

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

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended June 30, 2018

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission file number: **001-38029**



AKOUSTIS TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

33-1229046
(IRS Employer Identification No.)

9805 Northcross Center Court, Suite A
Huntersville, NC
(Address of principal executive offices)

28078
(Postal Code)

Registrant's telephone number, including area code: **1-704-997-5735**

Securities registered under Section 12(b) of the Act:

Title of Each Class:
Common Stock, \$0.001 par value

Name of each exchange on which registered:
The NASDAQ Stock Market LLC
(NASDAQ Capital Market)

Securities registered under Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

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

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

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

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Smaller reporting company

(Do not check if a smaller reporting company)

Emerging growth company

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

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

The aggregate market value of the registrant's common stock, par value \$0.001 per share ("Common Stock"), held by non-affiliates on December 29, 2017 was approximately \$106.9 million. For purposes of this computation, shares of Common Stock held by all officers,

directors, and beneficial owners of 10% or more of the outstanding Common Stock were excluded because such persons may be deemed to be affiliates of the registrant. Such determination should not be deemed an admission that such persons are, in fact, affiliates of the registrant.

As of August 22, 2018, there were 22,222,523 shares of Common Stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days after the end of the fiscal year ended June 30, 2018. Portions of such proxy statement are incorporated by reference into Part III of this Form 10-K.

TABLE OF CONTENTS

Item Number and Caption	Page
Explanatory Note	
Cautionary Note Regarding Forward-Looking Information	1
PART I	2
1. Business	2
1A. Risk Factors	12
1B. Unresolved Staff Comments	26
2. Properties	26
3. Legal Proceedings	27
4. Mine Safety Disclosures	27
PART II	27
5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases Of Equity Securities	27
6. Selected Financial Data	28
7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	29
7A. Quantitative and Qualitative Disclosures About Market Risk	36
8. Financial Statements and Supplemental Data	36
9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	37
9A. Controls and Procedures	38
9B. Other Information	39
PART III	
10-14 Information to be provided in Proxy Statement	39
PART IV	
15. Exhibits and Financial Statement Schedules	39

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This Annual Report on Form 10-K (this “Report”) contains forward-looking statements, including, without limitation, in the sections captioned “Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and elsewhere. Any and all statements contained in this Report that are not statements of historical fact may be deemed forward-looking statements. Terms such as “may,” “might,” “would,” “should,” “could,” “project,” “estimate,” “predict,” “potential,” “strategy,” “anticipate,” “attempt,” “develop,” “plan,” “help,” “believe,” “continue,” “intend,” “expect,” “future,” and terms of similar import (including the negative of any of the foregoing) may be intended to identify forward-looking statements. However, not all forward-looking statements may contain one or more of these identifying terms. Forward-looking statements in this Report may include, without limitation, statements regarding (i) the plans and objectives of management for future operations, including plans or objectives relating to the development of commercially viable radio frequency (“RF”) filters, (ii) a projection of income (including income/loss), earnings (including earnings/loss) per share, capital expenditures, dividends, capital structure or other financial items, (iii) our future financial performance, including any such statement contained in a discussion and analysis of financial condition by management or in the results of operations included pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”), (iv) our ability to efficiently utilize cash and cash equivalents to support our operations for a given period of time, (v) our ability to engage customers while maintaining ownership of our intellectual property, and (vi) the assumptions underlying or relating to any statement described in points (i) through (v) above.

The forward-looking statements are not meant to predict or guarantee actual results, performance, events or circumstances and may not be realized because they are based upon our current projections, plans, objectives, beliefs, expectations, estimates and assumptions and are subject to a number of risks and uncertainties and other influences, many of which are beyond our control. Actual results and the timing of certain events and circumstances may differ materially from those described by the forward-looking statements as a result of these risks and uncertainties. Factors that may influence or contribute to the inaccuracy of the forward-looking statements or cause actual results to differ materially from expected or desired results may include, without limitation, our inability to obtain adequate financing, our limited operating history, our inability to generate revenues or achieve profitability, the results of our research and development (R&D) activities, our inability to achieve acceptance of our products in the market, general economic conditions, including upturns and downturns in the industry, our limited number of patents, failure to obtain, maintain and enforce our intellectual property rights, our inability to attract and retain qualified personnel, our reliance on third parties to complete certain processes in connection with the manufacture of our products, product quality and defects, existing or increased competition, our ability to market and sell our products, our inability to successfully integrate our STC-MEMS Business (as defined below under “Business - Recent Developments - Business Developments”) in our business, our failure to innovate or adapt to new or emerging technologies, our failure to comply with regulatory requirements, results of any arbitration or litigation that may arise, stock volatility and illiquidity, our failure to implement our business plans or strategies, our failure to maintain effective internal control over financial reporting, and our failure to obtain the Trusted Foundry accreditation of our New York fabrication facility. A description of the risks and uncertainties that could cause our actual results to differ materially from those described by the forward-looking statements in this Report appears in the section captioned “Risk Factors” and elsewhere in this Report.

Readers are cautioned not to place undue reliance on forward-looking statements because of the risks and uncertainties related to them and to the risk factors. Except as may be required by law, we do not undertake any obligation to update the forward-looking statements contained in this Report to reflect any new information or future events or circumstances or otherwise.

DEFINITIONS

When used in this Report, the terms, “we,” “Akoustis,” the “Company,” “our,” and “us” refers to Akoustis Technologies, Inc., a Delaware corporation, and its wholly owned consolidated subsidiary, Akoustis, Inc. also a Delaware corporation.

PART I

ITEM 1. BUSINESS

Overview

Akoustis® is a development-stage company focused on developing, designing, and manufacturing innovative RF filter products for the mobile wireless device industry, including for products such as smartphones and tablets, cellular infrastructure equipment, and WiFi premise equipment. Located between the device's antenna and its digital backend, the RF front-end ("RFFE") is the circuitry that performs the analog signal processing and contains components such as amplifiers, filters and switches. To construct the resonators that are the building blocks for the RF filter, we have developed a new and proprietary MEMS-based BAW technology and unique manufacturing flow, called XBAW. Our XBAW process incorporates high purity piezoelectric materials to explore high power, high frequency and wide bandwidth applications. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RFFE

We believe owning the core resonator technology and manufacturing our designs is the most direct and efficient means of delivering our solutions to the market. Furthermore, our technology is based upon bulk-mode resonance, which is superior to surface-mode resonance for high-band applications that include 4G/LTE, emerging 5G, WiFi, and military applications. While some of our target customers utilize or make the RFFE module, they may lack access to critical high-band filter technology to compete in high-band applications and other traditional surface-mode solutions where higher power performance is required. We intend to design, manufacture, and market our RF filter products to mobile phone original equipment manufacturers ("OEMs"), military and defense OEM's, cellular infrastructure OEMs, and WiFi premise equipment customers and to enable broader competition among the front-end module manufacturers. We plan to operate as a "pure-play" RF filter supplier and align with the front-end module manufacturers who seek to acquire high performance filters to grow their module business.

We currently build pre-production RF filter circuits, using our first generation XBAW wafer process, in our 122,000-square foot wafer-manufacturing plant located in Canandaigua, New York, which we acquired in June 2017. To date, we have been awarded 17 patents including two blocking patents that we have licensed from Cornell University and the University of California, Santa Barbara and we have over 28 additional patents pending. These patents cover our XBAW process and technology from the substrate level through the system application layer. Where possible, we leverage both federal and state level, R&D grants to support development and commercialization of our technology.

We are developing RF filters for 4G/LTE, emerging 5G, military and WiFi bands and the associated proprietary models and design kits required to design our RF filters. As we qualify our first RF filter products, we plan to engage with target customers to evaluate our filter solution. Our initial designs will target high-band 4G/LTE, emerging 5G, and WiFi frequency bands. Since Akoustis owns its core technology and controls access to its intellectual property, we expect to offer several ways to engage with potential customers. First, we intend to engage with multiple wireless markets, providing filters that we design and offer as standard catalog components. Second, we expect to deliver filters to customer-supplied specifications, which we will design and fabricate for a specific customer. Finally, we will offer our models and design kits for our customers to design their own filter utilizing our proprietary technology.

We have earned minimal revenue from operations since inception, and we have funded our operations primarily with development contracts, RF filter prototype orders, government grants, MEMS foundry and engineering services, sales of our equity securities, and issuance of debt. We have incurred losses totaling approximately \$38.2 million from inception through June 30, 2018. These losses are primarily the result of material and processing costs associated with developing and commercializing our technology, as well as personnel costs, professional fees (primarily accounting and legal), and other general and administrative ("G&A") expenses. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves materials and solid-state device technology development and engineering of catalog and custom filter designs.

Plan of Operation

We plan to commercialize our technology by designing and manufacturing single-band and multi-band BAW RF filter solutions in our New York wafer fabrication facility. We expect our filter solutions will address problems (such as loss, bandwidth, power handling, and isolation) created by the growing number of frequency bands in the RFFE of mobile devices, infrastructure and premise equipment to support 4G/LTE, emerging 5G, and WiFi. We have prototyped our first single-band low-loss BAW filter designs for 4G/LTE frequency bands, which are dominated by competitive BAW solutions and historically cannot be addressed with low-band, lower power handling surface acoustic wave (SAW) technology. During the second half of calendar 2017 we sampled filter product prototypes to prospective customers that cover LTE, Radar and WiFi applications. In March and April of 2018, we announced our first two commercial products, the AKF-1252 and the AKF-1938, which we are currently sampling with customers involved in the WiFi market and military market, respectively. In May we announced a Non Recurring Engineering ("NRE") contract and purchase order for a 4G/LTE infrastructure customer that we expect will ship in early calendar 2019. Additionally, in June 2018 we announced a 5.2 GHz BAW WiFi filter for the handset market, the AKF-1652. We expect to begin commercial production for one or more customers in the second half of calendar 2018. As we receive customer evaluations, we will do further iterations on the designs and provide next generation samples for evaluation and characterization.

To succeed, we must convince mobile phone OEMs, RFFE module manufacturers, cellular infrastructure OEMs, and WiFi premise equipment OEMs to use our XBAW filter technology in their systems and modules. However, since there are two dominant BAW filter suppliers in the industry that have high-band technology, and both utilize such technology as a competitive advantage at the module level, we expect customers that lack access to high-band filter technology will be open to engage with our pure-play filter company.

In June 2018 we completed the qualification of our high purity piezoelectric materials process and our XBAW manufacturing process to support an initial product family of 4G/LTE, emerging 5G mobile, military and WiFi filter solutions. Now that we have stabilized our process technology in a manufacturing environment, we intend to complete a production release of our high-band filter products in the frequency range from 2 GHz to 6 GHz. The target frequency bands will be prioritized based upon customer priority. We expect this will require recruiting and hiring additional personnel and capital investments.

We plan to pursue RF filter design and R&D development agreements and potentially joint ventures with target customers and other strategic partners, but we cannot guarantee we will be successful in these efforts. These types of arrangements may subsidize technology development costs and qualification, filter design costs, and offer complementary technology and market intelligence and other avenues to revenue. However, we intend to retain ownership of our core technology, intellectual property, designs, and related improvements. We expect to pursue development of catalog designs for multiple customers and to offer such catalog products in multiple sales channels.

As of June 30, 2018, the Company had \$14.8 million of cash and cash equivalents to fund our operations, including R&D, commercialization of our technology, development of our patent strategy and expansion of our patent portfolio, as well as to provide working capital and funds for other general corporate purposes. These funds are expected to be sufficient to fund our operations into the fourth quarter of fiscal 2019. However, there is no assurance that the Company's projections and estimates are accurate. Our anticipated expenses include employee salaries and benefits, compensation paid to consultants, capital costs for research and other equipment, costs associated with development activities (including travel and administration), costs associated with the integration and operation of our New York wafer fabrication facility and related operations, legal expenses, sales and marketing costs, G&A expenses, and other costs associated with an early stage, public technology company. We anticipate increasing the number of employees; however, this is highly dependent on the nature of our development efforts, our success in commercialization, and our ability to source additional funds. We anticipate adding employees for R&D in both our New York and North Carolina facilities, as well as G&A functions, to support our efforts. We expect capital expenditures to be approximately \$4.1 million for the purchase of equipment and software during the next 12 months, and we are currently investigating the feasibility of using equipment leases, or government grants to fund all or part of the purchase of the equipment.

The amounts we actually spend for any specific purpose may vary significantly and will depend on a number of factors, including, but not limited to, the pace of progress of our commercialization and development efforts, actual needs with respect to product testing, R&D, market conditions, changes in or revisions to our marketing strategies, and the integration of our New York wafer fabrication facility and related operations into our business.

Commercial development of new technology, by its nature, is unpredictable. Although we will undertake development efforts with commercially reasonable diligence, there can be no assurance that our current cash position will be sufficient to enable us to commercialize our technology to the extent needed to create future sales to sustain operations. If our current cash is insufficient for these purposes, we are unable to source additional funds on terms acceptable to the Company (or at all), or we experience costs in excess of estimates to continue our R&D plan, it is possible that we would not have sufficient resources to continue as a going concern and we may be required to curtail or suspend our operations. Even if we are able to source sufficient funds to continue as a going concern, our technology may not be accepted, we may never earn revenues sufficient to support our operations, and we may never be profitable.

Recent Developments

New York Manufacturing Facility

On March 23, 2017, we entered into an Asset Purchase Agreement and a Real Property Purchase Agreement (collectively, the “STC-MEMS Agreements”) with The Research Foundation for the State University of New York (“RF-SUNY”) and Fuller Road Management Corporation (“FRMC”), an affiliate of RF-SUNY (collectively, “Sellers”), respectively, to acquire certain specified assets, including STC-MEMS, a semiconductor wafer-manufacturing and microelectromechanical systems (“MEMS”) operation with associated wafer-manufacturing tools, and the associated real estate and improvements located in Canandaigua, New York used in the operation of STC-MEMS (the assets and real estate and improvements referred to together herein as the “STC-MEMS Business”). Pursuant to the STC-MEMS Agreements, the Company also agreed to assume post acquisition date substantially all of the ongoing obligations of the STC-MEMS Business incurred in the ordinary course of business.

We completed the acquisition of the STC-MEMS Business on June 26, 2017 for an aggregate purchase price of \$2.8 million in cash. The Company recorded net assets acquired of \$6.3 million for purchase consideration of \$4.6 million (includes \$2.85 million of cash paid at closing plus \$1.7 million real estate contingent liability), which resulted in the recording of a bargain purchase gain of \$1.7 million.

The STC-MEMS acquisition allows the Company to internalize manufacturing, increase capacity and control its wafer supply chain for its XBAW based RF filters. In January 2018, we successfully transferred our R&D resonator filter process flow into the facility, and we plan to utilize the facility to optimize our XBAW technology and consolidated all aspects of wafer manufacturing for our disruptive and patented high band BAW RF filters targeting the multi-billion dollar mobile and other wireless markets. Our consolidation of the Company’s supply chain into the STC-MEMS Business started on June 26, 2017 and is expected to shorten time-to-market for our RF products, greatly enhancing our ability to service customers upon completion of development and design specifications. Furthermore, we believe that shorter time-to-market cycles provide us with the opportunity to increase the number of our potential customers.

On February 27, 2018, we entered into a Lease and Project Agreement and a Company Lease Agreement with the Ontario County Industrial Development Agency (the “OCIDA”), pursuant to which we will lease for \$1.00 annually to the OCIDA a portion of the real property, including the improvements thereon, acquired in connection with the purchase of the STS MEMS Business and the OCIDA will lease such real property and improvements back to us for annual rent payments specified in such agreements. See Note 12.

Business Developments

In August 2017, we announced our first shipment of premium high-band BAW RF filter prototypes manufactured using our patented single-crystal BulkONE® technology to a Chinese tier one customer. The shipment included high performance, LTE-TDD Band 41, 2.6 GHz BAW RF filters that we believe address the challenging filter requirements in the high growth 4G LTE mobile market in China. Shortly thereafter, we announced our first 3.8GHz RF filter shipments to our second customer for a key Radar application.

In March and April of 2018, we announced our first two commercial products, the AKF-1252 and the AKF-1938, which we are currently sampling with customers involved in the WiFi market and military radar market, respectively. In May we announced an NRE contract and purchase order for a 4G/LTE infrastructure customer that we expect will ship in early calendar 2019. Additionally, in June 2018 we announced a 5.2 GHz BAW WiFi filter for the handset market, the AKF-1652. We expect to begin commercial production for one or multiple markets in the second half of calendar 2018. As we receive customer evaluations, we will do further iterations on the designs and provide next generation samples for evaluation and characterization.

In June 2018 we completed the qualification of our XBAW RF filter wafer manufacturing process to support an initial product family of 4G/LTE, 5G mobile, military and WiFi filter solutions. Now that we have stabilized our process technology in a manufacturing environment, we intend to complete a production release of our high-band filter products in the frequency range from 2 GHz to 6 GHz.

Organizational Developments

On August 11, 2016, we changed our fiscal year from a fiscal year ending on March 31 of each year to one ending on June 30 of each year, effective for the fiscal year ended June 30, 2017. On October 31, 2016, we filed a transition report on Form 10-K for the transition period from April 1, 2016 to June 30, 2016.

Following stockholder approval at our 2016 annual stockholders’ meeting, we changed our state of incorporation from the State of Nevada to the State of Delaware on December 15, 2016.

On February 22, 2018, Akoustis Manufacturing New York, Inc. was merged into Akoustis, Inc., with Akoustis, Inc. as the surviving entity.

Financing Developments

On May 14, 2018 the Company completed the offering of \$15.0 million principal amount of the Company’s 6.5% Convertible Senior Secured Notes due 2023. The net proceeds of the offering after payment of offering costs were approximately \$13.1 million. The notes will mature on May 31, 2023, unless earlier converted, redeemed or repurchased. Interest on the notes accrues at the rate of 6.5% per year and is payable at the Company’s option quarterly in cash and/or freely tradable shares of the Company’s common stock, subject to certain limitations. The notes may be converted into common stock at the option of the holder at any time prior to maturity at an initial conversion price of \$6.55 per share, subject to adjustment under certain circumstances. If the holder elects to convert the notes at any time on or after the date that is one year after the last date of original issuance of the notes and prior to May 31, 2021, the holder will also receive a make-whole payment equal to the remaining scheduled interest payments that would have been made on the notes converted had such notes remained outstanding through May 31, 2021 (the “put date”). At the Company’s option, make-whole payments may be paid in cash and/or

freely tradable shares of the Company's common stock.

Glossary

The following is a glossary of technical terms used herein:

- **Acoustic wave** - a mechanical wave that vibrates in the same direction as its direction of travel.
- **AlN** - Aluminum Nitride.
- **Acoustic wave filter** - an electromechanical device that provides radio frequency control and selection, in which an electrical signal is converted into a mechanical wave in a device constructed of a piezoelectric material and then back to an electrical signal.

- **Band, channel or frequency band** - a designated range of radio wave frequencies used to communicate with a mobile device.
- **Bulk acoustic wave (BAW)** - an acoustic wave traveling through a material exhibiting elasticity, typically vertical or perpendicular to the surface of a piezoelectric material.
- **Digital baseband** - the digital transceiver, which includes the main processor for the communication device.
- **Duplexer** - a bi-directional device that connects the antenna to the transmitter and receiver of a wireless device and simultaneously filters both the transmit signal and receive signal.
- **Filter** - a series of interconnected resonators designed to pass (or select) a desired radio frequency signal and block unwanted signals.
- **Group III element nitrides** - a dielectric material comprised of group IIIA element, such as boron (B), aluminum (Al) or gallium (Ga), combined with group 5A (or VA nitrogen to form a compound semiconductor nitride such as BN, AlN, or GaN. For resonators, the dielectric is typically chosen based upon the piezoelectric constant of the material in order to generate the highest electromechanical coupling.
- **Insertion Loss** -The power losses associated with inserting a BAW filter into a circuit.
- **Lossy** - resistive losses that result in heat generation.
- **Metrology** - techniques used to evaluate materials, devices and circuits.
- **Monolithic topology** - a description of an electrical circuit whereby all the elements of the circuit are fabricated at the same time using the same process flow.
- **Power Amplifier Duplexer (PAD)** - an RF module containing a power amplifier and duplex filter components for the RFFE of a smartphone.
- **Piezoelectric materials** - certain solid materials (such as crystals and certain ceramics) that produce a voltage in response to applied mechanical stress, or that deform when a voltage is applied to them.
- **Quality factor, or Q** - energy stored divided by the energy dissipated per cycle. Higher Q represents a higher caliber of resonance and implies mechanical and electrical factors responsible for energy dissipation are minimal. For a given amount of energy stored in a resonator, Q represents the number of cycles resonance will continue without additional input of energy into the system.
- **Resonator** - a device whose impedance sharply changes over a narrow frequency range and is characterized by one or more 'resonance frequency' due to a standing wave across the resonator's electrodes. The vibrations in a resonator can be characterized by mechanical "acoustic" waves which travel without a characteristic sound velocity. Resonators are the building blocks for RF filters used in mobile wireless devices.
- **RF** - radio frequency.
- **RF front-end (RFFE)** - the circuitries in a mobile device responsible for processing the analog radio signals; located between the device's antenna and the digital baseband.
- **RF spectrum** - a defined range of frequencies.

