

# **Liquidity and Capital Resources**

As disclosed in Note 4 to the Consolidated Financial Statements, on February 16, 2017 the Company entered into a Credit Facility which provided for a term loan in the aggregate principal amount of \$0.8 million (the "Term Loan") and an asset based revolving loan (the "Revolver"), which is subject to a Borrowing Base Calculation (as defined in the Credit Facility) of up to a maximum availability of \$9 million. The proceeds of the Term Loan and Revolver were used to finance the acquisition of CommAgility. We expect our existing cash balance, cash generated by operations and borrowings available under our Credit Facility to be our primary sources of short-term liquidity, and we believe these sources will be sufficient to meet our liquidity needs for at least the next twelve months. As disclosed in Note 15 to the Consolidated Financial Statements, on February 27, 2019 the Company entered into Amendment No. 3 to the Credit Facility which extended the term of the Revolver to March 31, 2020. During the first quarter of 2019 the Company will pay the final deferred purchase price and contingent consideration amounts due related to the CommAgility acquisition which are approximately \$0.4 million and \$1.4 million, respectively, as of December 31, 2018. Our ability to meet our cash requirements will depend on our ability to generate cash in the future, which is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our

control.

The Company expects to realize tax benefits in future periods due to the available net operating loss carryforwards resulting from the disposition of a former wholly owned subsidiary in 2010. Accordingly, future taxable income is expected to be offset by the utilization of operating loss carryforwards and as a result will increase the Company's liquidity as cash needed to pay federal and state income taxes will be substantially reduced. Additionally, CommAgility benefits from a research and development deduction which significantly reduces the cash needed to pay taxes in the UK.

Cash and cash equivalents increased from \$2.5 million at December 31, 2017 to \$5.0 million at December 31, 2018 primarily due to cash generated from operations and borrowings under our Credit Facility, offset only in part by capital expenditures and deferred purchase price payments related to the CommAgility acquisition. As of December 31, 2018, substantially all of our cash and cash equivalents are held outside the United States. The asset based revolver under our Credit Facility is secured by the Company's U.S. assets. Income taxes have been provided on foreign earnings such that there would be no significant income tax expense to repatriate the portion of this cash that is not required to meet operational needs of our international subsidiary.

# Operating Activities

Cash provided by operating activities was \$4.0 million for the year ended December 31, 2018 as compared to cash provided by operating activities of \$1.4 million for the year ended December 31, 2017. The improvement was primarily due to higher operating income across all of our segments.

# **Investing Activities**

Cash used by investing activities was \$1.7 million for the year ended December 31, 2018 and was primarily comprised of cash used for capital expenditures of \$0.9 million and payment of deferred purchase price of \$0.8 million related to the CommAgility acquisition. For the year ended December 31, 2017 cash used by investing activities was \$10.4 million and was primarily related to cash used for the CommAgility acquisition of \$9.4 million and capital expenditures of \$0.9 million.

## **Financing Activities**

Cash provided by financing activities was \$0.5 million for the year ended December 31, 2018 as compared to \$2.0 million for the year ended December 31, 2017. During the year ended December 31, 2018, net borrowings under the Credit Facility were \$0.3 million and proceeds from stock option exercises were \$0.3 million which were both partially offset by Term Loan principal payments of \$0.2 million. During the year ended December 31, 2017 the Company received net proceeds of \$1.2 million from the Revolver and received \$0.8 million from the Term Loan. Principal repayments of the Term Loan during the year ended December 30, 2017 were \$0.1 million. Additionally, the Company paid \$0.2 million in debt issuance costs in 2017 associated with the Credit Facility.

As of December 31, 2018, \$1.5 million was outstanding on the Revolver and \$0.5 million was outstanding under the Term Loan. As of December 31, 2018 and 2017, and the date hereof, the Company is in compliance with the covenants of the Credit Facility.

The Company may pursue strategic opportunities, including potential acquisitions, mergers, divestitures or other activities, which may require significant use of the Company's capital resources. The Company may incur costs as a result of such activities and such activities may affect the Company's liquidity in future periods. In order to fund such activities, the Company may need to incur additional debt or issue additional securities if market conditions are favorable. However, there can be no certainty that such funding will be available in needed quantities on terms favorable to the Company or at all.

On August 27, 2018 the Company filed a shelf registration statement on Form S-3 which was declared effective on September 17, 2018. The Form S-3 will permit the Company to issue and sell, from time to time, up to \$40 million in aggregate value of shares of its common stock through one or more methods of distribution, subject to applicable SEC limits on the value of securities that the Company, as a smaller reporting company, may sell during an applicable period, market conditions, and the Company's capital desires and needs. The Company has no current plans to offer any common stock under the shelf registration statement.

The terms of any offering of the Company's common stock, and the intended use of the net proceeds resulting therefrom, will be established at the times of the offerings and will be described in prospectus supplements filed with the SEC at the times of the offerings. The shelf registration statement is intended to provide financial flexibility to access capital in a competitive and expeditious manner when market conditions are appropriate.

The Company believes that its financial resources from working capital and availability under the Credit Facility are adequate to meet its current needs. The Company expects the cash flow of CommAgility to fund the deferred purchase price and contingent consideration liabilities related to the CommAgility acquisition. However, should current global economic conditions deteriorate, additional working capital funding may be required which may be difficult to obtain due to restrictive credit markets and covenants of our Credit Facility.

Purchase obligations consist of inventory that arises in the normal course of business operations. Future obligations and commitments as of December 31, 2018 consisted of the following:

# Table of Contractual Obligations

(in thousands)

	Payments by Year					
Facility Leases	Total \$2,134	2019 \$539	2020 \$510	2021 \$474	2022 \$488	2023 \$123
Operating and Equipment Leases	171	54	54	54	9	-
Purchase Obligations	7,860	7,860	-	-	-	-
Contingent Consideration Payment	1,442	1,442	-	-	-	-
Deferred Purchase Price Payments	852	852	-	-	-	-
	\$12,459	\$10,747	\$564	\$528	\$497	\$123

## Off-Balance Sheet Arrangements

Other than contractual obligations incurred in the normal course of business, the Company does not have any off-balance sheet arrangements.

# Effects of Inflation and Changing Prices

The Company does not anticipate that inflation or other expected changes in prices will significantly impact its business.

# Recent Accounting Pronouncements Affecting the Company

A discussion of recent accounting pronouncements is included in Note 1 to the Consolidated Financial Statements.

# Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

# Item 8. Financial Statements and Supplementary Data

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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Wireless Telecom Group, Inc.

To the Board of Directors and Shareholders Wireless Telecom Group, Inc. Parsippany, NJ

## **Opinion on the Consolidated Financial Statements**

We have audited the accompanying consolidated balance sheets of Wireless Telecom Group, Inc. (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations and comprehensive income/(loss), changes in shareholders' equity and cash flows for each of the two years in the period ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

#### **Change in Accounting Principle**

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for revenues from contracts with customers in 2018.

#### **Basis for Opinion**

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PKF O'Connor Davies, LLP

We have served as the Company's auditor since 2006.

New York, New York March 12, 2019

# CONSOLIDATED BALANCE SHEETS

# Wireless Telecom Group, Inc.

(In thousands, except number of shares and par value)

	December 31 2018	December 31 2017
CURRENT ASSETS	Φ.Σ. Ο 1.Σ.	Φ2.450
Cash & Cash Equivalents	\$5,015	\$2,458
Accounts Receivable - net of reserves of \$44 and \$44, respectively	8,638	9,041
Inventories - net of reserves of \$1,910 and \$1,856, respectively	6,884	6,526
Prepaid Expenses and Other Current Assets	1,689	4,733
TOTAL CURRENT ASSETS	22,226	22,758
PROPERTY PLANT AND EQUIPMENT - NET	2,578	2,730
OTHER ASSETS		
Goodwill	9,778	10,260
Acquired Intangible Assets, net	3,206	4,511
Deferred Income Taxes	5,592	5,939
Other	787	723
TOTAL OTHER ASSETS	19,363	21,433
TOTAL ASSETS	\$44,167	\$46,921
CURRENT LIABILITIES		
Short Term Debt	\$2,016	\$1,335
Accounts Payable	3,252	4,109
Accrued Expenses and Other Current Liabilities	6,083	2,894
Deferred Revenue	103	629
TOTAL CURRENT LIABILITIES	11,454	8,967
LONG TERM LIABILITIES		
Long Term Debt	_	494
Other Long Term Liabilities	115	1,590
Deferred Tax Liability	616	767
TOTAL LONG TERM LIABILITIES	731	2,851
TOTAL LONG TERM LIABILITIES	731	2,031
COMMITMENTS AND CONTINGENCIES		
SHAREHOLDERS' EQUITY		
Preferred Stock, \$.01 par value, 2,000,000 shares authorized, none issued	-	-
Common Stock, \$.01 par value, 75,000,000 shares authorized, 34,393,252 and 33,868,252	344	339
shares issued, 21,205,251 and 22,772,167 shares outstanding	J <del>44</del>	JJ7
Additional Paid in Capital	48,479	47,494
Retained Earnings	7,556	7,176
Treasury Stock at Cost, 13,188,601 and 11,096,085 shares, respectively	(24,509)	(20,910)

Accumulated Other Comprehensive Income	112	1,004
TOTAL SHAREHOLDERS' EQUITY	31,982	35,103
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$44,167	\$46,921

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

# CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME/(LOSS)

# Wireless Telecom Group, Inc.

# (In thousands, except per share amounts)

	Twelve M Ended December	er 31
NET REVENUES	2018 \$52,788	2017 \$46,078
COST OF REVENUES	28,621	26,817
GROSS PROFIT	24,167	19,261
Operating Expenses Research and Development Sales and Marketing General and Administrative (Gain)/Loss on Change in Fair Value of Contingent Consideration Total Operating Expenses	4,909 7,595 10,306 578 23,388	4,395 6,960 11,027 (253) 22,129
Operating Income/(Loss)	779	(2,868)
Other Income/(Expense) Interest Expense	(121) (575)	(82) (296)
Income/(Loss) before taxes	83	(3,246)
Tax Provision	48	1,247
Net Income/(Loss)	\$35	\$(4,493)
Other Comprehensive Income/(Loss): Foreign Currency Translation Adjustments Comprehensive Income/(Loss)	(892) \$(857)	1,004 \$(3,489)
Earnings/(Loss) Per Share: Basic Diluted	\$0.00 \$0.00	\$(0.22) \$(0.22)
Weighted Average Shares Outstanding: Basic Diluted	20,858 21,566	19,984 19,984

In periods with a net loss, the basic loss per share equals the diluted loss per share as all common stock equivalents are excluded from the per share calculation because they are anti-dilutive.