- **Surface acoustic wave (SAW)** - an acoustic sound wave traveling horizontally along the surface of a piezoelectric material.
- **TDD LTE** - Time Division Duplex- Long-Term Evolution or a wireless standard which shares the bandwidth between transmit and receive.
- **Tier one** - a supplier or OEM with substantial market share.
- **Tier two** - a supplier or OEM with an established but not substantial market share.
- **Trusted Foundry** - The Trusted Foundry Program was initiated by the Department of Defense in 2004 to ensure mission-critical national defense systems access to leading-edge integrated circuits from secure, domestic sources. Defense Microelectronics Activity (DMEA) is the manager of the Trusted Foundry Program for the U.S. Department of Defense (DoD). It is a joint DoD / National Security Agency (NSA) program and is administered by the NSA's Trusted Access Program Office (TAPO).
- **Wafer** - a thin slice of semiconductor material used in electronics for the fabrication of integrated circuits.

Our Technology

Current RF filters utilize a technology that is limited by the material properties of the base filter component. Existing BAW filters use an “acoustic wave ladder” that is based on a monolithic topology approach using lossy polycrystalline materials. By contrast, our XBAW technology uses high purity materials, which provides up to 30% higher piezoelectric properties, compared to conventional polycrystalline materials used in the industry today. We have fabricated resonators that demonstrate the feasibility of our approach and believe our technology will yield a new generation of filter products.

XBAW technology consists of novel high purity piezoelectric materials, which are fabricated into bulk-mode, acoustic wave resonators and RF filters. Our patented piezoelectric materials contain high-purity Group III element nitride materials and possess a unique signature, which can be detected by conventional material metrology tools. We utilize analytical modeling techniques to aid in the design of our materials, and our raw material specifications are typically outsourced to a third party for manufacturing. Once our materials are ready for processing, we supply our NY fabrication facility raw materials, a mask design file, and a unique process sequence in order to fabricate our resonators and filters. Our wafer process flow is compatible with wafer level packaging (WLP) that allows for low profile, cost effective filters to be produced.

Challenges Facing the Mobile Device Industry

Rising consumer demand for always-on wireless broadband connectivity is creating an unprecedented need for high performance RFFE for mobile devices. Mobile devices such as smartphones and tablets are quickly becoming the primary means of accessing the Internet, thereby driving the Internet of Things (IoT). The rapid growth in mobile data traffic is testing the limits of existing wireless bandwidth. Carriers and regulators have responded by opening new spectrums of RF frequencies, driving up the number of frequency bands in mobile devices. This substantial increase in frequency bands has created a demand for more filters, as well as a demand for filters with higher selectivity. The global transition to LTE and adoption of LTE-Advanced with more sophisticated carrier aggregation and multiple-input, multiple-output (MIMO) techniques will continue to push the requirements for increased supply of high performance filters. Furthermore, the introduction of 5G mobile technologies and their associated frequencies over the next several years will create an even greater need for high-performance, high-frequency filters as the bands being auctioned have primarily been in the 3-6 GHz range, well above current networks.

The new spectrum introduced by 4G/LTE and emerging 5G is driving spectrum licensing at higher frequencies than previous 3G smartphone models. For example, new TDD LTE frequencies allocated for 4G wireless cover frequencies nearly twice as high as those covered in previous generation phones. As a result, the demand for filters represents the single largest growth opportunity in the RFFE industry, according to a Mobile Experts May 2017 report. For traditional “low band” frequencies, SAW filters have been the primary choice, while high band solutions have utilized BAW filters due to their performance and yield. While there are multiple sources of supply for SAW technology, the source of supply for BAW filters is more limited and essentially dominated by two manufacturers worldwide. See “Competition” below.

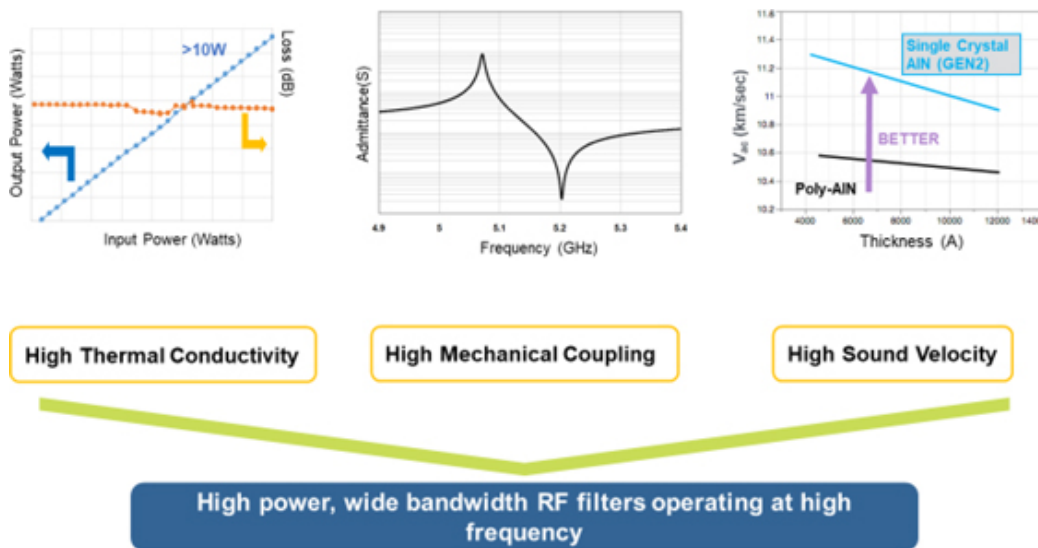
In addition, signal loss of current generation acoustic wave filters is excessively high, and up to half of the transmit power is wasted as heat, which ultimately constrains battery life. Another challenge is that the allocated spectrum for mobile communication bands requires high bandwidth RF filters, which, in turn, requires wide bandwidth core resonator technology. In addition, filters with inferior selectivity either reduce the available operating bands the mobile device can support or increase the noise in the operating bands. Each of these problems negatively impacts the end-user's experience when using the mobile device.

The RFFE must meet growing data demands while reducing cost and improving battery life. Our solution involves a new approach to RFFE component manufacturing, enabled by XBAW technology. We expect our technology to produce filters that will reduce the overall system cost and improve performance of the RFFE.

Our Solutions

Our immediate focus is on the commercialization of wide bandwidth RF filters operating in the high frequency spectrum known as the sub 6 GHz bands. Using our XBAW technology, we believe these filters enable new PAD module or RFFE competition for high band modules as well as performance-driven low band applications. Initially, we expect to target select strategic RFFE market leaders as well as tier two mobile phone original equipment manufacturers (“OEMs”) and/or RFFE module suppliers. Longer term, our focus will be to expand our market share by engaging with multiple mobile phone OEMs and RFFE module manufacturers. We have transitioned our technology to our Canandaigua, NY facility and continue to focus on the commercialization of our filters using our XBAW technology. This will be the first in a series of R&D activities that will set the foundation for filter products that we believe can disrupt the high band filter market. We will develop a series of filter designs to be used in the manufacturing of duplexers or more complex multiplexers targeting the 4G/LTE, emerging 5G, military and WiFi frequency bands. We believe our filter designs will create an alternative for, and replace, filters currently manufactured using materials with fundamentally inferior performance. Figure 1 below illustrates characterization plots that represent the high power, high bandwidth and high frequency capability of our essential single crystal materials.

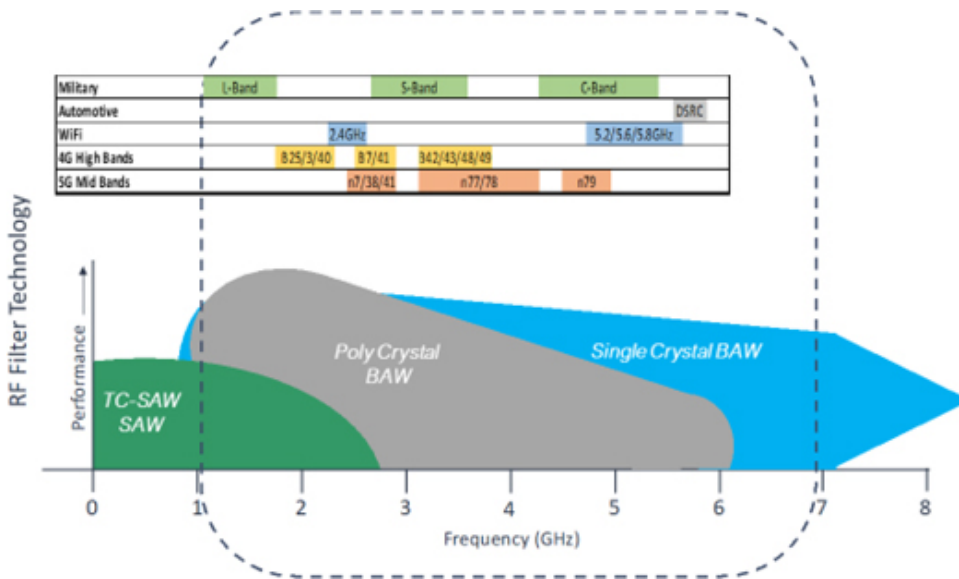
Figure 1-Characteristics of our essentially single crystal materials used to fabricate our BAW RF filters.



Single-Band Designs for Duplexers and Multiplexers

SAW filters have been preferred in modern RFFE because of their high performance, small size and low cost. However, traditional SAW ladder designs do not perform well in high frequency bands or bands with closely spaced receive and transmit channels, typical of many new bands. Therefore, BAW filters are needed for these bands. We have demonstrated in our NY wafer fab an ability to fabricate BAW resonators, the building block of BAW filters, that are more efficient than existing available BAW resonators. Furthermore, we believe the improved efficiency will reduce the total cost of RFFE as well as reduce the battery demand for mobile devices. Additionally, we believe that our XBAW technology will allow for a single manufacturing method that will support all of the BAW filter band range and a significant portion of the SAW band range. Figure 2 below illustrates what we believe will be the frequency range of our XBAW technology.

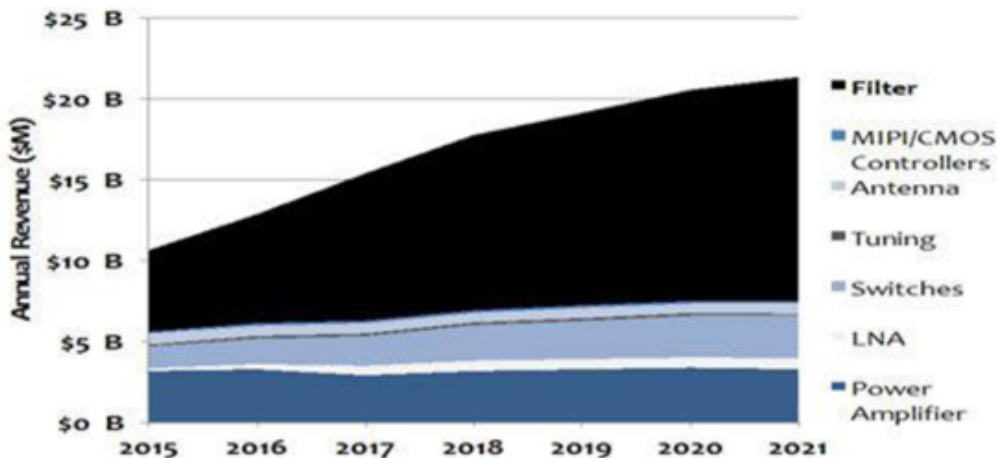
Figure 2- The potential range of our technology



Pure-Play Filter Provider Enables New Module Competition

Given the high sound velocity in our piezoelectric materials, our technology allows for a wide range of frequency coverage, and we plan to supply filters that will support 4G/LTE, emerging 5G, military and WiFi bands. We have successfully demonstrated resonators that will support the design and fabrication of 4G/LTE filters, WiFi filters and military radar filters, with frequencies adjacent to the emerging 5G mobile auctions. We completed the development required to transition our XBAW technology to high volume manufacturing in June 2018. We will be a pure-play filter supplier that will address the increasing RF complexity placed on RFFE manufacturers supporting 4G/LTE and WiFi. Figure 3 illustrates the historical growth in RF complexity.

Figure 3- Increase in Filter content in Mobile Phone Front End Modules (FEMs) from 2015 - 2021 (Source: Mobile Experts 2016)



Commercialization

Our immediate focus is on the commercialization of wide bandwidth RF filters to address the RFFE with innovative single-band designs using our XBAW sub 6 GHz RF filter technology. We are currently developing commercial single-band filters through our wafer fabrication facility. We are focused on developing fixed-band filters because we believe these designs present the greatest near-term potential for commercialization of our technology, and that once demonstrated, the facility can be more efficiently readied for production compared to alternative technologies.

Our technology development process consists of the following five phases:

1. Pre-Alpha – Demonstrate basic feasibility/capabilities
2. Alpha – Develop stable recipe (Process freeze) with limited production development
3. Beta – Complete technology qualification (Process qualification) in factory to enable product design
4. Pre-Production – Demonstrate lead product production capabilities, release final design tools
5. Production – Continual improvement of process and parametric performance

In March 2018, we announced the completion of the alpha-phase for our first generation XBAW process technology called XB1. In July

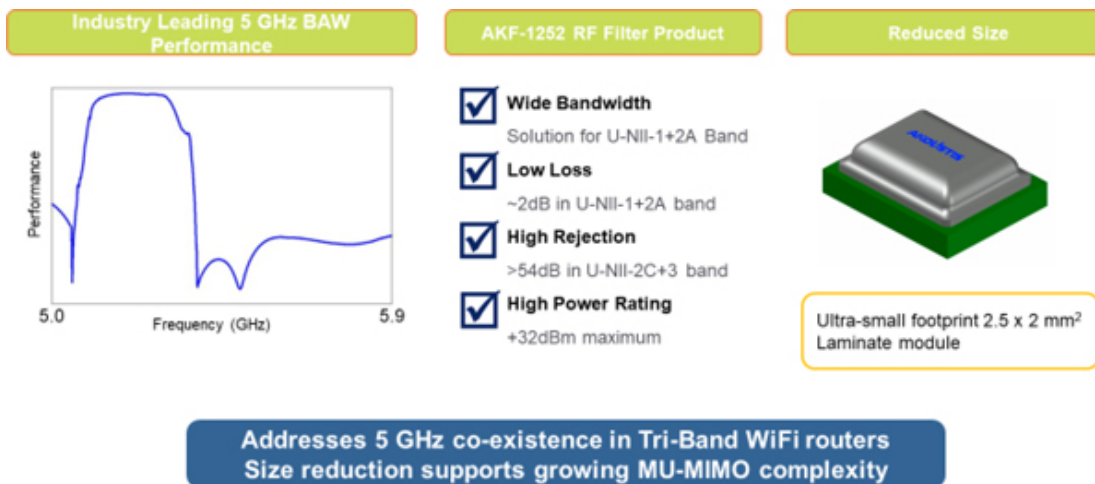
2018 we announced the completion of the beta-phase for both the XB1 and our single-crystal materials process. This shortens the development cycle time for new catalog and custom components as each new product will start in the pre-production phase and will not require end-to-end qualification.

Research and Development

Since inception, the Company's focus has been on developing an innovative mobile-wireless filter technology with a compelling value proposition to our potential customers and a significant and noticeable impact to the end user. Whereas today's polycrystalline material (used to manufacture RF resonators and filters) is sputtered on a metal-coated carrier, our patented XBAW technology employs high quality, single-crystal and near single-crystal piezoelectric films in our resonators, which are used as the enabler to create high performance BAW RF filters. Our high purity piezoelectric materials are a key differentiator when compared to the incumbent amorphous thin-film technologies because it increases the acoustic velocity, the electromechanical coupling coefficient in the resonator and high power performance. These technology features allow Akoustis to engineer RF filter solutions for a broad spectrum for multiple end markets. Research and development expense totaled \$13,266,975 for the year ended June 30, 2018 and \$5,013,260 for the year ended June 30, 2017. These R&D activities focused on high purity piezoelectric materials development and resonator demonstration. Current R&D investments include materials advancement, resonator development, RF filter design and high yield wafer manufacturing.

As a result of our efforts, we have developed and introduced several new filters which are currently sampling with multiple customers across multiple markets. Our focus remains on improving the electromechanical coupling and quality factor of our resonator technology and the performance of our fabricated filters through design improvements and process optimization experiments.

We announced our first filter in March, the AKF-1252, a 5.2 GHz filter for the WiFi premise equipment market. The AKF-1252 is a wideband filter for the U-NII-1&2A bands with typical insertion loss of less than 1dB, high rejection and a high power rating in an ultra-small footprint module. Our product is the first BAW RF filter targeting the 5.2 GHz WiFi band and is 23 times smaller than the current technology in use today.



Following the AKF-1252, we also announced the AKF-1652, a 5.2 GHz filter for the WiFi device market, with lower insertion loss. We are currently working on the development of the small footprint, flip-chip packaging that will be required before the expected uptake of 5.2 GHz WiFi in cellular handsets and other devices. We believe that handset makers are still a year away from including tri-band WiFi in smartphones, tablets and other mobile devices, and expect to complete the packaging development ahead of the market.

In April 2018 we announced the AKF-1938 filter in the 3.8 GHz band, adjacent to emerging 5G mobile frequency auctions. In early July, we announced that we have signed our first customer, a large military OEM with annual revenue of over \$1 billion. We expect to see revenue from this product begin in the second quarter of fiscal 2019, with follow-on orders expected in calendar 2019 and beyond.

We have also announced a 4G LTE infrastructure win for two adjacent filters, with engineering revenue attached and follow on production filter revenue expected upon completion of the design. Moving forward, we expect to deliver new catalog components based on the frequencies in highest demand from our customers and will announce additional products as we continue to benefit from our research and development efforts.

Raw Materials

Within its internal manufacturing operation, Akoustis sources raw materials, process gases, metals and other miscellaneous supplies to fabricate its BAW RF filter circuits. Materials range from substrates (used to deposit key piezoelectric materials) to standard dielectric-based laminates (used for packaging of the RF filter circuits). The Company sources at least two types of substrate materials for its BAW process and we have more than one supplier for one material and a single source for the other. Multiple process gases are used for material synthesis, process etching and wafer treatment. While there is more than one supplier for most process gases, the purity levels of such gases may change by source. Hence, either purification or process requalification may be required, as purchasing from a second source is required. Akoustis sources various high purity metals for electrode formation and interconnect layers for its RF circuits. Such metals are available in various purity levels and are available from more than one supplier. Other process handling hardware common to the semiconductor industry is available in abundance from multiple suppliers. Consistent with other semiconductor manufacturers, the Company may have to work with all its suppliers to ensure adequate supply of raw materials, process gases and metals as the Company ramps from R&D into high volume manufacturing.

Intellectual Property

We rely on a combination of intellectual property rights, including patents and trade secrets, along with copyrights, trademarks and contractual obligations and restrictions to protect our core technology and business.

In the United States and internationally we have fourteen (14) patents, in addition to twenty eight (28) pending patent applications and three (3) patents that are subject to a license agreement requiring further negotiation. Our intellectual property relates directly to our XBAW technology, including materials and device designs, methods of manufacture, integrated circuit designs, wafer packaging, and point of use (to include mobile applications). Our patents expire between 2031 and 2035. We intend to continue to innovate and expand our patent portfolio, and when appropriate, we will look to purchase license(s) that grant access to additional intellectual property that enables, enhances or further expands our technical capabilities and/or product.

We believe that Akoustis will have competitive advantages from rights granted under our patent applications. Some applications, however, may not result in the issuance of any patents. In addition, any future patent may be opposed, contested, circumvented or designed around by a third party or found to be unenforceable or invalidated. Others may develop technologies that are similar or superior to our proprietary technologies, duplicate our proprietary technologies or design around patents owned or licensed by us.

We generally control access to, and use of, our confidential information through the use of internal and external controls, including contractual protections with employees, contractors and customers. We rely in part on the United States and international copyright laws to protect our intellectual property. All employees and consultants are required to execute confidentiality and intellectual property assignment agreements in connection with their employment and consulting relationships with us. We also require them to agree to disclose and assign to us all inventions conceived or made in connection with the employment or consulting relationship.

Competition

The RF filter market is controlled by a relatively small number of RF component suppliers. These companies include, among others, Broadcom, Murata Manufacturing Co., Ltd., Qorvo, Inc., Skyworks Solutions Inc., Taiyo Yuden, and Qualcomm. Broadcom and Qorvo, Inc. dominate the high band BAW filter market, controlling a significant portion of the customer base and are increasing capacity to meet the growing RF filter demand of the 4G/LTE market.

Upon completion of our product development, we will compete directly with these companies to secure design slots inside RFFE modules - targeting companies that procure filters or internally source filters. While many of our competitors have more resources than we have, we believe that our filter designs will be superior in performance, and we will approach prospective customers as a pure-play filter supplier, offering advantages in performance over the full frequency range at competitive costs. Our challenge will be to convince our customers that we have a strong intellectual property position, we will be able to deliver in volume, that we will meet their price targets, and that we can satisfy reliability and other requirements. For a list of other competitive factors, see "Item 1A. Risk Factors - We are still developing our products, and they may not be accepted in the market."