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

# CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

# Wireless Telecom Group, Inc.

# (In thousands, except share amounts)

	Common Stock Issued	Commo Stock Amount	Additional P In Capital	ai <b>R</b> etained Earnings	Treasury Stock	Accumulated Other Comprehens Income/(Los	Shareholders'
Balances at December 31, 2016	29,786,224	\$ 298	\$ 40,562	\$11,669	\$(20,823)	\$ -	\$ 31,706
Net Income/(Loss)	-	-	-	(4,493)	-	-	(4,493)
Issuance of shares in connection with stock options exercised	557,500	6	431	-	-	-	437
Share-based compensation expense	-	-	536	-	-	-	536
Issuance of shares in connection with CommAgility acquisition	3,487,528	35	5,965	-	-	-	6,000
Issuance of restricted stock	150,000	1	(1)	-	-	-	-
Forfeiture of Restricted Stock	(113,000)	(1)	1	-	-	-	-
Cumulative translation adjustment	-	-	-	-	-	1,004	1,004
Repurchase of Stock	-	-	-	-	(87)	-	(87)
Balances at December 31, 2017	33,868,252	\$ 339	\$ 47,494	\$7,176	\$(20,910)	\$ 1,004	\$ 35,103
Adoption of Accounting Standard	-	-	-	345	-	-	345
Adjusted Opening Equity	33,868,252	\$ 339	\$ 47,494	\$7,521	\$(20,910)	\$ 1,004	\$ 35,448
Net Income/(Loss)	-	-	-	35	-	-	35
Issuance of Shares in Connection with Stock Options Exercised	300,000	3	285	-	-	-	288

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Issuance of Restricted Stock	225,000	2	(2)	-	-	-	-
Forfeiture of Shares Issued in Connection with CommAgility acquistion	-	-	-	-	(3,599)	-	(3,599)
Share-based Compensation Expense	-	-	702	-	-	-	702
Cumulative Translation Adjustment	-	-	-	-	-	(892)	(892)
Balances at December 31, 2018	34,393,252	\$ 344	\$ 48,479	\$7,556	\$(24,509)	\$ 112	\$ 31,982

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

# CONSOLIDATED STATEMENTS OF CASH FLOWS

# Wireless Telecom Group, Inc.

(In thousands)

CASH FLOWS PROVIDED BY OPERATING ACTIVITIES	For the Tw Months Ended Dec 2018	
Net Income/(Loss)	\$35	\$(4,493)
Adjustments to reconcile net income/(loss) to net cash provided by operating activities:	Φ33	φ( <del>4,493</del> )
Depreciation and Amortization	2,305	1,747
Amortization of Debt Issuance Fees	78	68
Share-based Compensation Expense	702	536
Deferred Rent	11	23
Deferred Income Taxes	233	1,395
Provision for Doubtful Accounts	-	33
Inventory Reserves	359	1,357
Changes in Assets and Liabilities, Net of Acquisition:	337	1,337
Accounts Receivable	231	(1,456)
Inventories	(751)	1,713
Prepaid Expenses and Other Assets	(850)	(119)
Accounts Payable	(735)	(210)
Accrued Expenses and Other Liabilities	2,372	809
Net Cash Provided by Operating Activities	3,990	1,403
Their Cush Frovided by Operating Netroties	3,770	1,103
CASH FLOWS (USED) BY INVESTING ACTIVITIES		
Capital Expenditures	(853)	(927)
Proceeds from Asset Disposal	-	7
Acquisition of Business, Net of Cash Acquired	(805)	(9,434)
Net Cash (Used) by Investing Activities	(1,658)	(10,354)
The case (coes) of miconing received	(1,000)	(10,00.)
CASH FLOWS PROVIDED BY FINANCING ACTIVITIES		
Revolver Borrowings	37,695	58,420
Revolver Repayments	(37,355)	(57,237)
Term Loan Borrowings	-	760
Term Loan Repayments	(152)	(114)
Debt Issuance Fees	-	(215)
Proceeds from Exercise of Stock Options	288	437
Shares Withheld for Employee Taxes	-	(87)
Net Cash Provided by Financing Activities	476	1,964
Effect of Exchange Rate Changes on Cash and Cash Equivalents	(251)	94
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	2,557	(6,893)
Cash and Cash Equivalents, at Beginning of Period	2,458	9,351

CASH AND CASH EQUIVALENTS, AT END OF PERIOD	\$5,015	\$2,458
SUPPLEMENTAL INFORMATION:		
Cash Paid During the Period for Interest	\$176	\$125
Cash Paid During the Period for Income Taxes	\$41	\$68

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

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.

# NOTE 1 - DESCRIPTION OF COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

#### Organization and Basis of Presentation

Wireless Telecom Group, Inc., a New Jersey corporation, together with its subsidiaries ("we", "us", "our" or the "Company"), is a global designer and manufacturer of advanced RF, microwave and millimeter wave components, modules, systems and instruments and currently markets its products and services worldwide under the Boonton, Microlab, Noisecom and CommAgility brands. Serving the wireless, telecommunication, satellite, military, aerospace, and semiconductor industries, Wireless Telecom Group products enable innovation across a wide range of traditional and emerging wireless technologies. With a unique set of high-performance products including peak power meters, signal analyzers, signal processing modules, long term evolution ("LTE") physical layer ("PHY") and stack software, power splitters and combiners, global positioning system ("GPS") repeaters, public safety monitors, noise sources, and programmable noise generators, Wireless Telecom Group supports the development, testing, and deployment of wireless technologies around the globe. The consolidated financial statements include the accounts of Wireless Telecom Group, Inc., doing business as, and operating under the trade name, Noise Com, Inc. ("Noisecom"), and its wholly owned subsidiaries including Boonton Electronics Corporation ("Boonton"), Microlab/FXR ("Microlab"), Wireless Telecommunications Ltd. and CommAgility Limited ("CommAgility").

The accompanying Consolidated Financial Statements include the accounts of the Company and its wholly owned subsidiaries. The Consolidated Financial Statements have been prepared using accounting principles generally accepted in the United States ("U.S. GAAP") and include the results of companies acquired by the Company from the date of each acquisition. All intercompany accounts and transactions have been eliminated in consolidation.

The Company presents its operations in three reportable segments: (1) Network Solutions, (2) Test and Measurement and (3) Embedded Solutions. The Network Solutions segment is comprised primarily of the operations of Microlab. The Test and Measurement segment is comprised of the operations of Boonton and Noisecom. The Embedded Solutions segment is comprised of the operations of CommAgility.

## Use of Estimates

The accompanying financial statements have been prepared in accordance with U.S. GAAP, which requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and

disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Accordingly, actual results could differ from those estimates. The most significant estimates and assumptions include management's analysis in support of inventory valuation, accounts receivable valuation, valuation of deferred tax assets, returns reserves, warranty accruals, intangible assets, estimated fair values of stock options and vesting periods of performance-based stock options and restricted stock and estimated fair values of acquired assets and liabilities in business combinations.

#### Reclassification

Certain prior period amounts have been reclassified to conform with the current period presentation.

## Concentrations of Credit Risk, Purchases and Fair Value

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and accounts receivable.

Credit evaluations are performed on customers requiring credit over a certain amount. Credit risk is mitigated to a lesser extent through collateral such as letters of credit, bank guarantees or payment terms like cash in advance.

For the years ended December 31, 2018 and 2017 one customer, from the Embedded Solutions segment, accounted for 22.0% and 10.4% of the Company's total consolidated revenues, respectively. At December 31, 2018 one customer exceeded 10% of consolidated gross accounts receivable at 32.1%. At December 31, 2017, two customers exceeded 10% of consolidated gross accounts receivable at 17.8% and 11.2%, respectively.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### Wireless Telecom Group, Inc.

For the year ended December 31, 2018 two suppliers exceed 10% of consolidated inventory purchases at 15% and 13%, respectively. For the year ended December 31, 2017 no single third-party supplier accounted for 10% or more of the Company's total consolidated inventory purchases.

## Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with maturities of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents consist of operating accounts.

## Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. Estimated allowances for doubtful accounts are reviewed periodically taking into account the customer's recent payment history, the customer's current financial statements and other information regarding the customer's credit worthiness. Account balances are charged off against the allowance when it is determined the receivable will not be recovered.

#### Inventories

Inventories are stated at the lower of cost (average cost) or net realizable value. Net realizable value is based upon an estimated average selling price reduced by estimated costs of completion, disposal and transportation. Reductions in inventory valuation are included in cost of sales in the accompanying Consolidated Statements of Operations and Comprehensive Loss. Finished goods and work-in-process include material, labor and manufacturing expenses.

The Company reviews inventory for excess and obsolescence based on best estimates of future demand, product lifecycle status and product development plans. The Company uses historical information along with these future estimates to reduce the inventory cost basis. Subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

During the year ended 2017 the Company recorded inventory adjustments totaling \$1.9 million comprised of an increase to the Company's excess and obsolescence reserve of \$1.1 million and the write off of gross inventory of \$0.8 million. The charge was effected as a result of a review of inventory balances and net realizable value of the inventory following the launch of the Company's lean manufacturing initiative and the adoption of a strategic product plan focused on product lifecycle acceleration.

Inventory carrying value is net of inventory reserves of approximately \$1.9 million as of December 31, 2018 and 2017.

Inventories consist of (in thousands):	December 31,	December 31,	
	2018	2017	
Raw materials	\$ 3,248	\$ 3,231	
Work-in-process	557	631	
Finished goods	3,079	2,664	
	\$ 6,884	\$ 6,526	
33			

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.

# Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets generally consist of income tax receivables, prepaid insurance, prepaid maintenance agreements and the short term portion of debt issuance costs. As of December 31, 2017, prepaid and other current assets included a \$3.6 million contingent asset representing the fair value of consideration shares issued in connection with the CommAgility acquisition. Under the claw back provisions of the Share Purchase Agreement (see Note 3) the consideration shares were forfeited in March 2018 and are no longer outstanding. Accordingly, prepaid expenses and other current assets decreased by \$3.6 million from December 31, 2017. The forfeited shares are recorded as treasury stock in the consolidated statement of shareholders' equity as of December 31, 2018.

## Property, Plant and Equipment

Property, plant and equipment are reflected at cost, less accumulated depreciation. Depreciation and amortization are provided on a straight-line basis over the estimated useful lives of the assets. The estimated useful lives for the property, plant and equipment are:

Machinery and computer equipment 3-8 years Furniture and fixtures 5-7 years Transportation equipment 4 years

Leasehold improvements are amortized over the shorter of the remaining term of the lease or the estimated economic life of the improvement. Repairs and maintenance are charged to operations as incurred; renewals and betterments are capitalized.

# Goodwill

Goodwill represents the excess of the aggregate purchase price over the fair value of the net assets acquired in a purchase business combination. Goodwill is evaluated for impairment annually by first performing a qualitative assessment to determine whether a quantitative goodwill test is necessary. After assessing the totality of events or circumstances, if we determine it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then we perform additional quantitative tests to determine the magnitude of any impairment.

The Company's goodwill balance relates to two of the Company's reporting units, Embedded Solutions and Network Solutions. Management's qualitative assessment performed in the fourth quarters of 2018 and 2017 did not indicate any impairment of goodwill as each reporting units fair value is estimated to be in excess of its carrying value.

Intangible and Long-lived Assets

Intangible assets include patents, non-competition agreements, customer relationships and trademarks. Intangible assets with finite lives are amortized using the straight-line method over the estimated economic lives of the assets, which range from three to five years. Long-lived assets, including intangible assets with finite lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. Measurement of an impairment loss for long-lived assets that management expects to hold and use is based on the estimated fair value of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or estimated fair value less costs to sell. The estimated useful lives of intangible and long-lived assets are based on many factors including assumptions regarding the effects of obsolescence, demand, competition and other economic factors, expectations regarding the future use of the asset, and our historical experience with similar assets. The assumptions used to determine the estimated useful lives could change due to numerous factors including product demand, market conditions, technological developments, economic conditions and competition. Intangible assets determined to have indefinite useful lives are not amortized but are tested for impairment annually and more frequently if events occur or circumstances change that indicate an asset may be impaired.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

W	irel	ess T	[e]	lecom	G	roup,	Inc.
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## Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The accounting guidance establishes a three-tiered hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

Level 1 - Quoted prices in active markets for identical assets or liabilities.

Level 2 - Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The categorization of a financial instrument within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement.

The carrying amounts of the Company's financial instruments, including cash, accounts receivable, accounts payable and accrued liabilities, approximate fair value due to their relatively short maturities. The Company's term loan and revolving credit facility bear interest at a variable interest rate plus an applicable margin and, therefore, carrying amount approximates fair value.

# **Contingent Consideration**

Under the terms of the CommAgility Share Purchase Agreement (See Note 3) the Company may be required to pay additional purchase price if certain financial targets are achieved for the years ending December 31, 2017 and December 31, 2018. The financial targets for 2017 were not achieved therefore there was no earn-out payment made in the twelve months ended December 31, 2018. As of December 31, 2017, the Company estimated the fair value of

the contingent consideration remaining to be paid based on the 2018 financial results to be \$0.6 million. The Company is required to reassess the fair value of the contingent consideration at each reporting period.

The significant inputs used in this fair value estimate include gross revenues and Adjusted EBITDA, as defined, and scenarios for the earn-out periods for which probabilities are assigned to each scenario to arrive at a single estimated outcome. The estimated outcome is then discounted based on the individual risk analysis of the liability. Although the Company believes its estimates and assumptions are reasonable, different assumptions, including those regarding the operating results of CommAgility or changes in the future, may result in different estimated amounts.

During the twelve months ended December 31, 2018 the Company recorded a loss on change in fair value of contingent consideration liability of \$0.6 million due to the improved financial results at CommAgility as compared to prior estimates. As of December 31, 2018, the Company's contingent consideration liability is \$1.4 million and is recorded in accrued expenses and other current liabilities in the accompanying consolidated balance sheet. The Company will satisfy this obligation with a cash payment to the sellers of CommAgility in the first quarter of 2019. The contingent consideration liability is considered a Level 3 fair value measurement.

#### Foreign Currency Translation

Assets and liabilities of non-U.S. subsidiaries that operate in a local currency environment, where the local currency is the functional currency, are translated from foreign currencies into U.S. dollars at period-end exchange rates while income and expenses are translated at the weighted average spot rate for the periods presented. Translation gains or losses related to net assets located outside the U.S. are shown as a component of accumulated other comprehensive income in the Consolidated Statements of Changes in Shareholders' Equity. Gains and losses resulting from foreign currency transactions, which are denominated in currencies other than the Company's functional currency, are included in the Consolidated Statements of Operations and Comprehensive Loss. The Company recognized \$0.1 million in foreign exchange transaction losses in fiscal 2017 and 2018.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Other Comprehensive Income (Loss)

Other comprehensive income (loss) is recorded directly to a separate section of shareholders' equity in accumulated other comprehensive income and includes unrealized gains and losses excluded from net income. These unrealized gains and losses consist of changes in foreign currency translation.

# Research and Development Costs

Research and development costs are charged to operations when incurred. The amounts charged to operations for the years ended December 31, 2018 and 2017 were \$4.9 million and \$4.4 million, respectively.

### **Advertising Costs**

Advertising expenses are charged to operations during the year in which they are incurred and aggregated \$0.1 million for the years ended December 31, 2018 and 2017.

#### **Stock-Based Compensation**

The Company follows the provisions of Accounting Standards Codification ("ASC") 718, "Compensation – Stock Compensation" which requires that compensation expense be recognized, based on the fair value of the stock awards. The fair value of the stock awards is equal to the fair value of the Company's stock on the date of grant. The fair value of options at the date of grant are estimated using the Black-Scholes option pricing model. When performance-based options are granted, the Company takes into consideration guidance under ASC 718 and SEC Staff Accounting Bulletin No. 107 (SAB 107) when determining assumptions. The expected option life is derived from assumed exercise rates based upon historical exercise patterns and represents the period of time that options granted are expected to be outstanding. The expected volatility is based upon historical volatility of our shares using daily price observations over an observation period that approximates the expected life of the options. The risk-free rate is based on the U.S. Treasury yield curve rate in effect at the time of grant for periods similar to the expected option life. The Company accounts for forfeitures when they occur.

Management estimates are necessary in determining compensation expense for stock options with performance-based vesting criteria. Compensation expense for this type of stock-based award is recognized over the period from the date the performance conditions are determined to be probable of occurring through the implicit service period, which is the date the applicable conditions are expected to be met. If the performance conditions are not considered probable of being achieved, no expense is recognized until such time as the performance conditions are considered probable of being met, if ever. If the award is forfeited because the performance condition is not satisfied, previously recognized compensation cost is reversed. Management evaluates performance conditions on a quarterly basis.

#### **Income Taxes**

The Company records deferred taxes in accordance with ASC 740, "Accounting for Income Taxes". This ASC requires recognition of deferred tax assets and liabilities for temporary differences between tax basis of assets and liabilities and the amounts at which they are carried in the financial statements, based upon the enacted rates in effect for the year in which the differences are expected to reverse. The Company establishes a valuation allowance when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company periodically assesses the value of its deferred tax asset, a majority of which has been generated by a history of net operating losses and determines the necessity for a valuation allowance. The Company evaluates which portion, if any, will more likely than not be realized by offsetting future taxable income, taking into consideration any limitations that may exist on its use of its net operating loss carry-forwards.

Under ASC 740, the Company must recognize and disclose uncertain tax positions only if it is more-likely-than-not the tax position will be sustained on examination by the taxing authority, based on the technical merits of the position. The amounts recognized in the financial statements attributable to such position, if any, are recorded if there is a greater than 50% likelihood of being realized upon the ultimate resolution of the position. Based on the evaluations noted above, the Company has concluded that there are no significant uncertain tax positions requiring recognition or disclosure in its consolidated financial statements.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.

On December 22, 2017, the United States enacted the Tax Cuts and Jobs Act ("TCJA"), which instituted fundamental changes to the taxation of multinational corporations, including a reduction the U.S. corporate income tax rate to 21% beginning in 2018. As a result, the Company re-measured its U.S. deferred tax assets at the new lower corporate income tax rate. The TCJA also requires a one-time transition tax on the mandatory deemed repatriation of the cumulative earnings of the Company's foreign subsidiary as of December 31, 2017. To determine the amount of this transition tax, the Company must determine the amount of earnings generated since inception by the relevant foreign subsidiary, as well as the amount of non-U.S. income taxes paid on such earnings, in addition to potentially other factors. See Note 12 for a discussion of the impact the TCJA.

#### Earnings (Loss) Per Common Share

Basic earnings (loss) per share is calculated by dividing net income (loss) available to common shareholders by the weighted average number of shares of common stock outstanding during the period. Diluted earnings (loss) per share is calculated by dividing net income (loss) available to common shareholders by the weighted average number of common shares outstanding for the period and, when dilutive, potential shares from stock options using the treasury stock method, the weighted average number of unvested restricted shares and the weighted-average number of restricted stock units outstanding for the period. Shares from stock options are included in the diluted earnings per share calculation only when options exercise prices are lower than the average market value of the common shares for the period presented. In periods with a net loss, the basic loss per share equals the diluted loss per share as all common stock equivalents are excluded from the per share calculation because they are anti-dilutive. In accordance with ASC 260, "Earnings Per Share", the following table reconciles basic shares outstanding to fully diluted shares outstanding.

	For the Years December 31 2018	
Weighted average common shares outstanding	20,858,298	19,983,747
Potentially dilutive equity awards	707,492	877,935
Weighted average common shares outstanding, assuming dilution	21,565,790	20,861,682

The weighted average number of options to purchase common stock not included in diluted loss per share because the performance condition was not met in 2018 was 285,000. The weighted average number of options to purchase common stock not included in diluted loss per share in 2017, because the effects are anti-dilutive or the performance condition was not met, was 1,048,000.

On January 1, 2018, the Company adopted Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers (Topic 606)* ("Topic 606"), using the "modified retrospective" method, meaning the standard is applied only to the most current period presented in the financial statements. Furthermore, we elected to apply the standard only to those contracts which were not completed as of the date of the adoption. Results for reporting periods beginning on the date of adoption are presented under Topic 606, while prior period amounts have not been adjusted and continue to be reported in accordance with accounting standards in effect for those periods (see Note 2).

Upon adoption, a cumulative effect adjustment of \$0.3 million was made and the impact resulted in an increase to the January 1, 2018 opening balance of retained earnings. The adjustment was based on customer-specific contracts in effect at December 31, 2017 and reflects revenue that would have been recognized in 2018 in accordance with Accounting Standard Codification ("ASC") Topic 605, *Revenue Recognition*, and Subtopic 985, *Software*, collectively referred to as "Topic 605". The beginning balance of deferred revenue decreased by \$0.2 million representing amounts that were invoiced to customers and not recognized and prepaid and other current assets increased by \$0.1 million representing unbilled receivables recognized under Topic 606. Further, accounts receivable increased \$0.2 million as the contra accounts receivable balance representing estimated product returns was reclassified to other current liabilities.

The most significant impact of Topic 606 relates to the Company's accounting for software license agreements which have multiple deliverables. Under Topic 605 the Company could not establish vendor specific objective evidence of fair value ("VSOE") for its undelivered elements and therefore was not able to separate its delivered software licenses from its future undelivered software license releases. Topic 606 no longer requires separability of promised goods, such as software licenses,

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.

on the basis of VSOE. Rather, Topic 606 requires the Company to identify the performance obligations in the contract—that is, those promised goods and services (or bundles of promised goods or services) that are distinct—and allocate the transaction price of the contract to those performance obligations on the basis of estimated standalone selling prices ("SSPs"). For these arrangements, the Company will recognize revenue for each deliverable at a point in time when control is transferred to the customer since each deliverable has standalone value.

The primary impact of adopting the new standard results in an acceleration of revenues recognized for the aforementioned multiple deliverable software license arrangements, which are primarily in the Embedded Solutions segment. These multiple deliverable arrangements represented less than 2% of total consolidated revenues for the year ended December 31, 2017.

The timing of revenue recognition for digital signal processing hardware in the Embedded Solutions segment, radio frequency solutions in the Network Solutions segment and noise generators and components and power meters and analyzers and related services in the Test and Measurement segment remains substantially unchanged.

The following line items in our Consolidated Statement of Operations and Comprehensive Income/(Loss) for the twelve months ended December 31, 2018 and Consolidated Balance Sheet as of December 31, 2018 have been provided to reflect both the adoption of Topic 606 as well as a comparative presentation in accordance with Topic 605 previously in effect (in thousands):

Twelve Months Ended December 31, 2018

CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS AND COMPREHENSIVE INCOME	Accordance	Ä	alances Without doption of SC Topic 606	Ac	pact of loption gher/(Lower)
Net Revenues Operating income	\$52,788 779	\$	52,590 581	\$	198 198
Net income/(loss)	35		(163)		198

As of December 31, 2018

CONDENSED CONSOLIDATED BALANCE SHEET	As Reporte (in Accorda with ASC Topic 606)	B an <b>W</b> A	alances Fithout doption of SC Topic 606	A	npact of doption igher/(Lower)
CURRENT LIABILITIES Deferred revenue	\$103	\$	608	\$	(505)
SHAREHOLDERS' EQUITY	Ψ105	Ψ	000	Ψ	(303)
Retained earnings	7,556		7,051		505

### Recent Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which creates new accounting and reporting guidelines for leasing arrangements. The new guidance requires organizations that lease assets to recognize assets and liabilities on the balance sheet related to the rights and obligations created by those leases, regardless of whether they are classified as finance or operating leases. Consistent with current guidance, the recognition, measurement, and presentation of expenses and cash flows arising from a lease primarily will depend on its classification as a finance or operating lease. The guidance also requires new disclosures to help financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. We have adopted the requirements of the new lease standard effective January 1, 2019. We have elected the optional transition method to apply the standard as of the effective date and therefore, we will not apply the standard to the comparative periods presented in our financial statements. The impact of adoption will be the recognition of a right-to-use asset and

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.

corresponding lease liability on the Company's Consolidated Balance Sheet in the amount of approximately \$1.8 million. Adoption of the new lease standard will not have a significant impact on the Company's Consolidated Statement of Operations and Comprehensive Income/(Loss).

On June 20, 2018, the FASB issued ASU 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting.* ASU 2018-07 is intended to reduce cost and complexity and to improve financial reporting for share-based payments issued to nonemployees. This ASU expands the scope of ASC Topic 718, *Compensation - Stock Compensation*, which currently only includes share-based payments issued to employees, to also include share-based payments issued to nonemployees for goods and services. Consequently, the accounting for share-based payments to nonemployees and employees will be substantially aligned. ASU 2018-07 supersedes ASC *Subtopic 505-50, Equity - Equity-Based Payments to Non-Employees.* The amendments in this ASU are effective for public companies for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. The Company does not expect the adoption of this standard to have a material impact on our financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326)*. ASU 2016-13 changes the impairment model for most financial assets and will require the use of an "expected loss" model for instruments measured as amortized cost. This pronouncement is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2019. The Company plans to adopt the standard effective January 1, 2020. We are currently in the process of evaluating the effects of this pronouncement on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement, Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement (Topic 820). ASU 2018-13 eliminates, modifies and adds disclosure requirements for fair value measurements. This pronouncement is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2019, with early adoption permitted. We are currently in the process of evaluating the effects of this pronouncement on our consolidated financial statements.

#### **NOTE 2 – REVENUE**

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for promised goods or services. The Company's performance obligations are satisfied either over time or at a point in time. Revenue from performance obligations that transferred at a point in time accounted for approximately 95% of the Company's total revenue for the twelve months ended December 31, 2018.