Employees

We place an emphasis on hiring the best talent at the right time to enable our core technology and business growth. This includes establishing a competitive compensation and benefits package, thereby enhancing our ability to recruit experienced personnel and key technologists. As of June 30, we had a total of 69 full-time employees plus 6 part-time employees. We will continue to hire specific and targeted positions to further enable our technology and manufacturing capabilities as and when appropriate.

Government Regulations

Our business and products in development are subject to regulation by various federal and state governmental agencies, including the radio frequency emission regulatory activities of the Federal Communications Commission (“FCC”), the consumer protection laws of the Federal Trade Commission, the import/export regulatory activities of the Department of Commerce, the product safety regulatory activities of the Consumer Products Safety Commission, and the environmental regulatory activities of the Environmental Protection Agency.

The rules and regulations of the FCC limit the RF used by, and level of power emitting from, electronic equipment. Our RF filters, as a key element enabling consumer electronic smartphone equipment, are required to comply with these FCC rules and may require certification, verification or registration of our RF filters with the FCC. Certification and verification of new equipment requires testing to ensure the equipment’s compliance with the FCC’s rules. The equipment must be labeled according to the FCC’s rules to show compliance with these rules. Testing, processing of the FCC’s equipment certificate or FCC registration and labeling may increase development and production costs and could delay the implementation of our XBAW acoustic wave resonator technology for our RF filters and the launch and commercial productions of our filters into the U.S. market. Electronic equipment permitted or authorized to be used by us through FCC certification or verification procedures must not cause harmful interference to licensed FCC users, and may be subject to RF interference from licensed FCC users. Selling, leasing or importing non-compliant equipment is considered a violation of FCC rules and federal law, and violators may be subject to an enforcement action by the FCC. Any failure to comply with the applicable rules and regulations of the FCC could have an adverse effect on our business, operating results and financial condition by increasing our compliance costs and/or limiting our sales in the United States.

The semiconductor and electronics industries also have been subject to increasing environmental regulations. A number of domestic and foreign jurisdictions seek to restrict the use of various substances, a number of which have been used in our products in development or processes. While we have implemented a compliance program to ensure our product offering meets these regulations, there may be instances where alternative substances will not be available or commercially feasible, or may only be available from a single source, or may be significantly more expensive than their restricted counterparts. Additionally, if we were found to be non-compliant with any such rule or regulation, we could be subject to fines, penalties and/or restrictions imposed by government agencies that could adversely affect our operating results. Our cost to maintain compliance with existing environmental regulations is expected to be nominal based on our structure in which we outsource a majority of our operations to suppliers that are responsible for meeting environmental regulations. We will continue to monitor our quality program and expand as required to maintain compliance and ability to audit our supply chain.

Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, or injunctions. An adverse outcome in any such litigation could require us to pay contractual damages, compensatory damages, punitive damages, attorneys’ fees and costs. These enforcement actions could harm our business, financial condition and results of operations. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, financial condition and results of operations could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management’s attention and resources and an increase in professional fees.

ITEM 1A. RISK FACTORS

This section is a summary of the risks that we presently believe are material to the operations of the Company. Additional risks of which we are not presently aware or which we presently deem immaterial may also impair the Company's business, financial condition or results of operations.

Risks Related to our Business and the Industry in Which We Operate

We have a limited operating history upon which investors can evaluate our business and future prospects.

We are an early stage company that has not yet begun full scale commercial operations. Historically, we were a shell company with no operating history and no assets other than cash. Upon consummation of a merger with Akoustis, Inc. in May 2015, we redirected our business focus towards the development of advanced single-crystal BAW filter products for RFFE for use in the mobile wireless device industry. Although Akoustis, Inc. since its inception has focused its activity on R&D of high efficiency acoustic wave resonator technology utilizing single-crystal piezoelectric materials, its RF filters have not generated any material level of sales.

Since our expectations of potential customers and future demand for our products are based on estimates of planned operations rather than experience, it is difficult for our management and our investors to accurately forecast and evaluate our future prospects and our revenues. Our proposed operations are therefore subject to all of the risks inherent in light of the expenses, difficulties, complications and delays frequently encountered in connection with the formation of any new business and the development of a product, as well as those risks that are specific to our business in particular. The risks include, but are not limited to, our reliance on third parties to complete some processes for the manufacturing of our product, the possibility that we will not be able to develop functional and scalable products, or that although functional and scalable, our products and/or services will not be accepted in the market. To successfully introduce and market our products at a profit, we must establish brand name recognition and competitive advantages for our products. There are no assurances that the Company can successfully address these challenges. If it is unsuccessful, the Company and its business, financial condition and operating results will be materially and adversely affected.

We may not generate revenues or achieve profitability.

We have incurred operating losses since our inception and expect to continue to have negative cash flow from operations. We have only generated minimal revenues from shipment of product while our primary sources of funds have been R&D grants, MEMS foundry services, private placements of our equity, and debt. We have experienced net losses of approximately \$38.2 million for the period from May 12, 2014 (inception) to June 30, 2018. Our future profitability will depend on our ability to create a sustainable business model and generate revenues, which is subject to a number of factors, including our ability to successfully implement our strategies and execute our R&D plan, our ability to implement our improved design and cost reductions into manufacturing of our RF filters, the availability of funding, market acceptance of our products, consumer demand for end products incorporating our products, our ability to compete effectively in a crowded field, our ability to respond effectively to technological advances by timely introducing our new technologies and products, and global economic and political conditions.

Our future profitability also depends on our expense levels, which are influenced by a number of factors, including the resources we devote to developing and supporting our projects and potential products, the continued progress of our research and development of potential products, our ability to improve R&D efficiencies, license fees or royalties we may be required to pay, and the potential need to acquire licenses to new technology, the availability of intellectual property for licensing or acquisition, or the use of our technology in new markets, which could require us to pay unanticipated license fees and royalties in connection with these licenses.

Our development and commercialization efforts may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenues to offset higher expenses. These expenses, among other things, may cause our net income and working capital to decrease. If we fail to generate revenue and manage our expenses, we may never achieve profitability, which would adversely and materially affect our ability to provide a return to our investors.

The industry and the markets in which the Company operates are highly competitive and subject to rapid technological change.

The markets in which we compete are intensely competitive. We operate primarily in the industry that designs and produces semiconductor components for wireless communications and other wireless devices, which is subject to rapid changes in both product and process technologies based on demand and evolving industry standards. The markets for our products are characterized by:

- rapid technological developments and product evolution,
- rapid changes in customer requirements,
- frequent new product introductions and enhancements,
- continuous demand for higher levels of integration, decreased size and decreased power consumption,
- short product life cycles with declining prices over the life cycle of the product, and
- evolving industry standards.

The continuous evolutions of these technologies and frequent introduction of new products and enhancements have generally resulted in short product life cycles for wireless semiconductor products, in general, and for RFFE, in particular. Our R&D activity and resulting products could become obsolete or less competitive sooner than anticipated because of a faster than anticipated change in one or more of the above-noted factors. Therefore, in order for our RF filters to be competitive and achieve market acceptance, we need to keep pace with rapid development of new process technologies, which requires us to:

- respond effectively to technological advances by timely introducing new technologies and products,
- successfully implement our strategies and execute our R&D plan in practice,
- improve the efficiency of our technology, and
- implement our improved design and cost reductions into manufacturing of our RF filters.

We are still developing our products, and they may not be accepted in the market.

Although we believe that our XBAW acoustic wave resonator technology that utilizes single-crystal piezoelectric materials will provide material advantages over existing RF filters and are currently developing various methods of integration suitable for implementation of this technology to RF filters, we cannot be certain that our RF filters will be able to achieve or maintain market acceptance. While we have fabricated R&D resonators that demonstrate the feasibility of our XBAW technology, we are still in the process of stabilizing this technology into our NY fabrication facility for manufacturing of our RF filters, and this technology is not verified yet in practice or on a commercial scale. There are also no records that can demonstrate our ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields. In addition to our limited operating history, we will depend on a limited number of manufacturers and customers for a significant portion of our revenue in the future and we cannot guarantee their acceptance of our products. Each of these factors may adversely affect our ability to implement our business strategy and achieve our business goals.

The successful development of our XBAW technology and market acceptance of our RF filters will be highly complex and will depend on the following principal competitive factors, including our ability to:

- comply with industry standards and effectively compete against current technology for producing RF acoustic wave filters,
- differentiate our products from offerings of our competitors by delivering RF filters that are higher in quality, reliability and technical performance,
- anticipate customer and market requirements, changes in technology and industry standards and timely develop improved technologies that meet high levels of satisfaction of our potential customers,
- maintain, grow and manage our internal teams to the extent we increase our operations and develop new segments of our business,
- develop and maintain successful collaborative, strategic, and other relationships with manufacturers, customers and contractors,
- protect, develop or otherwise obtain adequate intellectual property for our technology and our filters; and
- obtain strong financial, sales, marketing, technical and other resources necessary to develop, test, manufacture, commercialize and market our filters.

If we are unsuccessful in accomplishing these objectives, we may not be able to compete successfully against current and potential competitors. As a result, our XBAW technology and our RF filters may not be accepted in the market and we may never attain profitability.

We face intense competition, which may cause pricing pressures, decreased gross margins and loss of potential market share and may materially and adversely affect our business, financial condition and results of operations.

We compete with U.S. and international semiconductor manufacturers and mobile semiconductor companies of all sizes in terms of resources and market share, some of whom have significantly greater financial, technical, manufacturing and marketing resources than we do. We expect competition in our markets to intensify as new competitors enter the RF component market, existing competitors merge or form alliances, and new technologies emerge. Our competitors may introduce new solutions and technologies that are superior to our BAW technology, are verified on a commercial scale, and have achieved widespread market acceptance. Certain of our competitors may be able to adapt more quickly than we can to new or emerging technologies and changes in customer requirements or may be able to devote greater resources to the development, promotion and sale of their products than we can. This implementation may require us to modify the manufacturing process for our filters, design new products to more stringent standards, and redesign some existing products, which may prove difficult for us and result in delays in product deliveries and increased expenses.

Increased competition could also result in pricing pressures, declining average selling prices for our RF filters, decreased gross margins and loss of potential market share. We will need to make substantial investments to develop these enhancements and technologies, and we cannot assure investors that we will have funds available for these investments or that these enhancements and technologies will be successful. If a competing technology emerges that is, or is perceived to be, superior to our existing technology and we are unable to adapt to these changes and to compete effectively, our market share and financial condition could be materially and adversely affected, and our business, revenue, and results of operations could be harmed.

Changes in general economic conditions, together with other factors, cause significant upturns and downturns in the industry, and our business, therefore, may also experience cyclical fluctuations in the future.

From time to time, changes in general economic conditions, together with other factors, may cause significant upturns and downturns in the semiconductor industry. These fluctuations are due to a number of factors, many of which are beyond our control, including:

- levels of inventory in our end markets,
- availability and cost of supply for manufacturing of our RF filters using our design,
- changes in end-user demand for the products manufactured with our technology and sold by our prospective customers,
- exposure to foreign currency exchange rates, import duties and tariffs,
- industry production capacity levels and fluctuations in industry manufacturing yields,
- market acceptance of our future customers' products that incorporate our RF filters,
- the gain or loss of significant customers,
- the effects of competitive pricing pressures, including decreases in average selling prices of our RF filters,
- new product and technology introductions by competitors,
- changes in the mix of products produced and sold, and
- intellectual property disputes.

As a result, the demand for our products can change quickly and in ways we may not anticipate, and our business, therefore, may also experience cyclical fluctuations in future operating results. In addition, future downturns in the electronic systems industry could adversely impact our revenue and harm our business, financial condition and results of operations.

If we are unable to attract and retain qualified personnel to contribute to the development, manufacture and sale of our products, we may not be able to effectively operate our business.

As the source of our technological and product innovations, our key technical personnel represent a significant asset. We believe that our future success is highly dependent on the continued services of our current key officers, employees, and Board members, as well as our ability to attract and retain highly skilled and experienced technical personnel. The loss of their services could have a detrimental effect on our operations. Specifically, the loss of the services of Jeffrey Shealy, our President and Chief Executive Officer, John Kurtzweil, our Chief Financial Officer, David Aichele, our Vice President of Business Development, any major change in our Board or management, or our inability to attract, retain and motivate qualified personnel could have a material adverse effect on our ability to operate our business. The competition for management and technical personnel is intense in the wireless semiconductor industry, and therefore, we cannot assure you that we will be able to attract and retain qualified management and other personnel necessary for the design, development, manufacture and sale of our products.

Product defects could adversely affect the results of our operations and may expose us to product liability claims.

The fabrication of RF filters is a complex and precise process. If we or any of our manufacturers fails to successfully manufacture wafers that conform to our design specifications and the strict regulatory requirements of the FCC, it may result in substantial risk of undetected flaws in components or other materials used by our manufacturers during fabrication of our filters and could lead to product defects and costs to repair or replace these parts or materials. Any such failure would significantly impact our ability to develop and implement our technology and to improve performance of our RF filters. Our inability to comply with such requirements could result in significant costs, as well as negative publicity and damage to our reputation that could reduce demand for our products.

We also could be subject to product liability lawsuits if the wireless devices containing our RF filters cause injury. Recently interest groups have requested that the FCC investigate claims that wireless communications technologies pose health concerns and cause interference with airbags, hearing aids and medical devices. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product or inadequate disclosure of risks related to the use of our product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts.

If we are unable to establish effective marketing and sales capabilities or enter into agreements with third parties to market and sell our RF filters, we may not be able to effectively generate product revenues.

We have limited experience selling, marketing or distributing products and currently have a small internal marketing and sales force. To launch and commercialize our technology and our RF filters, we must build on a territory-by-territory basis marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. Therefore, we may choose to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. If so, our success will depend, in part, on our ability to enter into and maintain collaborative relationships for such capabilities, such collaborator's strategic interest in the products under development and such collaborator's ability to successfully market and sell any such products.

If we are unable to enter into such arrangements when needed on acceptable terms or at all, we may not be able to successfully commercialize our filters. Further, to the extent that we depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be successful. If we decide in the future to establish an internal sales and marketing team with technical expertise and supporting distribution capabilities to commercialize our RF filters, it could be expensive and time consuming and would require significant attention of our executive officers to manage. We may also not have sufficient resources to allocate to the sales and marketing of our filters. Any failure or delay in the development of sales, marketing and distribution capabilities, either through collaboration with one or more third parties or through internal efforts, would adversely impact the commercialization of any of our products that we obtain approval to market. As a result, our future product revenue would suffer, and we may incur significant additional losses.

Risks Related to Our Intellectual Property

If we fail to obtain, maintain and enforce our intellectual property rights, we may not be able to prevent third parties from using our proprietary technologies.

Our long-term success largely depends on our ability to market technologically competitive products which, in turn, largely depends on our ability to obtain and maintain adequate intellectual property protection and to enforce our proprietary rights without infringing the proprietary rights of third parties. While we rely upon a combination of our patent applications currently pending with the United States Patent and Trademark Office ("USPTO"), our trademarks, copyrights, trade secret protection and confidentiality agreements to protect the intellectual property related to our technologies, there can be no assurance that:

- our currently pending or future patent applications will result in issued patents,
- our limited patent portfolio will provide adequate protection to our core technology,
- we will succeed in protecting our technology adequately in all key jurisdictions,
- we will be able to finalize negotiations to enter into agreements pursuant to which we will license certain patents, or
- we can prevent third parties from disclosure or misappropriation of our proprietary information which could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding any competitive advantage we may derive from the proprietary information.

In addition, we intend to expand our international presence, and effective patent, copyright, trademark and trade secret protection may not be available or may be limited in foreign countries.

We have a limited number of patent applications, which may not result in issued patents or patents that fully protect our intellectual property.

In the United States and internationally we have twenty-eight (28) pending patent applications; however, there is no assurance that any of the pending applications or our future patent applications will result in patents being issued, or that any patents that may be issued as a result of existing or future applications will provide meaningful protection or commercial advantage to us.

The process of seeking patent protection in the United States and abroad can be long and expensive. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain at the time of filing that we are the first to file any patent application related to our single-crystal acoustic wave filter technology. In addition, patent applications are often published as part of the patent application process, even if such applications do not issue as patents. When published, such applications will become publicly available, and proprietary information disclosed in the application will become available to others. While at present we are unaware of competing patent applications, competing applications could potentially surface.

Even if all of our pending patent applications are granted and result in registration of our patents, we cannot predict the breadth of claims that may be allowed or enforced, or that the scope of any patent rights could provide a sufficient degree of protection that could permit us to gain or keep our competitive advantage with respect to these products and technologies. For example, we cannot predict:

- the degree and range of protection any patents will afford us against competitors, including whether third parties will find ways to make, use, sell, offer to sell or import competitive products without infringing our patents;
- if and when patents will be issued;
- if third parties will obtain patents claiming inventions similar to those covered by our patents and patent applications;
- if third parties have blocking patents that could be used to prevent us from marketing our own patented products and practicing our own technology; or
- whether we will need to initiate litigation or administrative proceedings (e.g. at the USPTO) in connection with patent rights, which may be costly whether we win or lose.

As a result, the patent applications we own may fail to result in issued patents in the United States. Third parties may challenge the validity, enforceability or scope of any issued patents or patents issued to us in the future, which may result in those patents being narrowed, invalidated or held unenforceable. Even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from developing similar products that do not infringe the claims made in our patents. If the breadth or strength of protection provided by the patents we hold or pursue is threatened, we may not be able to prevent others from offering similar technology and products in the RFFE mobile market and our ability to commercialize our RF filters with technology protected by those patents could be threatened.

If we fail to obtain issued patents outside of the United States, our ability to prevent misappropriation of our proprietary information or infringement of our intellectual property rights in countries outside of the United States where our filters may be sold in the future may be significantly limited. If we file foreign patent applications related to our pending U.S. patent applications or to our issued patents in the United States, these applications may be contested and fail to result in issued patents outside of the United States or we may be required to narrow our claims. Even if some or all of our patent applications are granted outside of the United States and result in issued patents, effective enforcement of rights granted by these patents in some countries may not be available due to the differences in foreign patent and other laws concerning intellectual property rights, a relatively weak legal regime protecting intellectual property rights in these countries, and because it is difficult, expensive and time-consuming to police unauthorized use of our intellectual property when infringers are overseas. This failure to obtain or maintain adequate protection of our intellectual property rights outside of the United States could have a materially adverse effect on our business, results of operations and financial conditions.

We may be involved in lawsuits to protect or enforce our patents, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe our patents or the patents of our potential licensors. To attempt to stop infringement or unauthorized use, we may need to file infringement claims, which can be expensive and time consuming and distract management.

If we pursue any infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable or may refuse to stop the other party from using the relevant technology on the grounds that our patents do not cover the technology in question. Additionally, any enforcement of our patents may provoke third parties to assert counterclaims against us. Some of our current and potential competitors have the ability to dedicate substantially greater resources to enforcing their intellectual property rights than we have. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, which could reduce the likelihood of success of, or the amount of damages that could be awarded resulting from, any infringement proceeding we pursue in any such jurisdiction. An adverse result in any infringement litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing, which could limit the ability of our filters to compete in those jurisdictions.

Interference proceedings could be provoked by third parties or brought by the USPTO to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to use it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms, or at all.

We need to protect our trademark rights and disclosure of our trade secrets to prevent competitors from taking advantage of our goodwill.

We believe that the protection of our trademark rights is an important factor in product recognition, protecting our brand, maintaining goodwill, and maintaining or increasing market share. We currently have two trademarks that we have filed to register with the USPTO - the Akoustis and BulkONE marks - and we may expend substantial cost and effort in an attempt to register new trademarks and maintain and enforce our trademark rights. If we do not adequately protect our rights in our trademarks from infringement, any goodwill that we have developed in those trademarks could be lost or impaired.

Third parties may claim that the sale or promotion of our products, when and if we have any, may infringe on the trademark rights of others. Trademark infringement problems occur frequently in connection with the sale and marketing of products in the RFFE mobile industry. If we become involved in any dispute regarding our trademark rights, regardless of whether we prevail, we could be required to engage in costly, distracting and time-consuming litigation that could harm our business. If the trademarks we use are found to infringe upon the trademark of another company, we could be liable for damages and be forced to stop using those trademarks, and as result, we could lose all the goodwill that has been developed in those trademarks.

In addition to the protection afforded by patents and trademarks, we seek to rely on copyright, trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our processes that involve proprietary know-how, information or technology that is not covered by patents. For Akoustis, this includes chip layouts, circuit designs, resonator layouts and implementation, and membrane definition. Although we require all of our employees and certain consultants and advisors to assign inventions to us, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology to enter into confidentiality agreements, our trade secrets and other proprietary information may be disclosed, or competitors may otherwise gain access to such information or independently develop substantially equivalent information. If we are unable to prevent material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or maintain the competitive advantage that we believe is provided by such intellectual property, which would weaken our competitive market position, and materially adversely affect our business and operational results.

Development of certain technologies with our manufacturers may result in restrictions on jointly-developed intellectual property.

In order to maintain and expand our strategic relationship with manufacturers of our filters, we may, from time to time, develop certain technologies jointly with these manufacturers and file for further intellectual property protection and/or seek to commercialize such technologies. We may enter into joint development agreements with manufacturers to provide for joint development works and joint intellectual property rights by us and by such manufacturer. Such agreements may restrict our commercial use of such intellectual property, or may require written consent from, or a separate agreement with, that manufacturer. In other cases, we may not have any rights to use intellectual property solely developed and owned by such manufacturer or another third party. If we cannot obtain commercial use rights for such jointly-owned intellectual property or intellectual property solely owned by these manufacturers, our future product development and commercialization plans may be adversely affected.

We may be subject to claims of infringement, misappropriation or misuse of third party intellectual property that, regardless of merit, could result in significant expense and loss of our intellectual property rights.

The semiconductor industry is characterized by the vigorous pursuit and protection of intellectual property rights. We have not undertaken a comprehensive review of the rights of third parties in our field. From time to time, we may receive notices or inquiries from third parties regarding our products or the manner in which we conduct our business suggesting that we may be infringing, misappropriating or otherwise misusing patent, copyright, trademark, trade secret and other intellectual property rights. Any claims that our technology infringes, misappropriates or otherwise misuses the rights of third parties, regardless of their merit or resolution, could be expensive to litigate or settle and could divert the efforts and attention of our management and technical personnel, cause significant delays and materially disrupt the conduct of our business. We may not prevail in such proceedings given the complex technical issues and inherent uncertainties in intellectual property litigation. If such proceedings result in an adverse outcome, we could be required to:

- pay substantial damages, including treble damages if we were held to have willfully infringed;
- cease the manufacture, offering for sale or sale of the infringing technology or processes;
- expend significant resources to develop non-infringing technology or processes;
- obtain a license from a third party, which may not be available on commercially reasonable terms, or may not be available at all; or
- lose the opportunity to license our technology to others or to collect royalty payments based upon successful protection and assertion of our intellectual property against others.

In addition, our agreements with prospective customers and manufacturing partners may require us to indemnify such customers and manufacturing partners for third party intellectual property infringement claims. Pursuant to such agreements, we may be required to defend such customers and manufacturing partners against certain claims that could cause us to incur additional costs. While we endeavor to include as part of such indemnification obligations a provision permitting us to assume the defense of any indemnification claim, not all of our current agreements contain such a provision and we cannot provide any assurance that our future agreements will contain such a provision, which could result in increased exposure to us in the case of an indemnification claim.

Defense of any intellectual property infringement claims against us, regardless of their merit, would involve substantial litigation expense and would be a significant diversion of resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, obtain one or more licenses from third parties, limit our business to avoid the infringing activities, pay royalties and/or redesign our infringing technology or alter related formulations, processes, methods or other technologies, any or all of which may be impossible or require substantial time and monetary expenditure. The occurrence of any of the above events could prevent us from continuing to develop and commercialize our filters and our business could materially suffer.

Risks Related to our Financial Condition

We have a history of losses, will need substantial additional funding to continue our operations and may not achieve or sustain profitability in the future.

Our operations have consumed substantial amounts of cash since inception. We have incurred losses since our incorporation and formation in 2014. We plan to apply for additional grants in the calendar years 2018 and 2019 and we do not expect meaningful revenues from our resonator technology until at least the second half of calendar year 2018. There is no guarantee that the grants we apply for will be awarded to us, and if our forecasts for the Company prove incorrect, the business, operating results and financial condition of the Company will be materially and adversely affected. We anticipate that our operating expenses will increase in the foreseeable future as we continue to pursue the development of our patent-pending single-crystal acoustic wave filter technology, invest in marketing, sales and distribution of our RF filters to grow our business, acquire customers, commercialize our technology in the mobile wireless market and continue to invest in our manufacturing facility in Canandaigua, NY. These efforts may prove more expensive than we currently anticipate, and we may not succeed in generating sufficient revenues to offset these higher expenses. In addition, we expect to incur significant expenses related to regulatory requirements and our ability to obtain, protect, and defend our intellectual property rights.

We may also encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may increase our capital needs and/or cause us to spend our cash resources faster than we expect. Accordingly, we will need to obtain substantial additional funding in order to continue our operations.

To date, we have financed our operations through a mix of investments from private investors, the incurrence of debt, foundry services revenue, and grant funding, and we expect to continue to utilize such means of financing for the foreseeable future. Additional funding from those or other sources may not be available when or in the amounts needed, on acceptable terms, or at all. If we raise capital through the sale of equity, or securities convertible into equity, it would result in dilution to our then existing stockholders, which could be significant depending on the price at which we may be able to sell our securities. If we raise additional capital through the incurrence of indebtedness, such as our issuance of senior secured convertible notes in May 2018, we may become subject to additional covenants restricting our business activities, and holders of debt instruments may have rights and privileges senior to those of our equity investors. In addition, servicing the interest and principal repayment obligations under debt facilities could divert funds that would otherwise be available to support research and development, or commercialization activities. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our R&D programs for our acoustic wave filter technology or any future commercialization efforts. Any of these events could materially and adversely affect our business, financial condition and prospects, and could cause our business to fail.

Our independent registered public accounting firm has expressed doubt about our ability to continue as a going concern.

The Company's historical financial statements have been prepared under the assumption that we will continue as a going concern. Our independent registered public accounting firm has issued a report that included an explanatory paragraph referring to our recurring net losses and accumulated deficit and expressing substantial doubt in our ability to continue as a going concern. Our ability to continue as a going concern is dependent upon our ability to obtain additional equity financing or other capital, attain further operating efficiencies, reduce expenditures, and, ultimately, to generate revenue. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty. However, if adequate funds are not available to us when we need them, and we are unable to commercialize our products giving us access to additional cash resources, we will be required to curtail our operations, which would, in turn, further raise substantial doubt about our ability to continue as a going concern.

Servicing our debt requires a significant amount of cash or Common Stock, and we may not have sufficient cash flow from our business or have the ability to issue the necessary number of shares of Common Stock to pay our substantial debt.

We have the ability, at our option, to pay accrued interest on our 6.5% Convertible Senior Secured Notes due 2023 in cash or freely tradable shares of Common Stock. Our ability to make scheduled payments of interest depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our debt in cash and make necessary capital expenditures. Furthermore, we may not issue Common Stock to make payments of interest to the extent such issuance would violate NASDAQ Marketplace Rule 5635(d), which limits the amount of Common Stock that we may privately issue without prior stockholder approval. Therefore, our ability to repay our debt with Common Stock will depend on the capital markets and whether we have obtained stockholder approval for such issuances of Common Stock.

If we are unable to generate sufficient cash flow or issue Common Stock to satisfy payment obligations under our convertible notes, we may be required to adopt one or more alternatives, such as selling assets or obtaining additional equity capital on terms that may be onerous or highly dilutive. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

We are subject to a number of restrictive covenants, which may restrict our business and financing activities.

The indenture governing our convertible notes imposes operating and other restrictions on us. Such restrictions may affect, and in many respects limit or prohibit, among other things, our ability to:

- incur or guarantee additional indebtedness;
- issue preferred stock or stock of any subsidiary;
- make investments or acquisitions;
- merge, consolidate, dissolve or liquidate;
- engage in certain asset sales (including the sale of stock of our subsidiary);
- grant liens (except permitted liens);
- pay dividends;
- engage in transactions with our affiliates; and
- enter into a new line of business.

The restrictions in the indenture governing the promissory notes may prevent us from taking actions that we believe would be in the best interests of our business, and may make it difficult for us to successfully execute our business strategy or effectively compete with companies that are not similarly restricted. We also may incur future debt obligations that might subject us to additional restrictive covenants that could affect our financial and operational flexibility. Our ability to comply with these covenants in future periods will largely depend on the pricing of our products and services, and our ability to successfully implement our overall business strategy. We cannot assure you that we will be granted waivers or amendments to these agreements if for any reason we are unable to comply with these agreements. The breach of any of these covenants and restrictions could result in a default under the indenture governing the promissory notes, which could result in an acceleration of our indebtedness.

Risk Related to Managing Any Growth We May Experience

We may engage in future acquisitions that could disrupt our business, cause dilution to our shareholders and harm our financial condition and operating results.

While we currently have no specific plans to acquire any other businesses, we may, in the future, make acquisitions of, or investments in, companies that we believe have products or capabilities that are a strategic or commercial fit with our current business or otherwise offer opportunities for our company. In connection with these acquisitions or investments, we may:

- issue Common Stock or other forms of equity that would dilute our existing shareholders' percentage of ownership,
- incur debt and assume liabilities, and
- incur amortization expenses related to intangible assets or incur large and immediate write-offs.

We may not be able to complete acquisitions on favorable terms, if at all. If we do complete an acquisition, we cannot assure you that it will ultimately strengthen our competitive position or that it will be viewed positively by customers, financial markets or investors. Furthermore, future acquisitions could pose numerous additional risks to our expected operations, including:

- problems integrating the purchased business, products or technologies,
- challenges in achieving strategic objectives, cost savings and other anticipated benefits,
- increases to our expenses,
- the assumption of significant liabilities that exceed the limitations of any applicable indemnification provisions or the financial resources of any indemnifying party,
- inability to maintain relationships with prospective key customers, vendors and other business partners of the acquired businesses,
- diversion of management's attention from its day-to-day responsibilities,

- difficulty in maintaining controls, procedures and policies during the transition and integration,
- entrance into marketplaces where we have no or limited prior experience and where competitors have stronger marketplace positions,
- potential loss of key employees, particularly those of the acquired entity, and
- historical financial information may not be representative or indicative of our results as a combined company.

Our business and operations would suffer in the event of system failures, and our operations are vulnerable to interruption by natural disasters, terrorist activity, power loss and other events beyond our control, the occurrence of which could materially harm our business.

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access as well as telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our R&D. If any disruption or security breach resulted in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and/or the further development of our technology for RF filters could be delayed.

We are also vulnerable to accidents, electrical blackouts, labor strikes, terrorist activities, war and other natural disasters and other events beyond our control, and we have not undertaken a systematic analysis of the potential consequences to our business as a result of any such events and do not have an applicable recovery plan in place. We carry business interruption insurance that would compensate us for certain actual losses from interruptions of our business that may occur, however that may not fully cover all losses incurred, any losses or damages incurred could cause our business to materially suffer.

Risks Related to Regulatory Requirements

We could fail to obtain Trusted Foundry accreditation in our New York Fabrication Facility.

We are in the process of applying for Trusted Foundry accreditation in our New York fabrication facility following our acquisition of the facility in June 2017. A failure to timely obtain that accreditation could hamper our ability to generate product and foundry services revenue related to potential Aerospace and Defense customers, which could adversely affect our business, financial condition and prospects.

We may incur substantial expenses in connection with regulatory requirements, and any regulatory compliance failure could cause our business to suffer.

The wireless communications industry is subject to ongoing regulatory obligations and review. See “Business - Government Regulations” above. Maintaining compliance with these requirements may result in significant additional expense to us, and any failure to maintain such compliance could cause our business to suffer.

Noncompliance with applicable regulations or requirements could also subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, or injunctions. An adverse outcome in any such litigation could require us to pay contractual damages, compensatory damages, punitive damages, attorneys’ fees and costs. These enforcement actions could harm our business, financial condition and results of operations. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, financial condition and results of operations could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management’s attention and resources and an increase in professional fees.

Compliance with regulations regarding the use of “conflict minerals” could limit the supply and increase the cost of certain metals used in manufacturing our products.

Regulations in the United States require that we determine whether certain materials used in our products, referred to as conflict minerals, originated in the Democratic Republic of the Congo or adjoining countries, or originated from recycled or scrap sources. We anticipate that we will incur costs associated with implementing policies and procedures to comply with the applicable rules and due diligence procedures. In addition, the verification and reporting requirements could affect the sourcing and availability of minerals that are used in the manufacture of our products, and we may face reputational and competitive challenges if we are unable to sufficiently verify the origins of all conflict minerals used in our products. We may also face challenges with government regulators, potential customers, suppliers and manufacturers if we are unable to sufficiently verify that the metals used in our products are conflict free. We are currently in compliance with this requirement after filing our initial report in May 2018.

There could be an adverse change or increase in the laws and/or regulations governing our business.

We and our operating subsidiary are subject to various laws and regulations in different jurisdictions, and the interpretation and enforcement of laws and regulations are subject to change. We also will be subject to different tax regulations in each of the jurisdictions where we will conduct our business or where our management or the management of our operating subsidiary is located. We expect that the scope and extent of regulation in these jurisdictions, as well as regulatory oversight and supervision, will generally continue to increase. There can be no assurance that future regulatory, judicial and legislative changes in any jurisdiction will not have a material adverse effect on us or hinder us in the operation of our business. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations applicable to us.

These current or future laws and regulations may impair our research, development or production efforts or impact the research activities we pursue. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions, which could cause our financial condition to suffer.

Investment Risks

You could lose all of your investment.

An investment in our securities is speculative and involves a high degree of risk. Potential investors should be aware that the value of an investment in the Company may go down as well as up. In addition, there can be no certainty that the market value of an investment in the Company will fully reflect its underlying value.

Our stock trades in low volumes, which may make it more difficult for investors to sell their shares quickly.

Our Common Stock trades on the NASDAQ Capital Market, but it trades in low volumes, which may make it more difficult for investors to sell their shares quickly. This situation may be attributable to a number of factors, including but not limited to the fact that we are a development-stage company that is relatively unknown to stock analysts, stock brokers, institutional investors, and others in the investor community. In addition, investors may be risk averse to investments in development-stage companies. As a consequence, it may be more difficult for investors to sell their shares quickly and our stock price may be more sensitive to sales of our Common Stock in the market. The low trading volume is outside of our control and may not increase or, if it increases, may not be maintained.

Stockholders may experience dilution of their ownership interests because of the future issuance of additional shares of our common or preferred stock or other securities that are convertible into or exercisable for our common or preferred stock, including as a result of triggering price protection rights held by certain investors.

In the future, we may issue our authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our stockholders. The Company is authorized to issue an aggregate of 45,000,000 shares of Common Stock and 5,000,000 shares of preferred stock. We may issue additional shares of our Common Stock or other securities that are convertible into or exercisable for our Common Stock in connection with hiring or retaining employees, future acquisitions, future sales of our securities for capital raising purposes, or for other business purposes. In addition, as of August 22, 2018, warrants and options to purchase 728,493 and 1,338,859 shares, respectively, of our Common Stock remained outstanding. Additionally, our outstanding convertible senior secured notes were convertible into approximately 2.3 million shares of Common Stock on such date. In addition, investors in the May 2017 Offering and December 2017 Offering (each as defined under “Management’s Discussion and Analysis - Liquidity and Capital Resources - Financing Activities” below) have certain price protection rights. The price-protected anti-dilution rights of investors in the May 2017 Offering were triggered by the December 2017 Offering conducted at \$5.50 per share and, as a result, in December 2017 the Company issued an additional 542,450 shares to investors in the May 2017 Offering for no additional consideration. If we issue shares of our Common Stock (subject to customary exceptions, including issuances of awards under Company employee stock incentive programs and certain issuances in connection with credit arrangements) at a price less than \$5.50 per share, with respect to the May 2017 Offering, or less than \$5.00 per share (or \$4.40 in the case of one investor), with respect to the December 2017 Offering, the respective investors will be entitled to receive (for no additional consideration) additional shares of our Common Stock in an amount such that, when added to the number of shares of Common Stock they initially purchased in the May 2017 Offering or December 2017 Offering, as applicable, will equal the number of shares of Common Stock that their investment in such offering would have purchased at 90% of the lower purchase price, with respect to the May 2017 Offering, or at the lower purchase price, with respect to the December 2017 Offering. The future issuance of additional shares of our Common Stock may create downward pressure on the trading price of the Common Stock. We will need to raise additional capital in the near future to meet our working capital needs, and there can be no assurance that we will not be required to issue additional shares, warrants or other convertible securities in the future in conjunction with these capital raising efforts, including at a price (or exercise prices) below the price you paid for your stock.

The ability of our Board of Directors to issue additional stock may prevent or make more difficult certain transactions, including a sale or merger of the Company.

Our Board of Directors is authorized to issue up to 5,000,000 shares of preferred stock with powers, rights and preferences designated by it. Shares of voting or convertible preferred stock could be issued, or rights to purchase such shares could be issued, to create voting impediments or to frustrate persons seeking to effect a takeover or otherwise gain control of the Company. The ability of the Board to issue such additional shares of preferred stock, with rights and preferences it deems advisable, could discourage an attempt by a party to acquire control of the Company by tender offer or other means. Such issuances could therefore deprive stockholders of benefits that could result from such an attempt, such as the realization of a premium over the market price for their shares in a tender offer or the temporary increase in market price that such an attempt could cause. Moreover, the issuance of such additional shares of preferred stock to persons friendly to the Board of Directors could make it more difficult to remove incumbent managers and directors from office even if such change were to be favorable to stockholders generally.

We do not anticipate paying dividends on our Common Stock.

Cash dividends have never been declared or paid on our Common Stock, and we do not anticipate such a declaration or payment for the foreseeable future. We expect to use future earnings, if any, to fund business growth. Therefore, stockholders will not receive any funds absent a sale of their shares of Common Stock. If we do not pay dividends, our Common Stock may be less valuable because a return on your investment will only occur if our stock price appreciates. We cannot assure stockholders that our stock price will appreciate or that they will receive a positive return on their investment if and when they sell their shares.

We are an emerging growth company, and the reduced disclosure requirements applicable to emerging growth companies may make our Common Stock less attractive to investors.

We are an emerging growth company under the JOBS Act. For as long as we continue to be an emerging growth company, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies including, but not limited to, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory stockholder vote on executive compensation and any golden parachute payments not previously approved, exemption from the requirement of auditor attestation in the assessment of our internal control over financial reporting and exemption from any requirement that may be adopted by the Public Company Accounting Oversight Board. If we do, the information that we provide stockholders may be different than what is available with respect to other public companies. We cannot predict if investors will find our Common Stock less attractive because we will rely on these exemptions. If some investors find our Common Stock less attractive as a result, there may be a less active trading market for our Common Stock and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected to take advantage of this extended transition period. Since we will not be required to comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies, our financial statements may not be comparable to the financial statements of companies that comply with the effective dates of those accounting standards.

We will remain an emerging growth company until the earliest of (1) the end of the fiscal year in which the market value of our Common Stock that is held by non-affiliates exceeds \$700 million as of the end of the second fiscal quarter, (2) the end of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more during such fiscal year, (3) the date on which we issue more than \$1 billion in non-convertible debt in a three-year period or (4) June 30, 2019, the end of the fiscal year following the fifth anniversary of the date of the first sale of our Common Stock pursuant to an effective registration statement filed under the Securities Act of 1933, as amended (the "Securities Act"). Decreased disclosures in our SEC filings due to our status as an "emerging growth company" may make it harder for investors to analyze our results of operations and financial prospects.

Being a public company is expensive and administratively burdensome.

As a public reporting company, we are subject to the information and reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and other federal securities laws, rules and regulations related thereto, including compliance with the Sarbanes-Oxley Act. Complying with these laws and regulations requires the time and attention of our Board of Directors and management, and increases our expenses. Among other things, we are required to:

- maintain and evaluate a system of internal control over financial reporting in compliance with the requirements of Section 404 of the Sarbanes-Oxley Act and the related rules and regulations of the SEC and the Public Company Accounting Oversight Board;
- maintain policies relating to disclosure controls and procedures;
- prepare and distribute periodic reports in compliance with our obligations under federal securities laws;
- institute a more comprehensive compliance function, including with respect to corporate governance; and

- involve, to a greater degree, our outside legal counsel and accountants in the above activities.

The costs of preparing and filing annual and quarterly reports, proxy statements and other information with the SEC and furnishing audited reports to stockholders is expensive and much greater than that of a privately-held company, and compliance with these rules and regulations may require us to hire additional financial reporting, internal controls and other finance personnel, and will involve a material increase in regulatory, legal and accounting expenses and the attention of management. There can be no assurance that we will be able to comply with the applicable regulations in a timely manner, if at all. In addition, being a public company makes it more expensive for us to obtain director and officer liability insurance. In the future, we may be required to accept reduced coverage or incur substantially higher costs to obtain this coverage. These factors could also make it more difficult for us to attract and retain qualified executives and members of our Board of Directors, particularly directors willing to serve on the Audit Committee of our Board of Directors.

If we fail to remediate any identified material weakness and maintain effective controls and procedures, we may not be able to accurately report our financial results, which could have a material adverse effect on our operations, financial condition, and the price of our Common Stock.

We are required to maintain disclosure controls and procedures and internal control over financial reporting. Section 404 of the Sarbanes-Oxley Act of 2002 requires us to include in our annual reports on Form 10-K an assessment by management of the effectiveness of our internal control over financial reporting. A material weakness is a deficiency, or combination of deficiencies, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Remediation of any material weakness may require extensive management attention and cause the Company to incur additional expenses. If we fail to remediate any material weakness, or if we are unable to maintain effective controls and procedures in the future, our ability to record, process, summarize, and report financial information accurately and within the time periods specified in the rules and forms of the SEC could be adversely affected, we could lose investor confidence in the accuracy and completeness of our financial reports, and we may be subject to investigation or sanctions by the SEC. Any such consequence or other negative effect could adversely affect our operations, financial condition, and the price of our Common Stock.