#### **Nature of Products and Services**

Hardware

The Company generally has one performance obligation in its arrangements involving the sales of radio frequency solutions in the Network Solutions segment, digital signal processing hardware in the Embedded Solutions segment and noise generators and components and power meter and analyzers in the Test and Measurement segment. When the terms of a contract include the transfer of multiple products, each distinct product is identified as a separate performance obligation. Generally, satisfaction occurs when control of the promised goods is transferred to the customer in exchange for consideration in an amount for which we expect to be entitled. Generally, control is transferred when legal title of the asset moves from the Company to the customer. We sell our products to a customer based on a purchase order, and the shipping terms per each individual order are primarily used to satisfy the single performance obligation. However, in order to determine control has transferred to the customer, the Company also considers:

- · when the Company has a present right to payment for the asset
- · when the Company has transferred physical possession of the asset to the customer
- · when the customer has the significant risks and rewards of ownership of the asset
- · when the customer has accepted the asset

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.
Software
Arrangements involving licenses of software in the Embedded Solutions segment may involve multiple performance obligations, most notably subsequent releases of the software. The Company has concluded that each software release in a multiple deliverable arrangement in the Embedded Solutions segment is a distinct performance obligation and, accordingly, transaction price is allocated to each release when the customer obtains control of the software.
Performance obligations that are not distinct at contract inception are combined. Specifically, with the Company's sales of software, contracts that include customization may result in the combination of the customization services with the license as one distinct performance obligation and recognized over time. The duration of these performance obligations are typically one year or less.
Services
Arrangements involving calibration and repair services in the Company's Test and Measurement segment are generally considered a single performance obligation and are recognized as the services are rendered.
Shipping and Handling
Shipping and handling activities performed after the customer obtains control are accounted for as fulfillment activities and recognized as cost of revenues.
Significant Judgments
For the Company's more complex software and services arrangements significant judgment is required in determining whether licenses and services are distinct performance obligations that should be accounted for separately, or, are not distinct, and thus accounted for together. Further, in cases where we determine that performance obligations should be

accounted for separately, judgment is required to determine the standalone selling price for each distinct performance

obligation.

Certain of the Company shipments include a limited return right. In accordance with Topic 606 the Company recognizes revenue net of expected returns.

#### **Contract Balances**

The timing of revenue recognition may differ from the timing of invoicing to customers and these timing differences result in contract assets or contract liabilities (deferred revenue) on the Company's Consolidated Balance Sheet. The Company records a contract asset when revenue is recognized prior to invoicing, or deferred revenue when revenue is recognized subsequent to invoicing. Contract assets are recorded in prepaid expenses and other current assets and are \$0.3 million and \$0.1 million as of December 31, 2018 and 2017 (as adjusted), respectively. Deferred revenue is \$0.1 million and \$0.4 million as of December 31, 2018 and 2017 (as adjusted), respectively.

Wireless Telecom Group, Inc.

## **Disaggregated Revenue**

We disaggregate our revenue from contracts with customers by product family and geographic location for each of our segments as we believe it best depicts how the nature, timing and uncertainty of our revenue and cash flows are affected by economic factors. See details in the tables below (in thousands).

		Ended December 31,	2018
	Network Test an Solutions Measu		Total
Total Net Revenues by Revenue Type	Solutions Wicasu	Tement Solutions	
Passive and Active RF Solutions	\$22,275 \$ -	\$ -	\$22,275
Noise Generators and Components	- 6,13	·	6,130
Power Meters and Analyzers	- 6,76		6,769
Signal Processing Hardware		12,746	12,746
Software Licenses		704	704
Services	- 1,31		4,164
Total Net Revenue	\$22,275 \$ 14,2	·	\$52,788
Total Type Tee Total	Ψ22,273 Ψ 11,2	Ψ 10,501	ΨυΣ,,,ου
Total Net Revenues by Geographic Areas			
Americas	\$18,871 \$ 10,2	23 \$ 3,755	\$32,849
EMEA	2,591 1,65	-	16,269
APAC	813 2,33		3,670
Total Net Revenue	\$22,275 \$ 14,2		\$52,788
	+, +,-	+	, · · · , · · · ·
	Twelve Months	Ended December 31,	2017
	Twelve Months Network Test a	· · · · · · · · · · · · · · · · · · ·	
		nd Embedded	2017 Total
Total Net Revenues by Revenue Type	Network Test a	nd Embedded	
Total Net Revenues by Revenue Type Passive and Active RF Solutions	Network Test a	nd Embedded	
• • • • • • • • • • • • • • • • • • • •	Network Test at Solutions Measu	nd Embedded Solutions \$ -	Total
Passive and Active RF Solutions	Network Test at Solutions Measur \$23,052 \$ -	nd Embedded Solutions  \$ - 8 -	<b>Total</b> \$23,052
Passive and Active RF Solutions Noise Generators and Components	Network Test at Solutions Measu \$23,052 \$ - - 4,92	nd Embedded Solutions  \$ - 8 -	<b>Total</b> \$23,052 4,928
Passive and Active RF Solutions Noise Generators and Components Power Meters and Analyzers	Network Test at Solutions Measu \$23,052 \$ - - 4,92	s - 8 - 7 -	<b>Total</b> \$23,052 4,928 7,367
Passive and Active RF Solutions Noise Generators and Components Power Meters and Analyzers Signal Processing Hardware	Network Test at Solutions Measu \$23,052 \$ - - 4,92	## Embedded Solutions    ## 5	<b>Total</b> \$23,052 4,928 7,367 5,828
Passive and Active RF Solutions Noise Generators and Components Power Meters and Analyzers Signal Processing Hardware Software Licenses	Network Test and Solutions Measure \$23,052 \$ - 4,92	## Embedded Solutions  ## 5 - ## 8 - ## - ## 5,828	<b>Total</b> \$23,052 4,928 7,367 5,828 564
Passive and Active RF Solutions Noise Generators and Components Power Meters and Analyzers Signal Processing Hardware Software Licenses Services Total Net Revenue	Network Test and Solutions Measure \$23,052 \$ - 4,92 - 7,36 1,08	## Embedded Solutions  ## 5	<b>Total</b> \$23,052 4,928 7,367 5,828 564 4,339
Passive and Active RF Solutions Noise Generators and Components Power Meters and Analyzers Signal Processing Hardware Software Licenses Services Total Net Revenue  Total Net Revenues by Geographic Areas	Network Test and Solutions Measure  \$23,052 \$ - 4,92 - 7,36 1,08 \$23,052 \$ 13,3	## Solutions    \$ -	\$23,052 4,928 7,367 5,828 564 4,339 \$46,078
Passive and Active RF Solutions Noise Generators and Components Power Meters and Analyzers Signal Processing Hardware Software Licenses Services Total Net Revenue  Total Net Revenues by Geographic Areas Americas	Network Test and Solutions Measure  \$23,052 \$ - 4,92   - 7,36   1,08   \$23,052 \$ 13,3   \$19,789 \$ 9,86	## Solutions    \$ -	\$23,052 4,928 7,367 5,828 564 4,339 \$46,078
Passive and Active RF Solutions Noise Generators and Components Power Meters and Analyzers Signal Processing Hardware Software Licenses Services Total Net Revenue  Total Net Revenues by Geographic Areas	Network Test and Solutions Measure  \$23,052 \$ - 4,92 - 7,36 1,08 \$23,052 \$ 13,3	## Solutions    \$ -	\$23,052 4,928 7,367 5,828 564 4,339 \$46,078

Total Net Revenue \$23,052 \$ 13,380 \$ 9,646 \$46,078

Wireless Telecom Group, Inc.

#### **NOTE 3 - ACQUISITION**

On February 17, 2017, Wireless Telecommunications, Ltd. (the "Acquisition Subsidiary"), a company incorporated in England and Wales which is a wholly owned subsidiary of Wireless Telecom Group, Inc., completed the acquisition of all of the issued shares in CommAgility a company incorporated in England and Wales (the "Acquisition") from CommAgility's founders. The Acquisition was completed pursuant to the terms of a Share Purchase Agreement, dated February 17, 2017, and entered into by and among the Company, the Acquisition Subsidiary and the founders. The Company paid \$11.3 million in cash on acquisition date and issued 3,487,528 shares of newly issued common stock ("Consideration Shares") with an acquisition date fair value of \$6.0 million. In addition to the acquisition date cash purchase price the sellers were paid an additional \$2.5 million in the form of deferred purchase price in installments beginning in March 2017 through January 2019 and were paid an additional purchase price adjustment based on working capital and cash levels of \$1.4 million. Lastly, the sellers could have earned an additional purchase price ("contingent consideration") if certain financial targets were met for the years ended December 31, 2017 and 2018 (See Note 1). The contingent consideration liability as of December 31, 2018 is \$1.4 million and is expected to be paid in the first quarter of 2019.

Pursuant to the claw back provision of the Share Purchase Agreement, 2,092,516 of the Consideration Shares were subject to forfeiture and return to the Company if (a) 2017 EBITDA, as defined, generated by CommAgility was less than £2.4 million; or (b) 2018 EBITDA, as defined, generated by CommAgility was less than £2.4 million (in each case as determined by an audit of CommAgility conducted by the accountants of the Acquisition Subsidiary in accordance with the terms of the Share Purchase Agreement). In March 2018 all consideration shares were forfeited as the 2017 EBITDA threshold was not achieved.

The acquisition has been accounted for under the acquisition method of accounting in accordance with ASC 805, "Business Combinations". Accounting for acquisitions requires us to recognize separately from goodwill the assets acquired and the liabilities assumed at their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. While we use our best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, our estimates are inherently uncertain and subject to refinement. During the twelve months ended December 31, 2017 the Company recorded measurement period adjustments related to the completion of the valuation of intangible assets, contingent consideration, the contingent asset associated with the equity claw back and deferred taxes. The Company incurred \$1.3 million of acquisition-related costs during the twelve months ended December 31, 2017, which is included as part of general and administrative expense in the accompanying Consolidated Statements of Operations and Comprehensive Income/(Loss). In 2017, from the acquisition date of February 17, 2017, CommAgility contributed \$9.6 million of net revenue to the Company. Various valuation techniques were used to estimate the fair value of assets acquired and the liabilities assumed which use significant unobservable inputs, or Level 3 inputs as defined by the fair value hierarchy. Using these valuation approaches requires the Company to make significant estimates and assumptions. The following table summarizes the allocation of the purchase consideration to the fair

value of assets acquired and liabilities assumed at the date of acquisition including measurement period adjustments (in thousands):

## Wireless Telecom Group, Inc.

Cash at close Equity issued at close Completion Cash Adjustment Deferred Purchase Price Contingent Consideration Total Purchase Price	Amounts Recognized as of Acquisition Date \$ 11,318 6,000 1,382 2,515 754 21,969
Cash Accounts Receivable Inventory Intangible Assets Contingent Asset Other Assets Fixed Assets Accounts Payable Accrued Expenses Deferred Revenue Deferred Tax Liability Other Long Term Liabilities Net Assets Acquired	4,567 2,234 1,085 5,117 3,599 168 304 (1,174) (417) (639) (835) (339) 13,670
Goodwill	\$ 8,299

Goodwill is calculated as the excess of consideration paid over the net assets acquired and represents synergies, organic growth and other benefits that are expected to arise from integrating CommAgility into our operations. None of the goodwill recorded in this transaction is expected to be tax deductible.

#### Wireless Telecom Group, Inc.

The following table summarizes the activity related to Contingent Consideration and Deferred Purchase Price for the twelve months ended December 31, 2017 and December 31, 2018 (in thousands):

	ontingent onsideration	Deferred Purchase Price
Balance at December 31, 2016	\$ -	\$ -
Fair Value At Acquisition Date	2,700	2,515
Accretion of Interest	73	-
Payment	-	(1,408)
Measurement Period Adjustment	(1,946)	-
Fair Value Adjustment	(253)	-
Foreign Currency Translation	56	123
Balance as of December 31, 2017	\$ 630	\$ 1,230
Accretion of Interest	281	-
Payment	-	(805)
Fair Value Adjustment	578	-
Foreign Currency Translation	(47)	-
Balance as of December 31, 2018	\$ 1,442	\$ 425

As of December 31, 2018, \$0.4 million of deferred purchase price and \$1.4 million of contingent consideration is included in accrued expenses and other current liabilities on the consolidated balance sheet. As of December 31, 2017, \$0.8 million of deferred purchase price is included in accrued expenses and other current liabilities on the consolidated balance sheet and \$0.6 million and \$0.5 million of contingent consideration and deferred purchase price, respectively, is included in other long term liabilities on the consolidated balance sheet.