In addition, at such time, if any, as we are no longer an emerging growth company, our independent registered public accounting firm will have to attest to and report on management's assessment of the effectiveness of our internal control over financial reporting. If and when we are required to have our independent registered public accounting firm attest to management's assessment of the effectiveness of our internal control over financial reporting, if our independent registered public accounting firm is not satisfied with the adequacy of our internal control over financial reporting, or if the independent auditors interpret the requirements, rules, or regulations differently than we do, then they may decline to attest to management's assessment or may issue a report that is qualified. Any of these events could result in a loss of investor confidence in the reliability of our financial statements, which could negatively affect the price of our Common Stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our current headquarters in Huntersville, NC, is 10,400 square feet, and its base rent is \$9,880 per month with a term expiring December 2022. The prior headquarters, a 4,800-square foot facility was vacated in April 2018. On June 26, 2017, the Company acquired a 122,000 square foot MEMS fabrication facility in Canandaigua, New York which currently houses 42 employees (the "NY Facility"). In connection with the offering and sale of senior secured convertible notes on May 14, 2018, the Company granted a first priority lien to The Bank of New York Mellon Trust Company, N.A. on substantially all of its current and future assets, including a mortgage on the NY Facility. Additionally, the Company has entered into a Lease and Project Agreement and a Company Lease Agreement with the OCIDA covering the NY Facility, pursuant to which the Company leases the NY Facility to the OCIDA for nominal consideration and the OCIDA leases the NY Facility back to the Company for annual rent payments set forth in such agreements. The Company believes the new 10,400-square foot facility in Huntersville, NC, along with the NY Facility will be suitable and sufficient to meet the Company's needs for the next several years.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may become involved in various lawsuits and legal proceedings that arise in the ordinary course of business. Litigation is subject to inherent uncertainties, and an adverse result in any such matters may arise from time to time that may have an adverse effect on our business, financial condition, results of operations and prospects.

We are currently not aware of any material pending legal proceedings to which we are a party or of which any of our property is the subject, nor are we aware of any such proceedings that are contemplated by any governmental authority.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market Information and Holders

Our Common Stock is currently traded on the NASDAQ Capital Market under the symbol "AKTS." Prior to March 13, 2017, our Common Stock was quoted on the OTC Market (OTCQB) under the same symbol. There has been limited trading in our Common Stock to date.

As of August 22, 2018, 22,222,523 shares of our Common Stock were issued and outstanding and were held by approximately 152 stockholders of record.

The following table sets forth the high and low sales prices (or closing bid prices with respect to periods prior to March 13, 2017) for our Common Stock for the fiscal quarters indicated, as reported on NASDAQ (or on OTC Markets with respect to closing bids for periods prior to March 13, 2017). OTC Market quotations for periods prior to March 13, 2017 reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

Period	High	Low
Quarter ended September 30, 2016	4.50	3.49
Quarter ended December 31, 2016	6.30	3.91
Quarter ended March 31, 2017	14.00	5.25
Quarter ended June 30, 2017	13.01	8.35
Quarter ended September 30, 2017	8.77	5.11
Quarter ended December 31, 2017	7.30	4.91
Quarter ended March 31, 2018	7.13	5.43
Quarter ended June 30, 2018	8.64	4.86

Dividends

We have never paid any dividends on our capital stock and do not anticipate paying any cash dividends on our Common Stock in the foreseeable future. We intend to retain future earnings to fund ongoing operations and future capital requirements. Any future determination to pay dividends will be at the discretion of our Board of Directors and will be dependent upon financial condition, results of operations, capital requirements and such other factors as the Board of Directors deems relevant.

Warrants and Options

As of June 30, 2018, there were outstanding warrants and options to purchase 748,572 shares of our Common Stock and 1,338,859 shares of our Common Stock, respectively.

Equity Compensation Plan Information

The following table provides information as of June 30, 2018, relating to our equity compensation plans, under which grants of options, restricted stock, and other equity awards may be made from time to time:

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders - options	1,338,859 ⁽¹⁾	\$ 6.06	738,247 ⁽³⁾
Equity compensation plans approved by security holders – restricted stock units	879,494 ⁽²⁾	\$ 0.00	-
Total	2,218,353		738,247 ⁽³⁾

(1) Consists of 160,000 shares of Common Stock to be issued upon the exercise of outstanding options are issuable under the Company's 2015 Equity Incentive Plan (the "2015 Plan") and 1,178,859 issuable under the Company's 2016 Stock Incentive Plan.

(2) Consists of 879,494 shares of Common Stock to be issued upon the vesting of outstanding restricted stock units issuable under the Company's 2016 Stock Incentive Plan.

(3) As of June 30, 2018, 738,247 additional shares of Common Stock remained available for future issuance under the Company's 2016 Stock Incentive Plan. No additional grants will be made under the Company's 2014 Stock Plan (the "2014 Plan") or the 2015 Plan.

Recent Sales of Unregistered Securities

We have not sold any equity securities during the fiscal year ended June 30, 2018 that were not registered under the Securities Act, other than as previously reported in our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K filed with the SEC.

Purchases of Equity Securities

Unvested restricted stock grants awarded under the 2014 Plan and the 2015 Plan are subject to Company repurchase options upon certain terminations of the recipient's service with the Company. As of June 30, 2018, 434,561, shares of restricted stock remained subject to repurchase options, which are scheduled to expire between July 2018 and December 2020. We repurchased 168,652 shares of our equity securities pursuant to these repurchase options during the fiscal year ended June 30, 2018.

Transfer Agent

The transfer agent for our Common Stock is Globex Transfer, LLC. The transfer agent's address is 780 Deltona Blvd., Suite 202, Deltona, FL 32725 and its telephone number is 813-344-4490.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

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

The following management's discussion and analysis should be read in conjunction with the historical financial statements and the related notes thereto contained in this Report. See also the "Cautionary Note Regarding Forward-Looking Information" on page 1 of this Report.

The following discussion highlights the results of operations and the principal factors that have affected our financial condition, as well as our liquidity and capital resources for the periods described, and provides information that management believes is relevant for an assessment and understanding of the statements of financial condition and results of operations presented herein. The following discussion and analysis are based on the audited financial statements contained in this Report, which we have prepared in accordance with United States generally accepted accounting principles. You should read the discussion and analysis together with such financial statements and the related notes thereto.

Overview

Akoustis® is a development-stage company focused on developing, designing, and manufacturing innovative RF filter products for the mobile wireless device industry, including for products such as smartphones and tablets, cellular infrastructure equipment, and WiFi premise equipment. Located between the device's antenna and its digital backend, the RF front-end ("RFFE") is the circuitry that performs the analog signal processing and contains components such as amplifiers, filters and switches. To construct the resonators that are the building blocks for the RF filter, we have developed a new and proprietary MEMS-based BAW technology and unique manufacturing flow, called XBAW. Our XBAW process incorporates high purity piezoelectric materials to explore high power, high frequency and wide bandwidth applications. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RFFE

We believe owning the core resonator technology and manufacturing our designs is the most direct and efficient means of delivering our solutions to the market. Furthermore, our technology is based upon bulk-mode resonance, which is superior to surface-mode resonance for high-band applications that include 4G/LTE, emerging 5G, WiFi, and military applications. While some of our target customers utilize or make the RFFE module, they may lack access to critical high-band filter technology to compete in high-band applications and other traditional surface-mode solutions where higher power performance is required. We intend to design, manufacture, and market our RF filter products to mobile phone original equipment manufacturers ("OEMs"), military and defense OEM's, cellular infrastructure OEMs, and WiFi premise equipment customers and to enable broader competition among the front-end module manufacturers. We plan to operate as a "pure-play" RF filter supplier and align with the front-end module manufacturers who seek to acquire high performance filters to grow their module business.

We currently build pre-production RF filter circuits, using our first generation XBAW wafer process, in our 122,000-square foot wafer-manufacturing plant located in Canandaigua, New York, which we acquired in June 2017. To date, we have been awarded 17 patents including two blocking patents that we have licensed from Cornell University and the University of California, Santa Barbara and we have over 28 additional patents pending. These patents cover our XBAW process and technology from the substrate level through the system application layer. Where possible, we leverage both federal and state level, R&D grants to support development and commercialization of our technology.

We are developing RF filters for 4G/LTE, emerging 5G, military and WiFi bands and the associated proprietary models and design kits required to design our RF filters. As we qualify our first RF filter products, we plan to engage with target customers to evaluate our filter solution. Our initial designs will target high-band 4G/LTE, emerging 5G, and WiFi frequency bands. Since Akoustis owns its core technology and controls access to its intellectual property, we expect to offer several ways to engage with potential customers. First, we intend to engage with multiple wireless markets, providing filters that we design and offer as standard catalog components. Second, we expect to deliver filters to customer-supplied specifications, which we will design and fabricate for a specific customer. Finally, we will offer our models and design kits for our customers to design their own filter utilizing our proprietary technology.

We have earned minimal revenue from operations since inception, and we have funded our operations primarily with development contracts, RF filter prototype orders, government grants, MEMS foundry and engineering services, sales of our equity securities, and issuance of debt. We have incurred losses totaling approximately \$38.2 million from inception through June 30, 2018. These losses are primarily the result of material and processing costs associated with developing and commercializing our technology, as well as personnel costs, professional fees (primarily accounting and legal), and other general and administrative ("G&A") expenses. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves materials and solid-state device technology development and engineering of catalog and custom filter designs.

Plan of Operation

We plan to commercialize our technology by designing and manufacturing single-band and multi-band BAW RF filter solutions in our New York wafer fabrication facility. We expect our filter solutions will address problems (such as loss, bandwidth, power handling, and isolation) created by the growing number of frequency bands in the RFFE of mobile devices, infrastructure and premise equipment to support 4G/LTE, emerging 5G, and WiFi. We have prototyped our first single-band low-loss BAW filter designs for 4G/LTE frequency bands, which are dominated by competitive BAW solutions and historically cannot be addressed with low-band, lower power handling surface acoustic wave (SAW) technology. During the second half of calendar 2017 we sampled filter product prototypes to prospective customers that cover LTE, Radar and WiFi applications. In March and April of 2018, we announced our first two commercial products, the AKF-1252 and the AKF-1938, which we are currently sampling with customers involved in the WiFi market and military market, respectively. In May we announced a Non Recurring Engineering ("NRE") contract and purchase order for a 4G/LTE infrastructure customer that we expect will ship in early calendar 2019. Additionally, in June 2018 we announced a 5.2 GHz BAW WiFi filter for the handset market, the AKF-1652. We expect to begin commercial production for one or more customers in the second half of calendar 2018. As we receive customer evaluations, we will do further iterations on the designs and provide next generation samples for evaluation and characterization.

To succeed, we must convince mobile phone OEMs, RFFE module manufacturers, cellular infrastructure OEMs, and WiFi premise equipment OEMs to use our XBAW filter technology in their systems and modules. However, since there are two dominant BAW filter suppliers in the industry that have high-band technology, and both utilize such technology as a competitive advantage at the module level, we expect customers that lack access to high-band filter technology will be open to engage with our pure-play filter company.

In June 2018 we completed the qualification of our high purity piezoelectric materials process and our XBAW manufacturing process to support an initial product family of 4G/LTE, emerging 5G mobile, military and WiFi filter solutions. Now that we have stabilized our process technology in a manufacturing environment, we intend to complete a production release of our high-band filter products in the frequency range from 2 GHz to 6 GHz. The target frequency bands will be prioritized based upon customer priority. We expect this will require recruiting and hiring additional personnel and capital investments.

We plan to pursue RF filter design and R&D development agreements and potentially joint ventures with target customers and other strategic partners, but we cannot guarantee we will be successful in these efforts. These types of arrangements may subsidize technology development costs and qualification, filter design costs, and offer complementary technology and market intelligence and other avenues to revenue. However, we intend to retain ownership of our core technology, intellectual property, designs, and related improvements. We expect to pursue development of catalog designs for multiple customers and to offer such catalog products in multiple sales channels.

As of June 30, 2018, the Company had \$14.8 million of cash and cash equivalents to fund our operations, including R&D, commercialization of our technology, development of our patent strategy and expansion of our patent portfolio, as well as to provide working capital and funds for other general corporate purposes. These funds are expected to be sufficient to fund our operations into the fourth quarter of fiscal 2019. However, there is no assurance that the Company's projections and estimates are accurate. Our anticipated expenses include employee salaries and benefits, compensation paid to consultants, capital costs for research and other equipment, costs associated with development activities (including travel and administration), costs associated with the integration and operation of our New York wafer fabrication facility and related operations, legal expenses, sales and marketing costs, G&A expenses, and other costs associated with an early stage, public technology company. We anticipate increasing the number of employees; however, this is highly dependent on the nature of our development efforts, our success in commercialization, and our ability to source additional funds. We anticipate adding employees for R&D in both our New York and North Carolina facilities, as well as G&A functions, to support our efforts. We expect capital expenditures to be approximately \$4.1 million for the purchase of equipment and software during the next 12 months, and we are currently investigating the feasibility of using debt facilities, equipment leases, or government grants to fund all or part of the purchase of the equipment.

The amounts we actually spend for any specific purpose may vary significantly and will depend on a number of factors, including, but not limited to, the pace of progress of our commercialization and development efforts, actual needs with respect to product testing, R&D, market conditions, changes in or revisions to our marketing strategies, and the integration of our New York wafer fabrication facility and related operations into our business.

Commercial development of new technology, by its nature, is unpredictable. Although we will undertake development efforts with commercially reasonable diligence, there can be no assurance that our current cash position will be sufficient to enable us to commercialize our technology to the extent needed to create future sales to sustain operations. If our current cash is insufficient for these purposes, we are unable to source additional funds on terms acceptable to the Company (or at all), or we experience costs in excess of estimates to continue our R&D plan, it is possible that we would not have sufficient resources to continue as a going concern and we may be required to curtail or suspend our operations. Even if we are able to source sufficient funds to continue as a going concern, our technology may not be accepted, we may never earn revenues sufficient to support our operations, and we may never be profitable.

Critical Accounting Policies

The following discussion and analysis of our financial condition and results of operations is based upon our financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). Certain accounting policies and estimates are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of our control. As a result, they are subject to an inherent degree of uncertainty. In applying these policies, our management uses its judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate.

Derivative Liability

The Company evaluates its options, warrants, convertible notes, and other contracts, if any, to determine if those contracts or embedded components of those contracts qualify as derivatives to be separately accounted for in accordance with paragraph 815-10-05-4 and Section 815-40-25 of the FASB Accounting Standards Codification. The result of this accounting treatment is that the fair value of the embedded derivative is marked-to-market each balance sheet date and recorded as either an asset or a liability. The change in fair value is recorded in the consolidated statement of operations as other income or expense. Upon conversion, exercise or cancellation of a derivative instrument, the instrument is marked to fair value at the date of conversion, exercise or cancellation and then the related fair value is reclassified to equity.

In circumstances where the embedded conversion option in a convertible instrument is required to be bifurcated and there are also other embedded derivative instruments in the convertible instrument that are required to be bifurcated, the bifurcated derivative instruments are accounted for as a single, compound derivative instrument.

The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period. Equity instruments that are initially classified as equity that become subject to reclassification are reclassified to liability at the fair value of the instrument on the reclassification date. Derivative instrument liabilities will be classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument is expected within 12 months of the balance sheet date.

The Company adopted Section 815-40-15 of the FASB Accounting Standards Codification (“Section 815-40-15”) to determine whether an instrument (or an embedded feature) is indexed to the Company’s own stock. Section 815-40-15 provides that an entity should use a two-step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument’s contingent exercise and settlement provisions.

The Company utilizes a binomial option pricing model to compute the fair value of the derivative liability and to mark to market the fair value of the derivative at each balance sheet date. The Company records the change in the fair value of the derivative as other income or expense in the consolidated statements of operations.

The Company utilizes the with-and-without method, a form of the income approach model to compute the fair value of its embedded derivatives associated with its convertible note. The fair value of the embedded derivatives represents the difference in the present value of anticipated cash flows assuming the feature is present as compared to a security without the same feature. The Company records the change in the fair value of the derivative as other income or expense in the consolidated statements of operations.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents and accounts payable approximate fair value due to the short-term nature of these instruments.

The Company measures the fair value of financial assets and liabilities based on the guidance of ASC 820, “*Fair Value Measurements and Disclosures*,” which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements.

ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

Fair value measurements are categorized using a valuation hierarchy for disclosure of the inputs used to measure fair value, which prioritize the inputs into three broad levels:

Level 1 - Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 - Pricing inputs are other than quoted prices in active markets included in level 1, which are either directly or indirectly observable as of the reported date, and include those financial instruments that are valued using models or other valuation methodologies.

Level 3 - Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value.

Equity-based compensation

The Company recognizes compensation expense for all equity-based payments in accordance with ASC 718 "*Compensation - Stock Compensation*". Under fair value recognition provisions, the Company recognizes equity-based compensation net of an estimated forfeiture rate and recognizes compensation cost only for those shares expected to vest over the requisite service period of the award.

Restricted stock awards and restricted stock units are granted at the discretion of the Company. These awards are restricted as to the transfer of ownership and generally vest over the requisite service periods, typically over a four-year period (vesting on a straight-line basis). The fair value of a stock award is equal to the fair market value of a share of Company stock on the grant date.

The fair value of an option award is estimated on the date of grant using the Black-Scholes option valuation model. The Black-Scholes option valuation model requires the development of assumptions that are inputs into the model. These assumptions are the value of the underlying share, the expected stock volatility, the risk-free interest rate, the expected life of the option, and the dividend yield on the underlying stock. Expected volatility is calculated using the historical volatilities of the Company's common stock traded on the Nasdaq Capital Market. Risk-free interest rates are calculated based on continuously compounded risk-free rates for the appropriate term. The dividend yield is assumed to be zero as the Company has never paid or declared any cash dividends on its Common Stock and does not intend to pay dividends on its Common Stock in the foreseeable future. The Company accounts for the impact of forfeitures as they occur.

Determining the appropriate fair value model and calculating the fair value of equity-based payment awards requires the input of the subjective assumptions described above. The assumptions used in calculating the fair value of equity-based payment awards represent management's best estimates, which involve inherent uncertainties and the application of management's judgment. As a result, if factors change and the Company uses different assumptions, our equity-based compensation could be materially different in the future. In addition, the Company is required to account for the impact of forfeitures as the forfeitures for those shares occur. If the Company's actual forfeitures are material, the equity-based compensation could be significantly different from what the Company has recorded in the current period.

The Company accounts for share-based payments granted to non-employees in accordance with ASC 505-40, "*Equity Based Payments to Non-Employees*". The Company determines the fair value of the stock-based payment as either the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. If the fair value of the equity instruments issued is used, it is measured using the stock price and other measurement assumptions as of the earlier of either (1) the date at which a commitment for performance by the counterparty to earn the equity instruments is reached, or (2) the date at which the counterparty's performance is complete. The fair value of the equity instruments is re-measured each reporting period over the requisite service period.

Results of Operations

Our results of operations are presented for the fiscal years ended June 30, 2018 and June 30, 2017.

Year Ended June 30, 2018 Compared to Year Ended June 30, 2017

Revenue

The Company recorded revenue of \$1.2 million for the year-ended June 30, 2018 as compared to \$486,000 for the year ended June 30, 2017. Revenue recorded during the year ended June 30, 2018, included \$1.0 million of revenue for foundry services provided at the NY Facility, with the remaining revenue consisting primarily of grant revenue. The revenue for the fiscal year ended June 30, 2017 consisted primarily of grant revenue.

Cost of Revenue

The Company recorded cost of revenue of \$1,019,000 in fiscal 2018 which includes direct labor, material, and facility costs primarily associated with the foundry services revenue, as compared to \$0 in fiscal year 2017.

Research and Development Expenses

R&D expenses were \$13.3 million for the year-ended June 30, 2018 and were \$8.3 million, or 165%, higher than the prior year amount of \$5.0 million. The year-over-year increase was primarily in the areas of R&D personnel, stock-based compensation, depreciation, and facility costs. Personnel costs were \$5.0 million compared to \$1.4 million in the comparative period, an increase of \$3,592,000 or 262%. The higher spend was due to R&D personnel in our acquired NY Facility, as well as incremental R&D hires. Stock-based compensation of \$2.4 million for the year ended June 30, 2018 was \$501,000, or 26%, higher than the year ended June 30, 2017 due to new stock awards made to R&D personnel and the change in the fair value of awards from prior periods. Facility and material costs of \$4.5 million primarily associated with the NY Facility acquired in June 2017, include utilities of \$983,000, repair and maintenance costs of \$1,182,000, and supplies, materials and parts costs of \$2,166,000. In addition, depreciation costs were \$1.1 million as compared to \$0.1 million in the comparative period ended June 30, 2017 which was an increase of \$963,000, or 975% due to the NY Facility acquisition and additional capital expenditures made during the year.