#### Pro Forma Information (Unaudited)

The following unaudited pro forma information presents the Company's operations as if the CommAgility acquisition and related financing activities had occurred on January 1, 2016. The pro forma information includes the following adjustments (i) amortization of acquired definite-lived intangible assets; (ii) interest expense incurred in connection with the Credit Facility (described in further detail in Note 4) used to finance the acquisition of CommAgility; and (iii) inclusion of acquisition-related expenses in the earliest period presented. The 2017 pro forma combined statement of operations is not necessarily indicative of the results of operations as they would have been had the transaction been effected on the assumed date and is not intended to be a projection of future results.

Pro-forma results for the year ended December 31, 2017 are presented below (in thousands, except per share amounts):

(Unaudited)	<u>2017</u>
Net Revenues	\$48,130
Net loss	\$(1,843)
Basic net loss per share	\$(0.09)
Diluted net loss per share	\$(0.09)

Wireless Telecom Group, Inc.

**NOTE 4 - DEBT** 

Debt consists of the following (in thousands):

	December
	31, 2018
Revolver at LIBOR Plus Margin	\$ 1,522
Term Loan at LIBOR Plus Margin	494
Total Debt	2,016
Debt Maturing within one year	(2,016)
Non-current portion of long term debt	\$ -

In connection with the acquisition of CommAgility, the Company entered into a Credit Facility with Bank of America, N.A. (the "Lender") on February 16, 2017 (the "Credit Facility"), which provided for a term loan in the aggregate principal amount of \$0.8 million (the "Term Loan") and an asset based revolving loan (the "Revolver"), which is subject to a Borrowing Base Calculation (as defined in the Credit Facility) of up to a maximum availability of \$9.0 million ("Revolver Commitment Amount"). The borrowing base is calculated as 85% of eligible accounts receivable and inventory, as defined, subject to certain caps and limits. The borrowing base is calculated on a monthly basis. The proceeds of the Term Loan and Revolver were used to finance the acquisition of CommAgility.

In connection with the issuance of the Credit Facility, the Company paid lender and legal fees of \$0.2 million which were primarily related to the Revolver and are capitalized and presented as other current and non-current assets in the Consolidated Balance Sheets. These costs are recognized as additional interest expense over the term of the related debt instrument using the straight line method which approximates the effective interest method.

The Company must repay the Term Loan in installments of \$38,000 per quarter due on the first day of each fiscal quarter beginning April 1, 2017 and continuing until the Term Loan maturity date, on which the remaining balance is due in a final installment. The future principal payments under the Term Loan are \$0.5 million in 2019. The Term Loan and Revolver are both scheduled to mature on November 16, 2019. On February 27, 2019 the Company entered into Amendment No. 3 to the Credit Facility which extends the termination date of the Revolver from November 16, 2019 to March 31, 2020.

The Term Loan and Revolver bear interest at the LIBOR rate plus a margin. The margin on the outstanding balance of the Company's Term Loan and Revolver were fixed at 3.50% and 3.00% per annum, respectively, through September

30, 2017. Thereafter, the margins were subject to increase or decrease by Lender on the first day of each of the Borrowers' fiscal quarters based upon the Fixed Charge Coverage Ratio (as defined in the Credit Facility) as of the most recently ended fiscal quarter falling into three levels. If the Company's Fixed Charge Coverage Ratio is greater than or equal to 1.25 to 1.00, a margin of 3.25% and 2.75%, respectively, is added to LIBOR rate with a step up to 3.50% and 3.00%, respectively, if the ratio is greater than or equal 1.00 to 1.00 but less than 1.25 to 1.00 and another step up to 3.75% and 3.25%, respectively, if the ratio is less than 1.00 to 1.00. The Company is also required to pay a commitment fee on the unused commitments under the Revolver at a rate equal to 0.50% per annum and early termination fee of (a) 2% of the Revolver Commitment Amount and Term Loan if termination occurs before the first anniversary of the Credit Facility or (b) 1% of the Revolver Commitment Amount and Term Loan if termination occurs after the first anniversary of the Credit Facility but before the second anniversary of the Credit Facility. The Company's interest rate plus margin as of December 31, 2018 was 5.38% and 5.88% for the Revolver and Term Loan, respectively. The Company's interest rate plus margin as of December 31, 2017 was 4.38% and 4.88% for the Revolver and Term Loan, respectively.

The Credit Facility is secured by liens on substantially all of the Company's and its domestic subsidiaries' assets including a pledge of 66 1/3% of the equity interests in the Company's Foreign Subsidiaries (as defined in the Credit Facility). The Credit Facility contains customary affirmative and negative covenants for a transaction of this type, including, among others, the provision of annual, quarterly and monthly financial statements and compliance certificates, maintenance of property, insurance, compliance with laws and environmental matters, restrictions on incurrence of indebtedness, granting of liens, making investments and acquisitions, paying dividends, entering into affiliate transactions and asset sales. Events of default under the Credit Facility include but are not limited to: failure to pay obligations when due, breach or failure of any covenant, insolvency

Wireless Telecom Group, Inc.

or bankruptcy, materially misleading representations or warranties, occurrence of a Change in Control (as defined) or occurrence of conditions that have a Material Adverse Effect (as defined).

As of December 31, 2018, and the date hereof, the Company is in compliance with the covenants of the Credit Facility.

### NOTE 5 - GOODWILL AND INTANGIBLE ASSETS

Goodwill consists of the following (in thousands):

	Network Solutions	<b>Embedded Solutions</b>	Total
Balance as of January 1, 2017	\$ 1,351	\$ -	\$1,351
CommAgility Acquisition	-	10,094	10,094
Measurement Period Adjustments	-	(1,795)	(1,795)
Foreign Currency Translation	-	610	610
Balance as of December 31, 2017	1,351	8,909	10,260
Foreign Currency Translation	-	(482)	(482)
Balance as of December 31, 2018	\$ 1,351	\$ 8,427	\$9,778

Intangible assets consist of the following (in thousands):

	Decemb	oer 31, 2018	3		
	Gross C	a <b>Aryċng</b> nulat	ted	Foreign Exc	change Net Carrying
	Amount	Amortizati	on	Translation	Amount
Customer Relationships	\$2,766	\$ (1,082	)	\$ 71	\$ 1,755
Patents	615	(240	)	15	390
Non-Compete Agreements	1,107	(727	)	41	421
Tradename	629	-		11	640
Total	\$5,117	\$ (2,049	)	\$ 138	\$ 3,206

#### **December 31, 2017**

Gross Accumulated Foreign Exchange Net Carrying Carrying Amortization Translation Amount

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	Amount	t			
Customer Relationships	\$2,766	\$ (494	) \$	178	\$ 2,450
Patents	615	(109	)	39	545
Non-Compete Agreements	1,107	(334	)	69	842
Tradename	629	-		45	674
Total	\$5,117	\$ (937	) \$	331	\$ 4,511

Amortization of acquired intangible assets was \$1.1 million and \$0.9 million for the twelve months ended December 31, 2018 and 2017, respectively. Amortization of acquired intangible assets is included as part of general and administrative expenses in the accompanying consolidated statements of operations and comprehensive loss.

### Wireless Telecom Group, Inc.

The estimated future amortization expense related to intangible assets is as follows as of December 31, 2018 (in thousands):

2019 \$1,061 2020 734 2021 687 2022 84 Total \$2,566

## NOTE 6 - PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, consist of the following as of December 31 (in thousands):

	<u>2018</u>	<u>2017</u>
Machinery & Equipment	\$7,928	\$7,268
Furniture & Fixtures	440	383
Transportation Equipment	2	2
Leasehold Improvements	1,217	1,121
Gross property, plant and equipment	9,587	8,774
Less: accumulated depreciation	7,009	6,044
Net property, plant and equipment	\$2,578	\$2,730

Depreciation expense of \$1.0 million and \$0.7 million was recorded for the years ended December 31, 2018 and 2017, respectively.

#### **NOTE 7 - OTHER ASSETS**

Other assets consist of the following as of December 31 (in thousands):

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Long term debt issuance	\$-	\$69
Deferred S3 Costs	255	-
Deferred cost	96	124
Product demo assets	351	431
Security deposit	50	50
Other	35	49
Total	\$787	\$723

Product demo assets are net of accumulated amortization expense of \$1.2 million and \$1.1 million as of December 31, 2018 and 2017, respectively. Amortization expense related to demo assets was \$0.2 million and \$0.1 million in 2018 and 2017, respectively.

Wireless Telecom Group, Inc.

#### NOTE 8 - ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

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Accrued expenses and other current liabilities consist of the following as of December 31 (in thousands):

	<u>2018</u>	<u>2017</u>
Contingent Consideration Liability	\$1,442	\$-
Deferred purchase price	852	780
Bonus	800	360
Payroll and related benefits	755	669
Goods received not invoiced	435	39
Commissions	444	360
Sales and use and VAT tax	374	98
Professional fees	233	150
Return Reserve	199	-
Warranty Reserve	90	-
Other	459	194
Severance	-	244
Total	\$6,083	\$2,894

#### NOTE 9 - ACCOUNTING FOR STOCK BASED COMPENSATION

The Company follows the provisions of ASC 718. The Company's results for the years ended December 31, 2018 and December 31, 2017 include stock based compensation expense totaling \$0.7 million and \$0.5 million, respectively. Such amounts have been included in the consolidated statement of operations and comprehensive loss within operating expenses.

#### **Incentive Compensation Plan**

In 2012, the Company's Board of Directors and shareholders approved the 2012 Incentive Compensation Plan (the "Initial 2012 Plan"), which provides for the grant of equity, including restricted stock awards, restricted stock units, non-qualified stock options and incentive stock options in compliance with the Internal Revenue Code of 1986, as amended, to employees, officers, directors, consultants and advisors of the Company who are expected to contribute to the Company's future growth and success. When originally approved, the Initial 2012 Plan provided for the grant of awards relating to 2 million shares of common stock, plus those shares subject to awards previously issued under the

Company's 2000 Stock Option Plan that expire, are canceled or are terminated after adoption of the Initial 2012 Plan without having been exercised in full and would have been available for subsequent grants under the 2000 Stock Option Plan. In June 2014, the Company's shareholders approved the Amended and Restated 2012 Incentive Compensation Plan (the "2012 Plan") allowing for an additional 1.6 million shares of the Company's common stock to be available for future grants under the 2012 Plan. The 2012 Plan provides that if awards are forfeited, expire or otherwise terminate without issuance of the shares underlying the awards, or if the award does not result in issuance of all or part of the shares underlying the award, the unissued shares are again available for awards under the 2012 Plan. As a result of certain award forfeitures and cancellations, as of December 31, 2018, there are approximately 1.8 million shares available for issuance under the 2012 Plan.

All service-based (time vesting) options granted have ten-year terms from the date of grant and typically vest annually and become fully exercisable after a maximum of five years. However, vesting conditions are determined on a grant by grant basis. Performance-based options granted have ten-year terms and vest and become fully exercisable when determinable performance targets are achieved. Performance targets are approved by the Company's compensation committee of the Board of Directors. Under the 2012 Plan, options may be granted to purchase shares of the Company's common stock exercisable only at prices equal to or above the fair market value on the date of the grant.

#### Wireless Telecom Group, Inc.

The following summarizes the components of share-based compensation expense for the years ending December 31 (in thousands):

	<u>2018</u>	<u>2017</u>
Performance Based Restricted Stock Awards	\$-	\$(62)
Service Based Restricted Stock Awards	172	230
Service Based Restricted Stock Units	175	-
Performance Based Stock Options	50	(235)
Service Based Stock Options	305	603
	\$702	\$536

As of December 31, 2018, \$0.3 million of unrecognized compensation costs related to unvested stock options is expected to be recognized over a remaining weighted average period of 2.8 years, \$0.3 million of unrecognized compensation costs related to unvested restricted shares is expected to be recognized over a remaining weighted average period of 3.6 years and \$0.1 million of unrecognized compensation costs related to unvested restricted stock units is expected to be recognized over 6 months.

The company had no stock option or restricted share forfeitures during the twelve months ended December 31, 2018.

#### **Restricted Common Stock Awards**

A summary of the status of the Company's non-vested restricted common stock, as granted under the Company's approved equity compensation plans, as of December 31, 2018 and 2017, and changes during the twelve months ended December 31, 2018 and 2017, are presented below:

	2018			2017									
Non-vested Restricted Shares	Number of Shares	Ave Grar	nt Fair	Number of Shares	Ave Gra	e Fair							
Non-vested as of January 1	159,207	\$	1.64	244,291	\$	1.52							
Granted	225,000	\$	1.68	150,000	\$	1.65							

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Vested and Issued	(152,084) \$	1.64	(122,084)	\$ 1.73
Forfeited	_	_	(113,000)	\$ 1.77
Non-vested as of December 31	232,123	\$1.68	159,207	\$1.64
49				

#### Wireless Telecom Group, Inc.

The following table summarizes the restricted common stock awards granted to certain directors and officers of the company during the years ended December 31, 2018 and 2017 under the 2012 Plan:

	Number of Shares	Va pe Gi	arket alue	Vesting
2018 8/1/2018 – Service Grant – Employees 12/20/18 – Service Grant - Employees 2018 Total	•	\$ \$		Annual Vesting through August 2021 Annual Vesting through December 2022
2017 6/5/17 - Service Grant - BOD	150,000		\$1.65	Next Annual Meeting - June 2018

#### **Restricted Stock Units:**

On June 5, 2018 the Company granted 25,000 Restricted Stock Units ("RSU") to each of our five non-employee board members under the 2012 Plan. Each RSU represents the Company's obligation to issue one share of the Company's common stock subject to the RSU award agreement and 2012 Plan. The grant date fair value was \$2.25 per share and the RSU's vest on the day before the first anniversary of the grant date or, if earlier, the effective date of a separation of service due to death or disability, provided the board member has rendered continuous service to the Company as a member of the board of directors from grant date to vesting date. Once vested, the RSU will be settled by delivery of shares to the board member no later than 30 days following: 1) the third anniversary of the grant date, 2) separation from service following, or coincident with, a vesting date, or 3) a change in control.

A summary of restricted stock unit activity for the twelve months ended December 31, 2018 follows:

		Weighted
	Number	Average
Restricted Stock Units	of	Grant
Restricted Stock Units	Shares	Date
	Silates	Fair
		Value

As of January 1 - -

Granted 125,000 \$2.25 Vested and Issued - - -Forfeited - - -Non-vested as of December 31 125,000 \$2.25

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#### **Performance-Based Stock Option Awards**

A summary of performance-based stock option activity, and related information for the years ended December 31, 2018 and December 31, 2017 follows:

	2018		2017	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Outstanding as of January 1	605,000	\$1.21	2,165,000	\$1.32
Granted	-	-	-	-
Exercised	(300,000)	\$0.96	(550,000)	\$0.75
Forfeited	-	-	(1,010,000)	\$1.69
Expired	-	-	-	-
Outstanding as of December 31	305,000	\$1.45	605,000	\$1.21
Exercisable at December 31	20,000	\$0.78	320,000	\$0.95

The aggregate intrinsic value of performance-based stock options outstanding (regardless of whether or not such options are exercisable) as of December 31, 2018 was \$0.1 million and the weighted average remaining contractual life was 6.6 years. The aggregate intrinsic value of performance-based stock options exercisable as of December 31, 2018 was approximately \$20,000 and the weighted average remaining contractual life was 2.0 years. The intrinsic value of options exercised during the twelve months ended December 31, 2018 was \$0.4 million.

The range of exercise prices of outstanding performance-based options at December 31, 2018 is \$0.78 to \$1.83 with a weighted average exercise price of \$1.45 per share.

Under the terms of the performance-based stock option agreements, the awards will fully vest and become exercisable on the date on which the Company's Board of Directors shall have determined that specific financial performance milestones have been met, provided the employee remains in the employ of the Company at such time; provided, however, upon a Change in Control (as defined in the stock option agreements and the 2012 Plan), the stock options shall automatically vest as permitted by the 2012 Plan. As of December 31, 2018, the Company has determined that the performance conditions on 285,000 options granted in 2013 and later are probable of being achieved by the year ending 2021. The Company's performance-based stock options granted prior to 2013 (consisting of 20,000 options) are fully amortized.

Wireless Telecom Group, Inc.

## **Service-Based Stock Option Awards**

A summary of service-based stock option activity and related information for the years ended December 31, 2018 and 2017 follows:

	2018		2017	
		Weighted		Weighted
	Options	Average	Options	Average
	Options	Exercise	Options	Exercise
		Price		Price
Outstanding as of January 1	1,815,000	\$1.53	1,198,000	\$1.51
Granted	160,000	\$1.52	845,000	\$1.68
Exercised	-	-	(7,500)	\$1.61
Forfeited	-	-	(137,500)	\$1.48
Expired	-	-	(83,000)	\$3.00
Outstanding as of December 31	1,975,000	\$1.52	1,815,000	\$1.53
Exercisable at December 31	1,225,000	\$1.49	566,667	\$1.38

The aggregate intrinsic value of service-based stock options (regardless of whether or not such options are exercisable) as of December 31, 2018 was \$0.5 million and the weighted average remaining contractual life was 8.0 years. The aggregate intrinsic value of service-based stock options exercisable as of December 31, 2018 was \$0.3 million and the weighted average remaining contractual life was 7.8 years.

The range of exercise prices of outstanding service-based options at December 31, 2018 is \$1.30 to \$1.92 with a weighted average exercise price of \$1.52 per share.

The following table presents the assumptions used to estimate the fair value of stock option awards granted during the twelve months ended December 31, 2018:

	Ontion		Risk		Fair	E
Number of	Option	Exercise	Free	Expected	Value at	Expected
Options	(in years)	Price	Interest Rate	Volatility	Grant Date	Yield

12/20/18 – Service Grant 160,000 4 \$1.52 2.65 % 48.53 % \$0.62 \$0.00 52

T	NT.		`	7		9	ır				٧.	1		T	$\alpha$		١T	r	T	т		•	1		)		T		Τ.	١.		T d	7	•	Α.	T	•	7r	T	•		Τ.	17	٠,	т	וה	Αī	7	$\alpha$
П	V	•	,		н,	. 7	١.	•	,	•	٠.		יוע	N.	•	•	,,	٠,		н.	J/	4		۲,	,	r		17	1/	•	17	14		I /	•	Ι.		•		А	۱.	r	٠Į١	٧I		1,1	N	1.7	3

Wireless Telecom Group, Inc.

#### **NOTE 10 - SEGMENT AND RELATED INFORMATION**

#### Financial information by segment

The operating businesses of the Company are segregated into three reportable segments: (i) Network Solutions, (ii) Test and Measurement and (iii) Embedded Solutions.

#### **Network Solutions**

The Network Solutions segment is comprised primarily of the operations of the Company's subsidiary, Microlab. Network Solutions designs and manufactures a wide selection of RF passive components and integrated subsystems for signal conditioning and distribution in the wireless infrastructure markets, particularly for small cell deployments, distributed antenna systems ("DAS"), the in-building wireless solutions industry and radio base-station market. Network Solutions also offers active solution sets to assist in network timing for tunnels and in-building wireless signaling. Network Solutions customers include telecommunications service providers, systems integrators, neutral host operators and distributors.

#### **Test and Measurement**

The Test and Measurement segment is comprised primarily of the Company's operations of the Noisecom product line and the operations of its subsidiary, Boonton. Noisecom designs and produces noise generation equipment and instruments, calibrated noise sources, noise modules and diodes. Noise components and instruments are used as a method to provide wide band signals for sophisticated telecommunication and defense applications, and as a stable reference standard for instruments and systems, including radar and satellite communications. 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. Customers of the Test and Measurement segment include large defense contractors and the U.S. and foreign governments.

#### **Embedded Solutions**

The Embedded Solutions segment is comprised of the operations of CommAgility Limited which was acquired on February 17, 2017. Embedded Solutions supplies signal processing technology for network validation systems supporting LTE and emerging 5G networks. Additionally, this segment licenses, implements and configures LTE PHY layer and stack software for private LTE networks supporting satellite communications, the military and aerospace industries. Customers include wireless communication test equipment companies, defense subcontractors and global technology and services companies.

The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies. The Company allocates resources and evaluates the performance of segments based on income or loss from operations, excluding interest, corporate expenses and other income (expenses).

## Wireless Telecom Group, Inc.

Financial information by reportable segment as of and for the years ended December 31, 2018 and 2017 is presented below (in thousands):

	For the twelve months ended December 31, 2018 2017	
Net sales by segment: Network Solutions	¢22.275	¢ 22 052
Test and Measurement	\$22,275 14,212	\$ 23,052 13,380
Embedded Solutions	16,301	•
Total consolidated net sales of reportable segments	\$52,788	
Total consolidated het sales of reportable segments	Ψ32,700	Ψ 40,070
Segment income:		
Network Solutions	\$3,476	\$ 2,935
Test and Measurement	1,728	431
Embedded Solutions	1,093	374
Income from reportable segments	6,297	3,740
Other unallocated amounts:		
Corporate expenses	(5,519)	(6,685)
Other expenses - net	(695)	(301)
Consolidated income/(loss) before Income tax provision/(benefit)	\$83	\$ (3,246)
Demociation and amountmention by accurants		
Depreciation and amortization by segment:	¢ 520	¢ 207
Network Solutions	\$539	\$ 297
Test and Measurement	527	393
Embedded Solutions	1,239	1,057
Total depreciation and amortization for reportable segments	\$2,305	\$ 1,747
Conital avanaditures by sagments		
Capital expenditures by segment: Network Solutions	\$359	\$ 426
Test and Measurement	193	300
Embedded Solutions	301	201
Total consolidated capital expenditures by reportable segment	\$853	\$ 927
Total consolidated capital expeliditules by reportable segment	\$633	\$ 921
	<b>December</b> December	
	31,	<u>31.</u>
	<u>2018</u>	<u>2017</u>
Total assets by segment:		
Network Solutions	\$10,088	\$ 10,442
Test and Measurement	5,943	6,163
Embedded Solutions	16,804	21,733
	,	*

Total assets for reportable segments	32,835	38,338
Corporate assets, principally cash and cash equivalents and deferred income taxes Total consolidated assets 54	11,332 \$44,167	8,583 \$46,921

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.

#### Regional Revenues

Net consolidated revenues from operations by region were as follows (in thousands):

	Twelve N	<b>Months</b>
	Ended	
	Decembe	er 31
	2018	2017
Americas	\$32,849	\$33,440
Europe, Middle East, Africa(EMEA)	16,269	8,916
Asia Pacific (APAC)	3,670	3,722
Total revenues	\$52,788	\$46,078

Net revenues are attributable to a geographic area based on the destination of the product shipment.

The majority of shipments in the Americas are to customers located within the United States. For the years ended December 31, 2018 and 2017, sales in the United States amounted to \$31.9 million in each year.

For the year ended December 31, 2018 shipments to the EMEA regions for all reportable segments were largely concentrated in the UK, Italy and Ireland. Shipments to the UK, Italy and Ireland in 2018 amounted to \$12.4 million, \$0.5 million and \$0.5 million, respectively. For the year ended December 31, 2017 shipments to the EMEA region for all reportable segments were largely concentrated in the UK, Israel and Germany. Shipments to the UK, Germany and Israel in 2017 amounted \$5.6 million, \$0.9 million and \$0.8 million, respectively.

The largest concentration of shipments in the APAC region is to China. For the years ended December 31, 2018 and 2017, shipments to China amounted to \$2.0 million and \$1.6 million, of all shipments to the APAC region, respectively. There were no other shipments significantly concentrated in one country in the APAC region.