General and Administrative Expenses

General and administrative (“G&A”) costs include salaries and wages for executive and administrative staff, stock-based compensation, professional fees, insurance costs and other general costs associated with the administration of our business. General and administrative expenses for the year ended June 30, 2018 were \$8.8 million versus \$6.2 million for the comparative period. The increase of \$2.6 million, or 43%, was associated mainly with increases in personnel costs, professional fees, insurance expense, stock-based compensation and travel. Personnel costs of \$2.8 million were higher by \$1,380,000, or 97%, due to the increase in the number of administrative personnel, while professional fees of \$1.6 million, associated with legal, accounting and investor relations, were higher by \$352,000, or 29%. Stock-based compensation for the year ended June 30, 2018 was \$3.1 million and higher by \$358,000, or 13%, as a result of the issuance of new awards for G&A personnel and the recording of the change in the fair value of stock grants issued to investor relations consultants. Additionally, G&A costs for the year ended June 30, 2018 included travel costs of \$351,000, insurance of \$317,000, and depreciation of \$200,000.

Other Operating Expenses

Other operating expenses for the year ended June 30, 2018 included a \$0.4 million loss on the impairment of assets held for sale and asset disposals, which were \$0 for the year ended June 30, 2017.

Other Income/(Expense)

Other income for the year ended June 30, 2018 was \$539,000 and included a \$0.5 million gain on change in fair value of our contingent real estate liability, and rental income of \$0.3 million, offset by \$0.3 in interest expense related to the amortization of debt issuance costs on the convertible note. Other income for the year ended June 30, 2017 was \$850,000 and included a \$1.7 million gain on bargain purchase related to the acquisition of the STC-MEMS Business, offset by an \$0.9 million loss on the fair value of derivatives for placement agent warrants issued in connection with private placements in 2015 and 2016

Net Loss

The Company recorded a net loss of \$21.7 million for the year ended June 30, 2018, compared to a net loss of \$9.8 million for the year ended June 30, 2017. The year-over-year incremental loss of \$11.9 million, or 121%, was driven by higher personnel costs of \$5.0 million, primarily in the NY Facility, increased stock compensation costs of \$0.9 million, decreased other income (net) of \$0.3 million, increased facility and material costs of \$3.2 million, and depreciation of \$1.2 million.

Liquidity and Capital Resources

Financing Activities

Since inception, the Company has recorded approximately \$1.0 million and \$1.1 million of revenue from contract research and government grants, and foundry services revenue, respectively. Our operations thus far have been funded primarily with contract research and government grants, foundry services, sales of our equity securities, and debt.

The Company has \$14.8 million of cash on hand as of June 30, 2018, which reflects an increase of \$5.2 million compared to \$9.6 million as of June 30, 2017. The \$5.2 million increase is primarily due to \$14.2 million in net cash used in operating activities and \$6.9 million in capital expenditures from July 1, 2017 to June 30, 2018, offset by the receipt of \$13.2 million in net proceeds from sales of our common stock and \$13.1 million in net proceeds received from our convertible note during the twelve months ended June 30, 2018. The Company estimates that cash on hand will fund its operations, including current capital expense commitments into the fourth quarter of fiscal 2019. We will need to obtain additional capital through the sale of additional equity securities, debt and additional grants, or otherwise, to fund operations past that date. There is no assurance that the Company's projections and estimates are accurate. Although the Company is actively managing and controlling the Company's cash outflows to mitigate these risks, these matters raise substantial doubt about the Company's ability to continue as a going concern within one year from the date of this filing.

With closings in each of November and December 2016 and January and February 2017, the Company sold a total of 2,142,000 shares of Common Stock in a private placement offering (the “2016-2017 Offering”) at a fixed purchase price of \$5.00 per share (the “2016-2017 Offering Price”). Aggregate gross proceeds were \$10.7 million (before deducting commissions and expenses of the offering).

In May 2017, the Company held a closing of a private placement offering (the “2017 Offering”) in which it sold an aggregate of 663,000 shares of Common Stock at a fixed purchase price of \$9.00 per share to accredited investors, for aggregate gross proceeds of \$5,967,000 (before deducting commissions and expenses of the offering).

During the year ended June 30, 2018, the Company sold a total of 2,640,819 shares of its common stock at \$5.50 per share in a private placement for aggregate gross proceeds of \$14.5 million before deducting commissions and expenses of approximately \$1.3 million. The proceeds of the offering will be used to fund development and commercialization of the Company’s technology, capital expenditures and general corporate expenditures. In addition to the commissions and expenses paid, the Company issued to the placement agents warrants to purchase 154,177 shares of the Company’s common stock.

On May 14, 2018 the Company completed the offering of \$15.0 million principal amount of the Company’s 6.5% Convertible Senior Secured Notes due 2023. The net proceeds of the offering after payment of offering costs were approximately \$13.1 million. The notes will mature on May 31, 2023, unless earlier converted, redeemed or repurchased. Interest on the notes accrues at the rate of 6.5% per year and is payable at the Company’s option quarterly in cash and/or freely tradable shares of the Company’s common stock, subject to certain limitations. The notes may be converted into common stock at the option of the holder at any time prior to maturity at an initial conversion price of \$6.55 per share, subject to adjustment under certain circumstances. If the holder elects to convert the notes at any time on or after the date that is one year after the last date of original issuance of the notes and prior to May 31, 2021, the holder will also receive a make-whole payment equal to the remaining scheduled interest payments that would have been made on the notes converted had such notes remained outstanding through May 31, 2021 (the “put date”). At the Company’s option, make-whole payments may be paid in cash and/or freely tradable shares of the Company’s common stock.

Balance Sheet and Working Capital

June 30, 2018 Compared to June 30, 2017

As of June 30, 2018, the Company had current assets of \$15.9 million made up primarily of cash on hand of \$14.8 million. As of June 30, 2017, current assets were \$10.0 million comprised primarily of cash on hand of \$9.6 million. The \$5.2 million increase in cash year over year was due to net proceeds from private placement offerings and convertible note issuance of \$26.3 million offset by the cash expended for operations of \$14.2 million and the investment in machinery and equipment of \$6.9 million.

Property, Plant and Equipment was \$12.8 million as of June 30, 2018 as compared to a balance of \$7.8 million as of the year ended June 30, 2017. The approximate \$5.0 million year-over-year increase is primarily due to the purchase of equipment and leasehold improvements of \$6.9 million, offset by depreciation of \$1.3 million, and assets impairment and disposals of \$0.5 million.

Total assets as of June 30, 2018 and June 30, 2017 were \$29.3 million and \$18.1 million, respectively.

Current liabilities as of June 30, 2018 were \$2.6 million and increased year-over-year by \$1.3 million. We saw an increase in accounts payable and accrued expenses of \$1.3 million due mainly to the ramp up of both R&D activities and administrative and support costs including additional personnel, material spend, and professional fees.

Long-term liabilities totaled \$12.8 million as of June 30, 2018, compared to \$1.7 million for the prior year period. The increase of \$11.1 million was mainly due to the decrease in the real estate contingent liability of \$0.5 million, offset by an increase in other long term liabilities of \$0.1 million, and convertible notes of \$11.5 million, net of debt discount and issuance costs.

Stockholders' equity was \$13.8 million as of June 30, 2018, compared to \$15.0 million as of June 30, 2017 a decrease of \$1.2 million. Additional paid-in-capital ("APIC") was \$52.1 million as of June 30, 2018 and increased by \$20.6 million. The year-over-year increase was due to an increase from net proceeds of \$13.2 million for the issuance of Common Stock during the year, less \$0.6 million for the fair value of warrants issued to placement agents for a total of 154,177 shares of Common Stock, an increase of \$6.1 million of APIC recorded due to the vesting of restricted stock agreements granted to employees and contractors in lieu of cash compensation, and an increase due to the intrinsic value of the beneficial conversion feature of the convertible notes of \$1.8 million. The \$1.2 million decrease in stockholders equity consisted of the \$20.6 million increase in APIC reduced by the \$21.7 million net loss recorded for the year ended June 30, 2018.

Cash Flow Analysis

Year Ended June 30, 2018 Compared to the Year Ended June 30, 2017

Operating activities used cash of \$14.2 million during the year ended June 30, 2018 and \$5.5 million for the 2017 comparative period. The \$8.7 million year-over-year increase in cash used was attributable to higher operating expenses associated with the ramp up of development and commercialization activities (primarily R&D personnel and material costs), higher spend on G&A costs for support personnel and professional fees and increase in depreciation expense.

Investing activities used cash of \$7.0 million for the year ended June 30, 2018 compared to \$4.5 million for the comparative year ended June 30, 2017. The \$2.5 million year-over-year increase was primarily due to increased spend on R&D equipment and leasehold improvements.

Financing activities provided cash of \$26.4 million for the year ended June 30, 2018 versus \$15.6 million for the 2017 comparative period. The \$10.8 million increase was due to additional proceeds from common stock and convertible notes issued during the period compared to the prior period.

Off-Balance Sheet Transactions

The Company did not engage in any "off-balance sheet arrangements" (as that term is defined in Item 303(a)(4)(ii) of Regulation S-K) as of June 30, 2018.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTAL DATA

INDEX TO FINANCIAL STATEMENTS

	<u>Page</u>
<u>Report of Independent Registered Public Accounting Firm</u>	<u>F-2</u>
<u>Consolidated Balance Sheets as of June 30, 2018 and June 30, 2017</u>	<u>F-3</u>
<u>Consolidated Statements of Operations for the years ended June 30, 2018 and 2017</u>	<u>F-4</u>
<u>Consolidated Statement of Changes in Stockholders' Equity for the years ended June 30, 2018 and 2017</u>	<u>F-5</u>
<u>Consolidated Statements of Cash Flows for the years ended June 30, 2018 and 2017</u>	<u>F-6</u>
<u>Notes to Consolidated Financial Statements</u>	<u>F-7</u>

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
Akoustis Technologies, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Akoustis Technologies, Inc. and Subsidiary (the "Company") as of June 30, 2018 and 2017, the related consolidated statements of operations, changes in stockholders' equity and cash flows for each of the two years in the period ended June 30, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of June 30, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended June 30, 2018, in conformity with accounting principles generally accepted in the United States of America.

Explanatory Paragraph – Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As more fully described in Note 2, the Company has incurred significant losses and needs to raise additional funds to meet its obligations and sustain its operations. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 audits 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 financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Marcum llp

Marcum llp

We have served as the Company's auditor since 2015.

New York, NY
August 29, 2018

Akoustis Technologies, Inc.
Consolidated Balance Sheets

	<u>June 30,</u> <u>2018</u>	<u>June 30,</u> <u>2017</u>
Assets		
Assets:		
Cash and cash equivalents	\$ 14,816,717	\$ 9,631,520
Accounts receivable	214,659	-
Inventory	57,556	188,476
Prepaid expenses	305,942	158,457
Other current assets	484,173	42,808
Total current assets	<u>15,879,047</u>	<u>10,021,261</u>
Property and equipment, net	12,820,169	7,853,814
Intangibles, net	264,295	206,527
Assets held for sale, net	333,250	—
Other assets	11,155	10,715
Total Assets	<u>\$ 29,307,916</u>	<u>\$ 18,092,317</u>
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable and accrued expenses	\$ 2,593,432	\$ 1,336,368
Deferred revenue	52,938	14,500
Total current liabilities	<u>2,646,370</u>	<u>1,350,868</u>
Long-term Liabilities:		
Contingent real estate liability	1,229,966	1,730,542
Convertible notes payable, net of debt discount and issuance costs	11,464,632	—
Other long term liabilities	117,086	—
Total long-term liabilities	<u>12,811,684</u>	<u>1,730,542</u>
Total Liabilities	<u>15,458,054</u>	<u>3,081,410</u>
Stockholders' Equity		
Preferred Stock, par value \$0.001: 5,000,000 shares authorized; none issued and outstanding	—	—
Common stock, \$0.001 par value; 45,000,000 shares authorized; 22,203,437 and 19,075,050 shares issued and outstanding at June 30, 2018 and June 30, 2017, respectively	22,203	19,075
Additional paid in capital	52,074,343	31,499,889
Accumulated deficit	(38,246,684)	(16,508,057)
Total Stockholders' Equity	<u>13,849,862</u>	<u>15,010,907</u>
Total Liabilities and Stockholders' Equity	<u>\$ 29,307,916</u>	<u>\$ 18,092,317</u>

See accompanying notes to the consolidated financial statements.

Akoustis Technologies, Inc.
Consolidated Statements of Operations

	For the Year Ended <u>June 30, 2018</u>	For the Year Ended <u>June 30, 2017</u>
Revenue	\$ 1,207,865	\$ 486,496
Cost of revenue	<u>1,019,490</u>	<u>—</u>
Gross profit	<u>188,375</u>	<u>486,496</u>
Operating expenses		
Research and development	13,266,975	5,013,260
General and administrative expenses	8,804,103	6,156,807
Loss on disposal of fixed assets	45,454	—
Impairment of assets held for sale	<u>349,571</u>	<u>—</u>
Total operating expenses	<u>22,466,103</u>	<u>11,170,067</u>
Loss from operations	<u>(22,277,728)</u>	<u>(10,683,571)</u>
Other (expense) income		
Other income	352	—
Interest (expense) income	(329,422)	1,936
Bargain purchase	—	1,725,881
Rental income	313,496	—
Change in fair value of contingent real estate liability	500,576	—
Change in fair value of derivative liabilities	<u>54,099</u>	<u>(877,490)</u>
Total other income	<u>539,101</u>	<u>850,327</u>
Net loss	<u>\$ (21,738,627)</u>	<u>\$ (9,833,244)</u>
Net loss per common share - basic and diluted	<u>\$ (1.04)</u>	<u>\$ (0.58)</u>
Weighted average common shares outstanding -basic and diluted	<u>20,928,235</u>	<u>16,990,536</u>

See accompanying notes to the consolidated financial statements.

Akoustis Technologies, Inc.
Consolidated Statement of Changes in Stockholders' Equity
For the Years Ended June 30, 2018 and 2017

	Common Stock		Additional Paid In Capital	Accumulated Deficit	Stockholders' Equity
	Shares	Amount			
Balance, June 30, 2016	15,375,981	15,376	9,335,801	(6,674,813)	2,676,364
Common stock issued for cash, net of issuance costs	2,805,000	2,805	15,381,966	—	15,384,771
Warrants issued to underwriter	—	—	(991,767)	—	(991,767)
Common stock issued for services	783,000	783	4,967,318	—	4,968,101
Common stock issued for exercise of warrants	111,069	111	171,649	—	171,760
Vesting of restricted shares	—	—	434,703	—	434,703
Transfer of warrants from liability to equity classification	—	—	2,200,219	—	2,200,219
Net loss	—	—	—	(9,833,244)	(9,833,244)
Balance, June 30, 2017	19,075,050	19,075	31,499,889	(16,508,057)	15,010,907
Common stock issued for cash, net of issuance costs	3,183,269	3,183	13,196,747	—	13,199,930
Warrants issued to underwriter	—	—	(645,757)	—	(645,757)
Common stock issued for services	131,000	131	5,617,343	—	5,617,474
Common stock issued for exercise of warrants	17,770	18	74,923	—	74,941
Intrinsic value of beneficial conversion feature	—	—	1,809,161	—	1,809,161
Vesting of restricted shares	—	—	521,833	—	521,833
Repurchase of common shares	(203,652)	(204)	204	—	—
Net loss	—	—	—	(21,738,627)	(21,738,627)
Balance, June 30, 2018	<u>22,203,437</u>	<u>\$ 22,203</u>	<u>\$ 52,074,343</u>	<u>\$ (38,246,684)</u>	<u>\$ 13,849,862</u>

See accompanying notes to the consolidated financial statements.

Akoustis Technologies, Inc.
Consolidated Statements of Cash Flows

	For the Year Ended June 30, 2018	For the Year Ended June 30, 2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (21,738,627)	\$ (9,833,244)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	1,247,518	102,876
Amortization of intangibles	15,078	7,208
Share-based compensation	5,490,517	4,631,115
Loss on disposal of assets	45,454	—
Impairment on assets held for sale	349,571	—
Change in fair value of derivative liabilities	(54,099)	877,490
Amortization of debt discount	204,581	—
Change in fair value of contingent real estate liability	(500,576)	—
Bargain purchase	—	(1,725,881)
Changes in operating assets and liabilities:		
Accounts receivable	(214,659)	—
Inventory	130,920	(48,883)
Prepaid expenses	(147,485)	(103,639)
Other current asset	(441,365)	(42,808)
Other assets	(440)	—
Accounts payable and accrued expenses	1,258,106	572,644
Change in other long term liabilities	117,086	—
Deferred revenue	38,438	14,500
Net Cash Used In Operating Activities	(14,199,982)	(5,548,622)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Cash paid for machinery and equipment	(6,942,148)	(1,625,055)
Cash paid for acquisition of STC-MEMS	—	(2,846,049)
Cash paid for intangibles	(72,846)	(60,729)
Net Cash Used In Investing Activities	(7,014,994)	(4,531,833)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of common stock	13,199,930	15,384,771
Proceeds from exercise of warrants	74,941	171,760
Proceeds received from convertible notes, net	13,125,302	—
Net Cash Provided By Financing Activities	26,400,173	15,556,531
Net Increase (Decrease) in Cash	5,185,197	5,476,076
Cash - Beginning of Period	9,631,520	4,155,444
Cash - End of Period	\$ 14,816,717	\$ 9,631,520
SUPPLEMENTARY CASH FLOW INFORMATION:		
Cash Paid During the Period for:		
Income taxes	\$ —	\$ —
Interest	\$ —	\$ —
SUPPLEMENTARY DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Stock compensation payable	\$ 3,033	\$ 654,781
Warrants issued for stock issuance costs	\$ 645,757	\$ 991,767
Reclassification of derivative liability to additional paid in capital	\$ —	\$ 2,200,219
Contingent liability	\$ 1,229,966	\$ 1,730,542
Reclassification of fixed assets to assets held for sale, net	\$ 682,821	\$ —
Debt issuance costs included in accounts payable and accrued expenses	\$ 29,824	\$ —
Intrinsic value of beneficial conversion feature	\$ 1,809,161	\$ —
Derivative liability of convertible notes	\$ 1,104,701	\$ —

See accompanying notes to the consolidated financial statements.

AKOUSTIS TECHNOLOGIES, INC.
Notes to the Consolidated Financial Statements

Note 1. Organization

Akoustis Technologies, Inc (“the Company”) was incorporated under the laws of the State of Nevada on April 10, 2013. Effective December 15, 2016, the Company changed its state of incorporation from the State of Nevada to the State of Delaware. Through its subsidiary, Akoustis, Inc. (a Delaware corporation), the Company, headquartered in Huntersville, North Carolina, is focused on developing, designing, and manufacturing innovative RF filter products for the mobile wireless device industry, including for products such as smartphones and tablets, cellular infrastructure equipment, and WiFi premise equipment. Located between the device’s antenna and its digital backend, the RF front-end (“RFFE”) is the circuitry that performs the analog signal processing and contains components such as amplifiers, filters and switches. To construct the resonators that are the building blocks for the RF filter, we have developed a fundamentally new single-crystal acoustic materials and device technology manufactured with our proprietary XBAW process. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RFFE.

On August 11, 2016, the Company changed its fiscal year from the period beginning on April 1 and ending on March 31 of each year to the period beginning on July 1 and ending on June 30 of each year, effective for the fiscal year ended June 30, 2017.

The Company’s common stock is listed on the Nasdaq Capital Market under the symbol AKTS.

Note 2. Going Concern and Management Plans

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As of June 30, 2018, the Company had working capital of \$13.2 million and an accumulated deficit of \$38.2 million. Since inception, the Company has recorded approximately \$1.0 million and \$1.1 million of revenue from contract research and government grants, and microelectromechanical systems (“MEMS”) foundry and engineering review services, respectively. As of August 21, 2018, the Company had cash and cash equivalents of \$12.1 million. The Company estimates that cash on hand is sufficient to fund its operations into the fourth quarter of fiscal 2019. The Company will need to obtain additional capital to fund operations past that date. The Company is actively managing and controlling cash outflows to mitigate this risk, however, this matter raises substantial doubt about the Company’s ability to continue as a going concern within one year from the date of this filing. These consolidated financial statements do not include any adjustments relating to the recoverability and classification of asset amounts or the classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

There is no assurance that the Company’s projections and estimates are accurate. The Company’s primary sources of funds for operations since inception have been contract research and government grants, MEMS Foundry and Engineering services revenue, sales of our equity securities, and issuance of debt. The Company needs to obtain additional capital to accomplish its business plan objectives and will continue its efforts to secure additional funds. However, the amount of funds raised, if any, may not be sufficient to enable the Company to attain profitable operations. To the extent that the Company is unsuccessful in obtaining additional financing, the Company may need to curtail or cease its operations and implement a plan to extend payables or reduce overhead until sufficient additional capital is raised to support further operations. There can be no assurance that such a plan will be successful.

Note 3. Summary of significant accounting policies

Basis of presentation

The Company’s consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and the rules and regulations of the Securities and Exchange Commission (“SEC”).

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Akoustis, Inc. On February 22, 2018, Akoustis Manufacturing New York, Inc. was merged into Akoustis, Inc., with Akoustis, Inc. as the surviving entity. All significant intercompany accounts and transactions have been eliminated in consolidation.

Use of estimates and assumptions

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date(s) of the financial statements and the reported amounts of revenues and expenses during the reporting period(s).