#### NOTE 11 - RETIREMENT PLAN

The Company has a 401(k) profit sharing plan covering all eligible U.S. employees. Company contributions to the plan for the years ended December 31, 2018 and 2017 amounted to \$0.2 million and \$0.3 million, respectively.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.

## **NOTE 12 - INCOME TAXES-**

The components of income tax expense related to net income (loss) from operations are as follows:

	Years Ended		
	December 31,		
	2018	2017	
Current:			
Federal	\$-	\$(4)	
State	46	22	
Foreign	(223)	(166)	
Deferred:			
Federal	389	1,672	
State	(41)	(275)	
Foreign	(123)	(2)	
Total	\$48	\$1,247	

The following is a reconciliation of the maximum statutory federal tax rate to the Company's effective tax relative to operations:

	Years End	
	December 31,	
	2018	2017
	% of	% of
	Pre Tax	Pre Tax
	Earnings	Earnings
Statutory federal income tax rate	21.0 %	(34.0) %
State income tax net of federal tax benefit	137.5	(3.5)
Changes in tax rates	0.0	67.4
Foreign rate difference	(239.7)	(1.5)
Repatriation tax - new law	0.0	4.8
Change in valuation allowance	(138.2)	4.4
Permanent differences	11.8	7.9
Research and development incentive	(342.7)	(6.7)
Global intangible low-taxed income	607.6	0.0
Other	(0.2)	(0.4)
Total	57.1 %	38.4 %

In 2018, the difference between the statutory and effective tax rate is due to global intangible low-taxed income, research and development deductions in the United Kingdom, foreign tax rate differences and a reduction in the state valuation allowance. In 2017 the difference between the statutory and effective tax rate is primarily due to the change in tax rates under TCJA.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### Wireless Telecom Group, Inc.

The components of deferred income taxes are as follows:

	Years Ended	
	December 31,	
	2018	2017
Deferred tax assets:		
Net operating loss carryforwards	\$11,259	\$11,979
Inventory	943	909
Research and development credit	648	648
Stock compensation	138	165
Other	73	108
Goodwill and intangible assets	(925)	(1,147)
Fixed assets	(438)	(439)
Gross deferred tax asset	11,698	12,223
Less valuation allowance	(6,722)	(7,051)
Net deferred tax asset	\$4,976	\$5,172

The Company has a domestic federal and state net operating loss carryforward at December 31, 2018 of approximately \$18.0 million and \$43.7 million, respectively, which begin to expire in 2029. The Company also has foreign net operating loss carryforwards at December 31, 2018 of approximately \$15.0 million for German and UK corporate tax and German trade tax purposes.

Realization of the Company's deferred tax assets is dependent upon the Company generating sufficient taxable income in the appropriate tax jurisdictions in future years to obtain benefit from the reversal of net deductible temporary differences and from utilization of net operating losses. The Company's valuation allowances of \$6.7 million and \$7.1 million at December 31, 2018 and 2017, respectively, are primarily associated with the Company's foreign net operating loss carryforward from an inactive foreign entity, state net operating loss carryforward and a state research and development credit. The amount of deferred tax assets considered realizable is subject to adjustment in future periods if estimates of future taxable income are changed. As of December 31, 2018, management believes that it is more likely than not that the Company will fully realize the benefits of its deferred tax assets associated with its domestic federal net operating loss carryforward.

The Company does not have any significant unrecognized tax positions and does not anticipate a significant increase or decrease in unrecognized tax positions within the next twelve months.

On December 22, 2017, the United States enacted TCJA which instituted fundamental changes to the taxation of multinational corporations, including a reduction of the U.S. corporate income tax rate to 21% beginning in 2018. In response to the complexities of this new legislation, the SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118) to provide companies with transitional relief. Specifically, SAB 118 provided up to one year from the date of enactment for companies to finalize the accounting for the effects of this new legislation. As of December 31, 2018, the Company has completed the accounting for the tax effects of the TCJA and did not have any material adjustments related to changes made to provisional amounts in accordance with SAB 118 guidance.

The Company has elected to record taxes related to the global intangible low-taxed income as a period cost.

The Company has recognized \$1.2 million net tax expense for the year ended 2017 which includes \$2.5 million deferred tax expense from revaluing the Company's deferred tax assets to reflect the new U.S. corporate tax rate. The TCJA also requires a one-time transition tax on the mandatory deemed repatriation of the cumulative earnings of the Company's foreign subsidiary as of December 31, 2017. To determine the amount of this transition tax, the Company determined the amount of earnings generated since inception by the relevant foreign subsidiary, as well as the amount of non-U.S. income taxes paid on such

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Wireless Telecom Group, Inc.

earnings, in addition to potentially other factors. The Company's earnings and profits from its foreign subsidiary under the transition tax calculation is offset by net operating losses thus no transition tax was payable.

#### **NOTE 13 – FAIR VALUE MEASUREMENTS**

Fair value is defined by ASC 820 "Fair Value Measurement" as the price that would be received upon selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820 establishes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

- ·Level 1 Quoted prices in active markets for identical assets and liabilities.
- Level 2 Quoted prices in active markets for similar assets and liabilities, or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair
- ·value of the assets and liabilities. This includes pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

Payment of a portion of the CommAgility purchase price is contingent on the achievement of certain financial targets for the years ending December 31, 2017 and 2018. The Company estimated the fair value of contingent consideration at acquisition date to be \$0.8 million. During the twelve months ended December 31, 2018 the Company reassessed the fair value of the contingent consideration and recorded a loss in the amount of \$0.6 million as a result of the improved financial results at CommAgility as compared to prior estimates. The significant inputs used in the fair value estimate include anticipated gross revenues and Adjusted EBITDA, as defined, and scenarios for the earn-out periods for which probabilities are assigned to each scenario to arrive at a single estimated outcome. The estimated outcome is then discounted based on individual risk analysis of the liability which was 15% at December 31, 2018 and will be paid in March 2019. As of December 31, 2018 the Company's contingent consideration liability is \$1.4 million and is recorded in accrued expenses and other current liabilities on the consolidated balance sheet. The contingent consideration liability is considered a Level 3 fair value measurement.

#### **NOTE 14 - COMMITMENTS AND CONTINGENCIES**

**Warranties** 

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.

#### **Operating Leases**

The Company leases a 45,700 square foot facility in Parsippany, New Jersey which has a term ending March 31, 2023 and is currently being used as the Company's principal headquarters and manufacturing plant. The Company is also responsible for its proportionate share of the cost of utilities, repairs, taxes and insurance.

Monthly lease payments range from approximately \$33,000 in year one to approximately \$41,000 in year eight. The lease can be renewed at the Company's option for one five-year period at fair market value to be determined at term expiration.

Pursuant to the Share Purchase Agreement dated February 17, 2017 the Company assumed leases for office space in Leicestershire, England consisting of 4,900 square feet and Duisburg, Germany consisting of 7,446 square feet. The Leicestershire lease expires in November 2020 and the Duisburg lease is renewable every three months.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### Wireless Telecom Group, Inc.

The future minimum facility lease payments are shown below (in thousands):

2019	\$539
2020	510
2021	474
2022	488
2023	123
Total	\$2,134

Rent expense, inclusive of common area maintenance charges, for the years ended December 31, 2018 and 2017 was approximately \$0.8 million.

The Company leases certain equipment under operating lease arrangements. These operating leases expire in various years through 2022. All leases may be renewed at the end of their respective leasing periods.

The future minimum operating lease payments are shown below (in thousands):

```
2019 $54
2020 54
2021 54
2022 9
Total $171
```

## **Environmental Contingencies**

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.

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 been diligently pursuing the matter in an attempt 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.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### Wireless Telecom Group, Inc.

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.

#### Risks and Uncertainties

Proprietary information and know-how are important to the Company's commercial success. There can be no assurance that others will not either develop independently the same or similar information or obtain and use proprietary information of the Company. Certain key employees have signed confidentiality and non-compete agreements regarding the Company's proprietary information.

The Company believes that its products do not infringe the proprietary rights of third parties. There can be no assurance, however, that third parties will not assert infringement claims in the future.

The Company's deferred tax asset is recorded at tax rates expected to be in existence when those assets are utilized. Should the tax rates change materially in the future the amount of deferred tax asset could be materially impacted.

## **NOTE 15 – SUBSEQUENT EVENTS**

On February 27, 2019 the Company entered into Amendment No. 3 to the Credit Facility which extends the termination date of the Revolver from November 16, 2019 to March 31, 2020.

#### NOTE 16 - SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

The following is a summary of selected quarterly financial data from operations (in thousands, except per share amounts).

<u>2018</u>	Quarter			
	1st	2nd	3rd	4th
Net revenues	\$13,264	\$13,414	\$14,019	\$12,091
Gross profit	6,268	6,171	6,464	5,264
Operating income/(loss)	568	33	919	(741)
Net income/(loss)	374	(179)	558	(718)
Diluted earnings/(loss) per share	\$0.02	\$(0.01)	\$0.03	\$(0.03)
2017	Ouarter			
2017	<b>Quarter</b> 1st	2nd	3rd	4th
2017 Net revenues	~	2nd \$11,933	3rd \$12,560	4th \$12,036
	1st			
Net revenues	1st \$9,549	\$11,933	\$12,560	\$12,036
Net revenues Gross profit	1st \$9,549 4,333	\$11,933 3,344	\$12,560 6,113	\$12,036 5,471
Net revenues Gross profit Operating income/(loss)	1st \$9,549 4,333 (1,718)	\$11,933 3,344 (2,247)	\$12,560 6,113 804	\$12,036 5,471 293

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

N	one	Э.

#### Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, as of the end of the period covered by this report, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Act of 1934. Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be included in our SEC reports is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, relating to Wireless Telecom Group, Inc. Based on this evaluation, our principal executive officer and principal financial officer concluded that, as of the period covered by this report, our disclosure controls and procedures are effective.

(b) Management's Report on Internal Control over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed under the supervision of the Company's principal executive officer and principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with U.S. GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurances with respect to financial statement preparation and presentation. Additionally, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As of December 31, 2018, management assessed the effectiveness of the Company's internal control over financial reporting based on the criteria for effective internal control over financial reporting established in "Internal Control — Integrated Framework," issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on the assessment, management determined that the Company maintained effective internal control over financial reporting as of December 31, 2018.

This annual report does not include an attestation report of the Company's independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's independent registered public accounting firm pursuant to the Dodd-Frank Wall Street and Consumer Protection Act, which exempts non-accelerated filers and smaller reporting companies from the auditor attestation requirement of Section 404 (b) of the Sarbanes-Oxley Act.

(c) Changes in Internal Controls over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

#### **Item 9B. Other Information**

None.

#### **PART III**

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

The information required under this item is set forth under "Director Nominees and Executive Officers of the Company", "Code of Business Conduct and Ethics" and "Corporate Governance Guidelines and Committees of the Board of Directors" in the 2019 Proxy Statement and is incorporated herein by reference.

## **Item 11. Executive Compensation**

The information required under this item is set forth under "Executive Compensation", "Compensation for the Named Executive Officers in 2018 and 2017", "Director Compensation for 2018" and "Certain Relationships and Related Transactions" in the 2019 Proxy Statement and is incorporated herein by reference.

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

The information about our equity compensation plans is set forth under "Equity Compensation Plan Information" in Item 5 of this annual report on Form 10-K, and is incorporated herein by reference.

The information about security ownership of certain beneficial owners and management is set forth under "Security Ownership of Certain Beneficial Owners" in the 2019 Proxy Statement and is incorporated herein by reference.

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

The information required under this item is set forth under "Certain Relationships and Related Transactions" and "Corporate Governance Guidelines and Committees of the Board of Directors" in the 2019 Proxy Statement and is incorporated herein by reference.

## Item 14. Principal Accountant Fees and Services

The information required under this item is set forth under "Fees Paid to Principal Accountants" and "Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Auditors" in the 2019 Proxy Statement and is incorporated herein by reference.

#### **PART IV**

## Item 15. Exhibits and Financial Statement Schedules

(a)(1)Report of Independent Registered Public Accounting Firm
 Consolidated Balance Sheets as of December 31, 2018 and 2017
 Consolidated Statements of Operations and Comprehensive Loss
 for the Two Years ended December 31, 2018
 Consolidated Statements of Changes in Shareholders' Equity for the
 Two Years ended December 31, 2018
 Consolidated Statements of Cash Flows for the Two Years ended
 December 31, 2018
 Notes to Consolidated Financial Statements

All other schedules have been omitted because the required (2) information is included in the financial statements or notes thereto or because they are not required.

(3) Exhibits

- Restated Certificate of Incorporation of Wireless Telecom Group, Inc. (incorporated herein by reference to Exhibit 3.1 3.1 to Wireless Telecom Group Inc.'s Annual Report on Form 10-K/A filed on April 22, 2005, Commission File No. 1-11916)
- 3.2 Amended and Restated By-laws (incorporated herein by reference to Exhibit 3.1 to Wireless Telecom Group, Inc.'s Current Report on Form 8-K, filed on July 1, 2016, Commission File No. 011-11916)
- 10.1\* Wireless Telecom Group, Inc. 2000 Stock Option Plan (incorporated herein by reference to Annex B to the Definitive Proxy Statement of Wireless Telecom Group, Inc., filed with the SEC on July 17, 2000)
- Amended and Restated Severance Agreement, dated December 10, 2012, between Wireless Telecom Group, 10.2\* Inc. and Paul Genova (incorporated herein by reference to Exhibit 10.8 to Wireless Telecom Group, Inc.'s Annual Report on Form 10-K, filed on April 1, 2013, Commission File No. 1-11916)
- Severance Agreement, dated December 10, 2012, between Wireless Telecom Group, Inc. and Joseph Debold 10.3\*(incorporated herein by reference to Exhibit 10.9 to Wireless Telecom Group, Inc.'s Annual Report on Form 10-K, filed on April 1, 2013, Commission File No. 1-11916)
- 10.4\* 2012 Incentive Compensation Plan of Wireless Telecom Group, Inc. (incorporated herein by reference to Annex A to the Definitive Proxy Statement of Wireless Telecom Group, Inc., filed with the SEC on April 30, 2012)

Form of Restricted Stock Award Agreement under 2012 Incentive Compensation Plan (incorporated herein by 10.5\* reference Exhibit 10.11 to Wireless Telecom Group, Inc.'s Annual Report on Form 10-K, filed on April 1, 2013, Commission file No. 1-11916)

Severance Agreement, dated June 14, 2013, between Wireless Telecom Group, Inc. and Robert Censullo 10.6\* (incorporated herein by reference to Exhibit 10.1 to Wireless Telecom Group, Inc.'s Quarterly Report on Form 10-Q, filed on August 14, 2013, Commission File No. 1-11916)

Form of Stock Option Agreement under the Wireless Telecom Group Inc.'s 2012 Incentive Compensation Plan 10.7\* (incorporated herein by reference to Exhibit 10.1 to Wireless Telecom Group Inc.'s Quarterly Report on Form 10-Q, filed on November 14, 2013, Commission File No. 1-11916)

- Amended and Restated 2012 Incentive Compensation Plan of Wireless Telecom Group, Inc. (incorporated 10.8\*herein by reference to Appendix A to Wireless Telecom Group Inc.'s Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 30, 2014)
- Officer Incentive Compensation Plan of Wireless Telecom Group, Inc., dated April 22, 2015 (incorporated 10.9\*herein by reference to Exhibit 10.1 to Wireless Telecom Group Inc.'s Current Report on Form 10-Q, filed with the SEC on May 13, 2015)
- Fifth Amendment to Lease Agreement, dated May 1, 2015 and retroactively effective as of April 1, 2015, by and between Icon Keystone NJP III Owner Pool 4 NJ, LLC and Boonton Electronics Corporation (incorporated herein by reference to Exhibit 10.1 to Wireless Telecom Group Inc.'s Current Report on Form 8-K, filed on May 12, 2015, Commission File No. 001-11916)
- Executive Employment Agreement, dated June 30, 2016, between Wireless Telecom Group, Inc. and Timothy 10.11\* Whelan (incorporated herein by reference to Exhibit 10.1 to Wireless Telecom Group Inc.'s Current Report on Form 8-K, filed on July 7, 2016, Commission File No. 001-11916)
- Employment Letter Agreement, dated December 1, 2016, between Wireless Telecom Group, Inc. and Michael 10.12\* Kandell (incorporated herein by reference to Exhibit 10.12 to Wireless Telecom Group, Inc.'s Annual Report on Form 10-K, filed on March 20, 2017, Commission File No. 001-11916)
- Letter Agreement, dated December 1, 2016, between Wireless Telecom Group, Inc. and Robert Censullo 10.13\*(incorporated herein by reference to Exhibit 10.13 to Wireless Telecom Group, Inc.'s Annual Report on Form 10-K, filed on March 20, 2017, Commission File No. 001-11916)
- Settlement Agreement and Site Release, dated December 16, 2016, by and among Wireless Telecom Group, Inc., Boonton Electronics Corp., WTT Acquisition Corp., Century Indemnity Company, as successor to 10.14 Insurance Company of North America and Federal Insurance Company (incorporated herein by reference to Exhibit 10.1 to Wireless Telecom Group Inc.'s Current Report on Form 8-K, filed on December 22, 2016, Commission File No. 001-11916)
- Separation Agreement and General Release, dated February 10, 2017, between Wireless Telecom Group, Inc. 10.15\* and Robert Censullo (incorporated herein by reference to Exhibit 10.15 to Wireless Telecom Group, Inc.'s Annual Report on Form 10-K, filed on March 20, 2017, Commission File No. 001-11916)
- Share Purchase Agreement, dated February 17, 2017, by and among Wireless Telecom Group, Inc., Wireless

  10.16 Telecommunications, Ltd., Edward De Salis Young, Paul Moakes, Simon Pack and Martin Hollinshead

  (incorporated herein by reference to Exhibit 10.1 to Wireless Telecom Group Inc.'s Current Report on Form 8-K, filed on February 21, 2017, Commission File No. 001-11916)
- 10.17 Registration Rights Agreement, dated February 17, 2017, by and among Wireless Telecom Group, Inc., Edward De Salis Young, Paul Moakes, Simon Pack and Martin Hollinshead (incorporated herein by reference to Exhibit

10.2 to Wireless Telecom Group Inc.'s Current Report on Form 8-K, filed on February 21, 2017, Commission File No. 001-11916)

Lock Up Agreement, dated February 17, 2017, by and among Wireless Telecom 8roup, Inc., Edward De Salis Young, Paul Moakes, Simon Pack and Martin Hollinshead (incorporated herein by reference to Exhibit 10.3 to Wireless Telecom Group Inc.'s Current Report on Form 8-K, filed on February 21, 2017, Commission File No. 001-11916)

- Voting Agreement, dated February 17, 2017, by and among Wireless Telecom Group, Inc., Edward De Salis

  Young, Paul Moakes, Simon Pack and Martin Hollinshead (incorporated herein by reference to Exhibit 10.4 to

  Wireless Telecom Group Inc.'s Current Report on Form 8-K, filed on February 21, 2017, Commission File No. 001-11916)
- Loan and Security Agreement, dated February 16, 2017, Wireless Telecom Group, Inc. Boonton Electronic

  Corporation, Microlab/FXR and Bank of America, N.A. (incorporated herein by reference to Exhibit 10.5 to

  Wireless Telecom Group Inc.'s Current Report on Form 8-K, filed on February 21, 2017, Commission File No. 001-11916)
- Amendment No. 1 to Loan and Security Agreement by and among Wireless Telecom Group, Inc., Boonton

  Electronic Corporation, Microlab/FXR and Bank of America, N.A. dated August 3, 2017 (incorporated herein by reference to Exhibit 10.6 to Wireless Telecom Group's Quarterly Report on Form 10-Q filed on August 9, 2017, Commission File No. 001-11916)
- Separation Agreement and General Release by and between Wireless Telecom Group, Inc. and Paul Steven 10.22\*Genova dated May 22, 2017 (incorporated herein by reference to Exhibit 10.7 to Wireless Telecom Group, Inc.'s Quarterly Report on Form 10-Q filed on August 9, 2017, Commission File No. 001-11916)
- Amendment to Executive Employment Agreement by and between Wireless Telecom Group, Inc. and Timothy 10.23\* Whelan dated June 9, 2017 (incorporated herein by reference to Exhibit 10.8 to Wireless Telecom Group, Inc.'s Quarterly Report on Form 10-Q filed on August 9, 2017, Commission File No. 001-11916)
- Separation Agreement and General Release by and between Wireless Telecom Group, Inc. and Joseph Debold 10.24\* dated November 30, 2017 (incorporated herein by reference to Exhibit 10.24 to Wireless Telecom Group, Inc.'s Annual Report on Form 10-K filed on March 12, 2018, Commission File No. 001-11916)
- Form of non-employee director Restricted Stock Unit grant agreement (incorporated herein by reference to 10.25\* Exhibit 10.1 to Wireless Telecom Group, Inc.'s Quarterly Report on Form 10-Q filed August 8, 2018, Commission File No. 001-11916)
- 10.26\* Form of Stock Option Agreement under the Wireless Telecom Group Inc.'s 2012 Incentive Compensation Plan for grants after February 11, 2019
- 10.27\* Form of Restricted Stock Award Agreement under the Wireless Telecom Group Inc.'s 2012 Incentive Compensation Plan for grants after February 11, 2019
- 21.1 List of subsidiaries
- 23.1 Consent of Independent Registered Public Accounting Firm (PKF O'Connor Davies, LLP)

- 31.1 Certification pursuant to section 302 of the Sarbanes-Oxley Act of 2002
- 31.2 Certification pursuant to section 302 of the Sarbanes-Oxley Act of 2002
- 32.1 Certification pursuant to 18 U.S.C. section 1350
- 32.2 Certification pursuant to 18 U.S.C. section 1350

The following financial statements from Wireless Telecom Group, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2018, filed on March 12, 2019, formatted in Extensible Business Reporting Language (XBRL): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations and Comprehensive Loss, 100.1 (iii) Consolidated Statements of Cash Flows, (iv) Consolidated Statement of Changes in Shareholders' Equity, and (v) the notes to the consolidated financial statements. As provided in Rule 406T of Regulation S-T, this information is furnished and not filed for purposes of Securities 11 and 12 of the Securities Act of 1933 and

\*Denotes a management contract or compensatory plan or arrangement. 65

Section 18 of the Securities Exchange Act of 1934

## SIGNATURES

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

WIRELESS TELECOM GROUP, INC.

Date: March 12, 2019 By: /s/ Timothy Whelan

Timothy Whelan

Chief Executive Officer

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

Name	<u>Title</u>	<u>Date</u>
/s/ Alan L. Bazaar Alan L. Bazaar	Chairman of the Board	March 12, 2019
/s/ Timothy Whelan Timothy Whelan	Chief Executive Officer	March 12, 2019
/s/ Michael Kandell Michael Kandell	Chief Financial Officer	March 12, 2019
/s/ Joseph Garrity Joseph Garrity	Director	March 12, 2019
/s/ Mitchell Herbets Mitchell Herbets	Director	March 12, 2019
/s/ Michael Millegan Michael Millegan	Director	March 12, 2019
/s/ Allan D.L. Weinstein Allan D.L. Weinstein 66	Director	March 12, 2019

#### **EXHIBIT INDEX**

Exhibit Number	Description
10.26*	Form of Stock Option Agreement under the Wireless Telecom Group Inc.'s 2012 Incentive Compensation Plan for grants after February 11, 2019
10.27*	Form of Restricted Stock Award Agreement under the Wireless Telecom Group Inc.'s 2012 Incentive Compensation Plan for grants after February 11, 2019
21.1	List of subsidiaries
23.1	Consent of Independent Registered Public Accounting Firm (PKF O'Connor Davies, LLP)
31.1	Certification pursuant to section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification pursuant to section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification pursuant to 18 U.S.C. section 1350
32.2	Certification pursuant to 18 U.S.C. section 1350

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<sup>\*</sup>Denotes a management contract or compensatory plan or arrangement.