Critical accounting estimates are estimates for which (a) the nature of the estimate is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change and (b) the impact of the estimate on financial condition or operating performance is material. The Company's critical accounting estimates and assumptions affecting the financial statements were:

- (1) *Fair value of long-lived assets:* Fair value is generally determined using the asset's expected future discounted cash flows or market value, if readily determinable. If long-lived assets are determined to be recoverable, but the newly determined remaining estimated useful lives are shorter than originally estimated, the net book values of the long-lived assets are depreciated over the newly determined remaining estimated useful lives. The Company considers the following to be some examples of important indicators that may trigger an impairment review: (i) significant under-performance or losses of assets relative to expected historical or projected future operating results; (ii) significant changes in the manner or use of assets or in the Company's overall strategy with respect to the manner or use of the acquired assets or changes in the Company's overall business strategy; (iii) significant negative industry or economic trends; (iv) increased competitive pressures; (v) a significant decline in the Company's stock price for a sustained period of time; and (vi) regulatory changes. The Company evaluates acquired assets for potential impairment indicators at least annually and more frequently upon the occurrence of such events.
- (2) *Valuation allowance for deferred tax assets:* Management assumes that the realization of the Company's net deferred tax assets resulting from its net operating loss ("NOL") carry forwards for Federal income tax purposes that may be offset against future taxable income was not considered more likely than not and accordingly, the potential tax benefits of the NOL carry forwards are offset by a full valuation allowance. Management made this assumption based on (a) the Company's incurrence of losses, (b) general economic conditions, and (c) other factors.
- (3) *Estimates and assumptions used in valuation of equity instruments:* Management estimates expected term of share options and similar instruments, expected volatility of the Company's common shares and the method used to estimate it, expected annual rate of quarterly dividends, and risk-free rate(s) to value share options and similar instruments.
- (4) *Estimates and assumptions used in valuation of derivative liabilities:* Management utilizes a binomial option pricing model to estimate the fair value of derivative liabilities, and utilizes the with-and-without method, a form of the income approach model to compute the fair value of its embedded derivatives associated with its convertible note. These models include subjective assumptions that can materially affect the fair value estimates.
- (5) *Estimates and assumptions used in business combinations:* The accounting for business combinations requires estimates and judgments as to expectations for future cash flows of the acquired business, and the allocation of those cash flows to identifiable intangible assets, in determining the estimated fair value for assets and liabilities acquired. The fair value measurement is highly sensitive to significant changes in the unobservable inputs and significant increases (decreases) in discount rate or decreases (increases) in price/earnings multiples would result in a significantly lower (higher) fair value measurement. The fair values assigned to tangible and intangible assets acquired and liabilities assumed are based on management's estimates and assumptions, including valuations that utilize customary valuation procedures and techniques. If the actual results differ from the estimates and judgments used in these estimates, the amounts recorded in the financial statements could result in a possible impairment of the acquired assets.

These significant accounting estimates or assumptions bear the risk of change due to the fact that there are uncertainties attached to these estimates or assumptions, and certain estimates or assumptions are difficult to measure or value.

Management bases its estimates on various assumptions that are believed to be reasonable in relation to the financial statements taken as a whole under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates.

Revised Prior Period Amounts

The Company identified and recorded an out-of-period adjustment related to stock-based compensation that should have been recorded in the year ended June 30, 2017. The adjustment was reflected as a \$725,004 increase in additional paid in capital and corresponding increase in accumulated deficit. Tabular summaries of the revisions are presented below:

	Consolidated Balance Sheet		
	June 30, 2017		
	Previously Reported	Revisions	Revised Reported
Additional paid in capital	\$ 30,774,885	\$ 725,004	\$ 31,499,889
Accumulated deficit	(15,783,053)	(725,004)	(16,508,057)

Consolidated Statement of Operations
Year ended June 30, 2017

	<u>Previously Reported</u>	<u>Revisions</u>	<u>Revised Reported</u>
Net loss	\$ (9,108,240)	\$ (725,004)	\$ (9,833,244)
Net loss per ordinary share:			
Basic	\$ (0.54)	\$ (0.04)	\$ (0.58)

The Company analyzed the revisions under SEC Staff Accounting Bulletin No. 108 and determined that the revisions are immaterial on a quantitative and qualitative basis and that it is probable that the judgment of a reasonable person relying upon the financial statements would not have been changed or influenced by the inclusion or correction of the items in the year ended June 30, 2017. Therefore, amendment of the 2017 Annual Report is not considered necessary. However, if the adjustments to correct the errors were recorded in the first quarter of 2018, the Company believes the impact would have been significant to the first quarter and would impact comparisons to prior periods. The Company has also revised in this annual report on Form 10-K the previously reported annual consolidated balance sheet as of June 30, 2017 on Form 10-K for these amounts.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents. Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash deposits. The Company maintains its cash in institutions insured by the Federal Deposit Insurance Corporation ("FDIC"). At times, the Company's cash and cash equivalent balances may be uninsured or in amounts that exceed the FDIC insurance limits; as of June 30, 2018 and 2017 approximately \$14.6 million and \$9.4 million, respectively, was uninsured.

Inventory

Inventory is stated at the lower of cost or net realizable value using the first-in, first-out (FIFO) valuation method. Inventory was comprised of the following at June 30, 2018 and 2017:

	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Finished goods held for resale	\$ 23,441	\$ 49,374
Raw materials	34,115	139,102
	<u>\$ 57,556</u>	<u>\$ 188,476</u>

Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation. Depreciation is calculated using the straight-line method on the various asset classes over their estimated useful lives, which range from two to eleven years. Expenditures for major renewals and betterments that extend the useful lives of property and equipment are capitalized. Expenditures for maintenance and repairs, which do not extend the economic useful life of the related assets, are charged to operations as incurred. The Company records gains or losses on the disposal of assets as the difference between net book value of assets and cash received less costs to dispose of assets. Gains or losses on the disposal of assets, as well as impairment of assets held for sale are recorded in operating expenses.

Intangible assets, net

Intangible assets consist of patents, trademarks and customer relationships. Applicable long-lived assets are amortized over the shorter of their estimated useful lives, the estimated period that the assets will generate revenue, or the statutory or contractual term in the case of patents. Estimates of useful lives and periods of expected revenue generation are reviewed for appropriateness and are based upon management's judgment. Patents are amortized on the straight-line method over their useful lives of 15 years.

Impairment of Long-Lived Assets

The Company assesses the recoverability of its long-lived assets, including property and equipment, when there are indications that the assets might be impaired. When evaluating assets for potential impairment, the Company compares the carrying value of the asset to its estimated undiscounted future cash flows. If an asset's carrying value exceeds such estimated undiscounted cash flows, the Company records an impairment charge for the difference between the carrying amount of the asset and its fair value.

Based on its assessments of equipment that is no longer needed as part of the XBAW single crystal manufacturing process, the Company recorded impairment charges on assets held for sale of \$349,571 for the year ended June 30, 2018, and \$0 for the year ended June 30, 2017.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents and accounts payable approximate fair value due to the short-term nature of these instruments.

The Company measures the fair value of financial assets and liabilities based on the guidance of ASC 820, "Fair Value Measurements and Disclosures," which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value

measurements.

ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

Fair value measurements are categorized using a valuation hierarchy for disclosure of the inputs used to measure fair value, which prioritize the inputs into three broad levels:

Level 1 - Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 - Pricing inputs are other than quoted prices in active markets included in level 1, which are either directly or indirectly observable as of the reported date, and include those financial instruments that are valued using models or other valuation methodologies.

Level 3 - Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value.

Derivative Liability

The Company evaluates its options, warrants, convertible notes, or other contracts, if any, to determine if those contracts or embedded components of those contracts qualify as derivatives to be separately accounted for in accordance with paragraph 815-10-05-4 and Section 815-40-25 of the FASB Accounting Standards Codification. The result of this accounting treatment is that the fair value of the embedded derivative is marked-to-market each balance sheet date and recorded as either an asset or a liability. The change in fair value is recorded in the consolidated statement of operations as other income or expense. Upon conversion, exercise or cancellation of a derivative instrument, the instrument is marked to fair value at the date of conversion, exercise or cancellation and then the related fair value is reclassified to equity.

In circumstances where the embedded conversion option in a convertible instrument is required to be bifurcated and there are also other embedded derivative instruments in the convertible instrument that are required to be bifurcated, the bifurcated derivative instruments are accounted for as a single, compound derivative instrument.

The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period. Equity instruments that are initially classified as equity that become subject to reclassification are reclassified to liability at the fair value of the instrument on the reclassification date. Derivative instrument liabilities will be classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument is expected within 12 months of the balance sheet date.

The Company adopted Section 815-40-15 of the FASB Accounting Standards Codification ("Section 815-40-15") to determine whether an instrument (or an embedded feature) is indexed to the Company's own stock. Section 815-40-15 provides that an entity should use a two-step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions.

The Company utilizes a binomial option pricing model to compute the fair value of the derivative liability and to mark to market the fair value of the derivative at each balance sheet date. The Company records the change in the fair value of the derivative as other income or expense in the consolidated statements of operations.

The Company utilizes the with-and-without method, a form of the income approach model to compute the fair value of its embedded derivatives associated with its convertible note. The fair value of the embedded derivatives represents the difference in the present value of anticipated cash flows assuming the feature is present as compared to a security without the same feature. The Company records the change in the fair value of the derivative as other income or expense in the consolidated statements of operations.

Revenue Recognition

Change in Accounting Policy for Revenue Recognition

Effective October 1, 2016, the Company changed its accounting policy for the recognition of grant revenue. The Company believes this change in accounting policy is preferable due to the fact that grant revenue is viewed as an ongoing function of its intended operations. This change in accounting policy also enhances the comparability of the Company's financial statements with many of its industry peers. The adoption of this accounting policy change has been applied retrospectively to all prior periods presented in this Annual Report on Form 10-K and has had no impact on net loss per share.

Contract Research and Government Grants

The Company may generate revenue from product sales, license agreements, collaborative research and development arrangements, and government grants. The Company recognizes nonrefundable grant revenue when it is received. Contracts executed and monies received prior to the recognition of revenue are recorded as deferred revenue.

MEMS Fabrication Services

The Company generates revenue from MEMS fabrication services at its Canandaigua, New York fabrication facility. Fabrication services revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectability is reasonably assured. The Company includes fabrication services revenue as revenue from operations due to the fact that these services revenue are viewed as an ongoing function of its intended operations and is not considered as “incidental” or “peripheral” which would result in its presentation being included in “Other income”.

Engineering Review Services

The Company records Engineering Review Services revenue (“ERS”) which is for providing design and development services whereby the Company’s R&D personnel deliver simulations/models and demonstration units (low volume) for evaluation by the customers. The Company recognizes revenue when there is persuasive evidence of an arrangement, the service has been provided to the customer, the amount of fees to be paid by the customer is fixed or determinable, and the collection of fees is reasonably assured.

Revenue Recognition for Facility Rental Income

Effective June 26, 2017, the Company records rental income for the tenants at the Company’s NY fabrication facility. The Company recognizes rental income in the period the rental services are delivered to the lessee; rent is received on a monthly, straight-line basis and is included in Other income.

Research and Development

Research and development expenses are charged to operations as incurred.

Equity-based compensation

The Company recognizes compensation expense for all equity-based payments in accordance with ASC 718 “*Compensation – Stock Compensation*”. Under fair value recognition provisions, the Company recognizes equity-based compensation net of an estimated forfeiture rate and recognizes compensation cost only for those shares expected to vest over the requisite service period of the award.

Restricted stock awards are granted at the discretion of the Company. These awards are restricted as to the transfer of ownership and generally vest over the requisite service periods, typically over a four-year period (generally vesting either ratably over the first four years or on a tier basis of 50% on the second anniversary of the effective date and 25% on the third and fourth anniversary dates). The fair value of a stock award is equal to the fair market value of a share of Company stock on the grant date.

The fair value of an option award is estimated on the date of grant using the Black–Scholes option valuation model. The Black–Scholes option valuation model requires the development of assumptions that are inputs into the model. These assumptions are the value of the underlying share, the expected stock volatility, the risk-free interest rate, the expected life of the option, and the dividend yield on the underlying stock. Expected volatility is calculated using the historical volatilities of the Company’s common stock traded on the Nasdaq Capital Market. Risk-free interest rates are calculated based on continuously compounded risk-free rates for the appropriate term. The dividend yield is assumed to be zero as the Company has never paid or declared any cash dividends on its Common stock and does not intend to pay dividends on its Common stock in the foreseeable future. The Company accounts for the impact of forfeitures as they occur.

Determining the appropriate fair value model and calculating the fair value of equity-based payment awards requires the input of the subjective assumptions described above. The assumptions used in calculating the fair value of equity-based payment awards represent management’s best estimates, which involve inherent uncertainties and the application of management’s judgment. As a result, if factors change and the Company uses different assumptions, equity-based compensation could be materially different in the future. In addition, the Company is required to account for the impact of forfeitures as the forfeitures for those shares occur. If the Company’s actual forfeitures are material, the equity-based compensation could be significantly different from what the Company has recorded in the current period.

The Company accounts for share-based payments granted to non-employees in accordance with ASC 505-40, “*Equity Based Payments to Non-Employees*”. The Company determines the fair value of the stock-based payment as either the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. If the fair value of the equity instruments issued is used, it is measured using the stock price and other measurement assumptions as of the earlier of either (1) the date at which a commitment for performance by the counterparty to earn the equity instruments is reached, or (2) the date at which the counterparty’s performance is complete. The fair value of the equity instruments is re-measured each reporting period over the requisite service period.

Income taxes

In determining income for financial statement purposes, the Company must make certain estimates and judgments in the calculation of tax expense, the resultant tax liabilities, and in the recoverability of deferred tax assets that arise from temporary differences between the tax and financial statement recognition of revenue and expense.

As part of the financial process, the Company assesses on a tax jurisdictional basis the likelihood that the Company's deferred tax assets can be recovered. If recovery is not more likely than not (a likelihood of less than 50 percent), the provision for taxes must be increased by recording a reserve in the form of a valuation allowance for the deferred tax assets that are estimated not to ultimately be recoverable. In this process, certain relevant criteria are evaluated including: the amount of income or loss in prior years, the existence of deferred tax liabilities that can be used to absorb deferred tax assets, future expected taxable income, and prudent and feasible tax planning strategies. Changes in taxable income, market conditions, U.S. or international tax laws, and other factors may change the Company's judgment regarding whether the Company will be able to realize the deferred tax assets. These changes, if any, may require material adjustments to the net deferred tax assets and an accompanying reduction or increase in income tax expense which will result in a corresponding increase or decrease in net income in the period when such determinations are made.

As part of the Company's financial process, the Company also assess the likelihood that the Company's tax reporting positions will ultimately be sustained. To the extent it is determined it is more likely than not (a likelihood of more than 50 percent) that some portion or all of a tax reporting position will ultimately not be recognized and sustained, a provision for unrecognized tax benefit is provided by either reducing the applicable deferred tax asset or accruing an income tax liability. The Company's judgment regarding the sustainability of the Company's tax reporting positions may change in the future due to changes in U.S. or international tax laws and other factors. These changes, if any, may require material adjustments to the related deferred tax assets or accrued income tax liabilities and an accompanying reduction or increase in income tax expense which will result in a corresponding increase or decrease in net income in the period when such determinations are made.

Loss Per Share

Basic net loss per common share is computed by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net loss per common share is determined using the weighted-average number of common shares outstanding during the period, adjusted for the dilutive effect of common stock equivalents. In periods when losses are reported, which is the case for the years ended June 30, 2018 and 2017 presented in these consolidated financial statements, the weighted-average number of common shares outstanding excludes common stock equivalents because their inclusion would be anti-dilutive.

The Company had the following common stock equivalents at June 30, 2018 and 2017:

	June 30, 2018	June 30, 2017
Options	1,338,859	160,000
Warrants	748,572	612,165
Total	<u>2,087,431</u>	<u>772,165</u>

Shares Outstanding

Shares outstanding include shares of restricted stock with respect to which restrictions have not lapsed. Restricted stock included in reportable shares outstanding was 734,561 shares and 1,460,632 as of June 30, 2018 and 2017, respectively. Shares of restricted stock are included in the calculation of weighted average shares outstanding.

Reclassification

Certain prior period amounts have been reclassified to conform to current period presentation. The reclassifications did not have an impact on net loss as previously reported.

Recently Issued Accounting Pronouncements

In July 2015, the Financial Accounting Standards Board (FASB) issued the FASB Accounting Standards Update (ASU) No. 2015-11 "Inventory (Topic 330): Simplifying the Measurement of Inventory" ("ASU 2015-11"). The amendments in this Update do not apply to inventory that is measured using last-in, first-out (LIFO) or the retail inventory method. The amendments apply to all other inventory, which includes inventory that is measured using first-in, first-out (FIFO) or average cost. An entity should measure inventory within the scope of this update at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Subsequent measurement is unchanged for inventory measured using LIFO or the retail inventory method. For public business entities, the amendments in this update are effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The adoption of ASU 2015-11 did not have a material effect on the consolidated financial statements and related disclosures.

In November 2015, the FASB issued ASU No. 2015-17, “*Balance Sheet Classification of Deferred Taxes*”, which will require entities to present deferred tax assets and deferred tax liabilities as noncurrent in a classified balance sheet. The ASU simplifies the current guidance, which requires entities to separately present deferred tax assets and deferred tax liabilities as current and noncurrent in a classified balance sheet. The ASU may be applied either prospectively or retrospectively. The amendments in this ASU are effective for annual reporting periods beginning after December 15, 2016 and interim periods within those annual periods. Earlier application is permitted as of the beginning of an interim or annual period. The adoption of ASU 2015-17 did not have a material effect on the consolidated financial statements and related disclosures.

In January 2016, the FASB issued ASU No. 2016-01, “*Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*”. The update addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. For public business entities, the amendments in this update are effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted only for certain portions of the ASU related to financial liabilities. The Company does not believe it will have a significant impact on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, “*Leases*” (Topic 842). The FASB issued this update to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The updated guidance is effective for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption of the update is permitted. The Company does not expect it will have a material effect on the consolidated financial statements and related disclosures.

In April 2016, the FASB issued ASU No. 2016-09, “*Compensation – Stock Compensation*” (Topic 718). The FASB issued this update to improve the accounting for employee share-based payments and affect all organizations that issue share-based payment awards to their employees. Several aspects of the accounting for share-based payment award transactions are simplified, including: (a) income tax consequences; (b) classification of awards as either equity or liabilities; and (c) classification on the statement of cash flows. The updated guidance is effective for annual periods beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption of the update is permitted. The adoption of ASU 2016-09 did not have a material effect on the consolidated financial statements and related disclosures. The Company has adopted the policy to account for the impact of forfeitures as they occur in determining compensation cost.

In April 2016, the FASB issued ASU No. 2016-10, “*Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing* (Topic 606)”. In March 2016, the FASB issued ASU No. 2016-08, “*Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net)* (Topic 606)”. In May 2016, the FASB issued ASU No. 2016-12, “*Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*”, which narrowly amended the revenue recognition guidance regarding collectability, noncash consideration, presentation of sales tax and transition. These amendments provide additional clarification and implementation guidance on the previously issued ASU 2014-09, “*Revenue from Contracts with Customers*”. The amendments in ASU 2016-10 provide clarifying guidance on materiality of performance obligations; evaluating distinct performance obligations; and the treatment of shipping and handling costs. The amendments in ASU 2016-08 clarify how an entity should identify the specified good or service for the principal versus agent evaluation and how it should apply the control principle to certain types of arrangements. The Company will adopt the standard in the first quarter of fiscal 2019 using the modified retrospective approach, under which the cumulative effect of adoption is recognized at the date of initial application. The Company has evaluated the impact of the standard and does not anticipate that the adoption of this standard will have a material impact on its consolidated financial statements. The Company does not expect these changes to be material and are implementing changes to its accounting policies, internal controls and disclosures to support the new standard.

In August 2016, the FASB issued ASU 2016-15, “*Classification of Certain Cash Receipts and Cash Payments*”. This update provides guidance on how to record eight specific cash flow issues. This update is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted and a retrospective transition method to each period should be presented. The Company does not believe it will have a significant impact on its consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, “*Statement of Cash Flows (Topic 230)*”, requiring that the statement of cash flows explain the change in the total cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. This guidance is effective for fiscal years, and interim reporting periods therein, beginning after December 15, 2017 with early adoption permitted. The provisions of this guidance are to be applied using a retrospective approach which requires application of the guidance for all periods presented. The Company does not believe it will have a significant impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-01, “*Business Combinations (Topic 805): Clarifying the Definition of a Business*”, which provides further guidance for evaluating whether a transaction will be accounted for as an acquisition of an asset or a business. This guidance is effective for fiscal years, and interim reporting periods therein, beginning after December 15, 2017. The Company does not believe it will have a material effect on the consolidated financial statements and related disclosures.

In May 2017, the FASB issued ASU 2017-09, “*Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting*,” which provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. The Company does not believe it will have a significant impact on its consolidated financial statements.

In July 2017, the FASB issued ASU 2017-11, “*Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815): I. Accounting for Certain Financial Instruments with Down Round Features; II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*”. Part I of this update addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. Part II of this update addresses the difficulty of navigating Topic 480, Distinguishing Liabilities from Equity, because of the existence of extensive pending content in the FASB Accounting Standards Codification. This pending content is the result of the indefinite deferral of accounting requirements about mandatorily redeemable financial instruments of certain nonpublic entities and certain mandatorily redeemable noncontrolling interests. The amendments in Part II of this update do not have an accounting effect. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. The Company is evaluating the effect that ASU 2017-11 will have on its financial statements and related disclosures.

In September 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2017-13, *Revenue Recognition (Topic 605), and Revenue from Contracts with Customers (Topic 606)*. The new standards, among other things, provide additional implementation guidance with respect to Accounting Standards Codification (ASC) Topic 606. ASU 2017-13 is effective for annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. The Company does not expect it to have a material impact on its implementation strategies or its consolidated financial statements upon adoption.

In March 2018, the FASB issued ASU 2018-05, *Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118.* The amendments incorporate into the ASC the recent SEC guidance related to the income tax accounting implications of the Tax Cuts and Jobs Act (the “Tax Act”). See Note 14 for further disclosures.

In June 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2018-07, *Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*. Under the new standard, companies will no longer be required to value non-employee awards differently from employee awards. Companies will value all equity classified awards at their grant-date under ASC 718 and forgo revaluing the award after the grant date. ASU 2018-07 is effective for annual reporting periods beginning after December 15, 2018, including interim reporting periods within that reporting period. Early adoption is permitted, but no earlier than the Company’s adoption date of Topic 606, Revenue from Contracts with Customers. The Company does not believe it will have a significant impact on its consolidated financial statements.

Note 4. Acquisition of STC-MEMS

Acquisition of STC-MEMS

On March 23, 2017, the Company entered into the Agreements with RF-SUNY, a New York State education corporation, on behalf of The State University of New York Polytechnic Institute, and FRMC, an affiliate of RF-SUNY to acquire the STC-MEMS Business. The acquisition will allow the Company to internalize manufacturing, increase capacity and control its wafer supply chain for single crystal BAW RF filters. Akoustis will utilize the NY Facility to consolidate all aspects of wafer manufacturing for its high-band RF filters.

Smart Systems Technology & Commercialization Center (STC-MEMS) was created in 2010 to form a vertically integrated “one-stop-shop” in smart system and smart-device innovation and manufacturing. The facility was designed to provide its customers the capacity, infrastructure and operational capabilities in all areas of semiconductor and advanced manufacturing, while covering a diverse number of markets including aerospace, biomedical, communications, defense, and energy. Located in Canandaigua, New York, just outside of Rochester, the STC-MEMS facility includes certified cleanroom manufacturing, advanced test and metrology, as well as a MEMS and optoelectronic packaging facility.

Post-acquisition date, the Company also agreed to assume substantially all the on-going obligations of the STC-MEMS Business incurred in the ordinary course of business, including with respect to the 29 employees employed by RF-SUNY. The purchase closed on June 26, 2017.

Acquisition Price

The purchase price paid for the transaction was an aggregate of approximately \$4.58 million consisting of (i) \$2.75 million in cash consideration, (ii) \$96,000 in inventory, and (iii) a contingent real estate liability of approximately \$1.73 million.

Recognizing and measuring the identifiable assets acquired and the liabilities assumed

The fair value of the purchase consideration issued to the sellers of the STC-MEMS Business was allocated to the net tangible and intangible assets acquired. The Company accounted for the STC-MEMS Business acquisition as the purchase of a business under GAAP under the acquisition method of accounting, as specified in ASC 805 “Business Combinations”, and the assets and liabilities acquired were recorded as of the acquisition date, at their respective fair values and consolidated with those of the Company. The fair value of the net assets acquired was approximately \$6.3 million. The excess of the aggregate fair value of the net tangible and intangible assets over the consideration paid has been treated as a gain on bargain purchase in accordance with ASC 805. The purchase price allocation was based, in part, on management’s knowledge of the STC-MEMS Business and the results of a third-party appraisal commissioned by management.

The Company utilized the services of an independent appraisal company to assist it in assessing the fair value of the assets and liabilities

acquired. This assessment included an evaluation of the fair value of the real estate and fixed assets in addition to the intangibles acquired. The real estate was valued utilizing a combination of the income and cost approaches. The fixed assets were valued utilizing a combination of the market and cost approaches. The intangible asset, customer relationships, was valued utilizing the income approach. The valuation process also included discussion with management regarding the history and business operations of the STC-MEMS Business, a study of the economic and industry conditions in which the STC-MEMS Business competes and an analysis of the historical and projected financial statements and other records and documents.

Recognizing and measuring goodwill or a gain from a bargain purchase

Management reviewed the assets and liabilities acquired and the assumptions utilized in estimating their fair values. Further revisions to the estimates were not deemed necessary and after identifying and valuing all assets and liabilities of the STC-MEMS Business, the Company concluded that recording a bargain purchase gain was appropriate and required under GAAP.

Purchase Consideration

Amount of consideration:	\$ 4,576,591
Assets acquired and liabilities assumed at fair value	
Land	\$ 1,000,000
Building	3,000,000
STC-MEMS equipment	2,124,650
Inventory	96,049
Customer relationships	81,773
Net assets acquired	<u>\$ 6,302,472</u>
Total net assets acquired	\$ 6,302,472
Consideration paid	4,576,591
Gain on bargain purchase	<u>\$ 1,725,881</u>

Prior to this transaction, none of the parties negotiating on behalf of the Company had met any of the individuals negotiating on behalf of the sellers. Further, there were no agreements signed with any individuals negotiating this deal. Additionally, there were no related parties associated with this transaction.

The following presents the unaudited pro-forma combined results of operations of the Company with the STC-MEMS Business as if the entities were combined on July 1, 2016.

	Year Ended June 30, 2017
Revenues, net	\$ 4,195,374
Net (loss) allocable to common shareholders	\$ (13,907,072)
Net (loss) per share	\$ (0.82)
Weighted average number of shares outstanding	16,990,536

The unaudited pro-forma results of operations are presented for information purposes only. The unaudited pro-forma results of operations are not intended to present actual results that would have been attained had the acquisitions been completed as of July 1, 2015 or to project potential operating results as of any future date or for any future periods.

The estimated useful life remaining on equipment and building acquired with the STC-MEMS Business is 2 to 5 years and 11 years, respectively.

The Company consolidated Akoustis NY as of the closing date of the agreement, and the results of operations of the Company include that of Akoustis NY. The Company recognized net revenues attributable to Akoustis NY of \$0 and recognized net losses of \$171,000 during the period June 26, 2017 through June 30, 2017; driven by wages and fringe benefits of \$126,000.

Note 5. Property and equipment

Property and equipment consisted of the following as of June 30, 2018 and 2017:

	Estimated Useful Life	June 30, 2018	June 30, 2017
Land	n/a	\$ 1,000,000	\$ 1,000,000
Building	11 years	3,000,000	3,000,000
Equipment	2-10 years	9,126,755	3,976,077
Other	*	1,057,854	23,748
		<u>14,184,609</u>	<u>7,999,825</u>
Less: Accumulated depreciation		(1,364,440)	(146,011)
Total		<u><u>\$ 12,820,169</u></u>	<u><u>\$ 7,853,814</u></u>

(*) Useful lives vary from 3-10 years, as well as leasehold improvements which are amortized on a straight-line basis over the term of the lease or the estimated useful lives, whichever is shorter.

The Company recorded depreciation expense of \$1,247,518 and \$102,876 for the years ended June 30, 2018 and 2017, respectively.

As of June 30, 2018, fixed assets with a net book value totaling \$435,680 were not placed in service and therefore not depreciated during the period.

As of June 30, 2018, fixed assets with a net book value totaling \$333,250 were reclassified to Assets held for sale on the consolidated balance sheets. The Company recorded an impairment charge of \$349,571 on fixed assets held for sale during the year ended June 30, 2018.

As of June 30, 2017, research and development fixed assets totaling \$1,062,496 were not placed in service and therefore not depreciated during the period.

Note 6. Intangible assets

The Company's intangible assets consisted of the following:

	<u>Estimated useful life</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Patents	15 years	\$ 208,137	\$ 135,291
Customer relationships	14 years	81,773	81,773
Less: Accumulated amortization		<u>(27,175)</u>	<u>(12,097)</u>
Subtotal		262,735	204,967
Trademarks		1,560	1,560
Intangible assets, net		<u>\$ 264,295</u>	<u>\$ 206,527</u>

The Company recorded amortization expense of \$15,078 and \$7,208 for the year ended June 30, 2018 and 2017, respectively.

The following table outlines estimated future annual amortization expense for the next five years and thereafter:

June 30,	
2019	\$ 15,093
2020	15,093
2021	15,093
2022	15,093
2023	15,093
Thereafter	<u>117,925</u>
Total	<u>\$193,390</u>

The remaining amount of future annual amortization expense of \$69,345 are patents that are still pending approval.

Note 7. Accounts payable and accrued expenses

Accounts payable and accrued expenses consisted of the following at June 30, 2018 and June 30, 2017:

	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Accounts payable	\$ 139,152	\$ 494,515
Accrued salaries and benefits	505,463	274,050
Accrued bonuses	750,442	—
Accrued stock-based compensation	395,539	399,157
Accrued professional fees	293,024	157,661
Accrued utilities	103,277	—
Accrued interest	127,292	—
	160,199	—
Accrued good received not invoiced		
Other accrued expenses	119,044	10,985
Totals	<u>\$ 2,593,432</u>	<u>\$ 1,336,368</u>

Note 8. Derivative Liabilities

Upon closing of private placements on May 22, 2015 and June 9, 2015, the Company issued 298,551 and 26,099 warrants, respectively, to purchase the same number of shares of Common Stock with an exercise price of \$1.50 and a five-year term to the placement agent. Upon closing of a private placement in April 2016, the Company issued 153,713 warrants to purchase the same number of shares of Common Stock with an exercise price of \$1.60 and a five-year term to the placement agent. The Company identified certain put features embedded in the warrants that potentially could result in a net cash settlement, requiring the Company to classify the warrants as a derivative liability.

During the year ended June 30, 2017, the Company amended the existing warrant agreements to eliminate the derivative feature. Upon execution of the revised agreements, a total of 471,697 warrants with a fair value of \$2,200,219 were reclassified from liabilities to equity.

The table below provides a summary of the changes in fair value, including net transfers in and/or out, of all financial assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during the years ended June 30, 2018 and 2017:

	Fair Value Measurement Using Level 3 Inputs Total
Balance, July 1, 2016	\$ 1,322,729
Change in fair value of derivative warrant liabilities	877,490
Reclassification of derivative liability to additional paid in capital	<u>(2,200,219)</u>
Balance, June 30, 2017	—
Issuance of derivative feature of make whole provision in convertible note	702,900
Issuance of derivative feature of change in control provision in convertible note	455,900
Change in fair value of derivative warrant liabilities	<u>(54,099)</u>
Balance, June 30, 2018	<u>\$ 1,104,701</u>

The fair value of the derivative feature of the warrants on the date of reclassification to equity was calculated using a binomial option model valued with the following weighted average assumptions:

	January 19, 2017
Risk free interest rate	1.01%
Dividend yield	0.00%
Expected volatility	39%
Remaining term (years)	3.89 - 4.79

Risk-free interest rate: The Company uses the risk-free interest rate of a U.S. Treasury Bill with a similar term on the date of the grant.

Dividend yield: The Company uses a 0% expected dividend yield as the Company has not paid dividends to date and does not anticipate declaring dividends in the near future.

Volatility: The Company estimated the expected volatility of the stock price based on the historical volatilities of the Company's common stock traded on the Nasdaq Capital Market.

Remaining term: The Company's remaining term is based on the remaining contractual maturity of the warrants.

The fair value of the derivative features of the convertible note on the issuance dates, and at the balance sheet date were calculated using the with-and-without method, a form of the income approach, valued with the following weighted average assumptions:

	May 14, 2018	June 30, 2018
Risk free interest rate	2.85%	2.73%
Dividend yield	0.00%	0.00%
Expected volatility	40%	42%
Remaining term (years)	5.05	4.92

Risk-free interest rate: The Company uses the risk-free interest rate of a U.S. Treasury Bill with a similar term on the date of the issuance.

Dividend yield: The Company uses a 0% expected dividend yield as the Company has not paid dividends to date and does not anticipate declaring dividends in the near future.

Volatility: The Company estimated the expected volatility of the stock price based on the corresponding volatility of the Company's peer group stock price for a period consistent with the convertible note's expected term.

Remaining term: The Company's remaining term is based on the remaining contractual term of the convertible note.

During the years ended June 30, 2018 and 2017, the Company marked the derivative features of liabilities to fair value and recorded a gain of \$54,099 and a loss of \$877,490, respectively, relating to the change in fair value.

Note 9. Convertible Notes

On May 14, 2018 the Company completed the offering of \$15.0 million principal amount of the Company's 6.5% Convertible Senior Secured Notes due 2023. The net proceeds of the offering after payment of offering costs are approximately \$13.1 million. The notes will mature on May 31, 2023, unless earlier converted, redeemed or repurchased. Interest on the notes accrues at the rate of 6.5% per year and is payable at the Company's option quarterly in cash and/or freely tradable shares of the Company's common stock, subject to certain limitations. The notes may be converted into common stock at the option of the holder at any time prior to maturity at an initial conversion price of \$6.55 per share, subject to adjustment under certain circumstances. If the holder elects to convert the notes at any time on or after the date that is one year after the last date of original issuance of the notes and prior to May 31, 2021, the holder will also receive a make-whole payment equal to the remaining scheduled interest payments that would have been made on the notes converted had such notes remained outstanding through May 31, 2021 (the "put date"). At the Company's option, make-whole payments may be paid in cash and/or freely tradable shares of the Company's common stock.

The holders of the notes will have a one-time right, exercisable prior to the put date in the manner described in the indenture relating to the notes, to require the Company to repurchase for cash all (but not less than all) of such holder's notes on the put date at a purchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, and including, the put date.

At any time on or after May 31, 2019, if the closing sale price per share of the Company's common stock is greater than 175% of the then-effective conversion price for each of 20 days of any 30 consecutive trading day period immediately preceding the Company's optional redemption notice, the Company may redeem the notes at a redemption price equal to 100% of the principal amount thereof, plus accrued interest.

The notes are fully guaranteed on a senior secured basis and rank senior in right of payment to all of the Company's existing unsecured indebtedness. The notes and the guarantees are secured by a first priority lien (subject to permitted liens) on substantially all of the Company's existing and future subsidiaries' assets, including the Canandaigua, New York manufacturing facility of the Company's subsidiary, Akoustis, Inc., and a pledge of its equity interests in Akoustis, Inc., but excluding certain excluded property.

The Company analyzed the components of the convertible notes for embedded derivatives and the application of the corresponding accounting treatment. This analysis determined that certain features of the notes, the interest make whole payment and the qualifying fundamental change payments, represented derivatives that require bifurcation from the host contract. The fair value of these components of \$1,158,800 was recorded as a debt discount and will be adjusted to fair value at the end of each future reporting period. As of June 30, 2018, the fair value of these components was \$1,104,701.

In addition, the Company identified a beneficial conversion feature in relation to the conversion option of the notes. The fair value of the conversion option of \$1,809,161 was recorded as a debt discount with a corresponding credit to additional paid in capital.

The Company recorded total debt discount and debt issuance costs of \$4,844,650, to be amortized over three years using an effective interest method. Debt discount and debt issuance costs include the fair value of the embedded features at the issuance date of \$1,158,800, the intrinsic value of the beneficial conversion feature of \$1,809,161, and debt issuance costs paid totaling \$1,876,689.

As of June 30, 2018, the outstanding principal balance of the convertible notes was \$15.0 million, and the debt discount was \$4,640,069.

Note 10. Concentrations

Vendors

For the year ended June 30, 2018, no vendors represented 10% or more of the Company's purchases.

For the year ended June 30, 2017, one vendor represented 11% of the Company's purchases.

Customers

For the year ended June 30, 2018, three customers represented 37%, 24% (20% of accounts receivable), and 14% (35% of accounts receivable), respectively, of the Company's non-grant related revenue.

For the year ended June 30, 2017, two customers represented 86%, and 14%, respectively, of the Company's non-grant related revenue.

Note 11. Stockholders' Equity

On December 15, 2016, in connection with the Company's reincorporation from the State of Nevada to the State of Delaware, the Company filed a Certificate of Incorporation with the State of Delaware, which, among other things, reduced the number of authorized shares of capital stock of the Company from 310,000,000 total shares consisting of (a) 300,000,000 shares of Common Stock and (b) 10,000,000 of \$0.001 par value "blank check" preferred stock to 50,000,000 total shares consisting of (a) 45,000,000 shares of Common Stock and (b) 5,000,000 shares of "blank check" preferred stock.

As of June 30, 2018 and 2017, there were no shares of preferred stock issued and outstanding.

Equity Issuances

December 2017 Offering

During the quarter ended December 31, 2017, the Company sold a total of 2,640,819 shares of its common stock at \$5.50 per share in a private placement for aggregate gross proceeds of \$14.5 million before deducting commissions and expenses of approximately \$1.3 million. The proceeds of the offering will be used to fund development and commercialization of the Company's technology, capital expenditures and general corporate expenditures. In addition to the commissions and expenses paid, the Company issued to the placement agents warrants to purchase 154,177 shares of the Company's common stock. The warrants represent a cost of the offering, have a grant date fair value of \$645,757 and are shown as an offset on the consolidated statements of changes in stockholders' equity.

The fair values of the warrants were estimated at the dates of grant using a binomial option pricing model with the following weighted average assumptions:

Expected term (years)	5.50
Risk-free interest rate	2.12%
Volatility	69%
Dividend yield	0%

Investors in the December 2017 Offering (other than directors, officers, employees, or other affiliates of the Company) were given price-protected anti-dilution rights such that if, prior to September 30, 2018, the Company issues additional shares of Common Stock or Common Stock equivalents (subject to customary exceptions, including but not limited to issuances of awards under equity compensation plans and certain other issuances of securities in connection with credit arrangements, equipment financings, lease arrangements or similar transactions) for a consideration per share less than the December 2017 Offering price per share (as adjusted for any subsequent stock dividend, stock split, distribution, recapitalization, reclassification, reorganization or similar event) (the "Lower Price"), each such investor will be entitled to receive from the Company additional shares of Common Stock in an amount such that, when added to the number of shares of Common Stock initially purchased by such investor, will equal the number of shares of Common Stock that such investor's subscription amount would have purchased at the greater of the Lower Price and \$5.00 (or \$4.40 in the case of one investor).

During the year ended June 30, 2018, the Company also issued 542,450 shares of its common stock to investors in the Company's private placement offering that closed in May 2017. These issuances were made pursuant to the price-protection provisions granted to such investors in their subscription agreements.

Equity incentive plans

On May 22, 2015, the Board of Directors adopted, and on the same date the stockholders approved, the 2015 Equity Incentive Plan (the "2015 Plan"), which reserved a total of 1,200,000 shares of Common Stock for issuance under the 2015 Plan. The 2015 Plan authorized the grant to participants of nonqualified stock options, incentive stock options, restricted stock awards, restricted stock units, performance grants. No additional shares will be issued under the 2015 Plan. Effective December 15, 2016, equity awards are granted under the Company's 2016 Stock Incentive Plan (the "2016 Plan"), which was approved stockholders on the same date. The Company settles awards issued under all plans with newly issued common shares.

In addition, the number of shares of our Common Stock subject to the 2016 Plan, any number of shares subject to any numerical limit in the 2016 Plan, and the number of shares and terms of any incentive award are expected to be adjusted in the event of any change in our outstanding Common Stock by reason of any stock dividend, spin-off, split-up, stock split, reverse stock split, recapitalization, reclassification, merger, consolidation, liquidation, business combination or exchange of shares or similar transaction.

Options granted under the 2015 Plan vest as determined by the Company's board of directors and expire over varying terms, but not more than ten years from the date of grant. In the case of an Incentive Stock Option that is granted to a 10% shareholder on the date of grant, such Option shall not be exercisable after the expiration of five years from the date of grant. Options for 160,000 shares of Common Stock were issued under the 2015 Plan to four non-employee directors in May 2015. No new options were granted in the year ended June 30, 2017.

The fair values of the Company's options were estimated at the dates of grant using a Black-Scholes option pricing model with the following weighted average assumptions:

	June 30, 2018
Exercise price	\$6.24 – \$7.59
Expected term (years)	

Risk-free interest rate	1.70 – 2.80%
Volatility	67 – 70%
Dividend yield	0%
Weighted Average Grant Date Fair Value of Options granted during the period	\$3.82

Expected term: The Company's expected term is based on the period the options are expected to remain outstanding. The Company estimated this amount utilizing the "Simplified Method" in that the Company does not have sufficient historical experience to provide a reasonable basis to estimate an expected term.

Risk-free interest rate: The Company uses the risk-free interest rate of a U.S. Treasury Note with a similar term on the date of the grant.

Volatility: The Company calculates the expected volatility of the stock price using the historical volatilities of the Company's common stock traded on the Nasdaq Capital Market.

Dividend yield: The Company uses a 0% expected dividend yield as the Company has not paid dividends to date and does not anticipate declaring dividends in the near future.

The following is a summary of the option activity:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding – June 30, 2017	160,000	1.50		
Exercisable – June 30, 2017	80,000	1.50		
Granted	1,229,859	6.69		
Exercised	—	—		
Forfeited/Cancelled	(51,000)	7.00		
Outstanding – June 30, 2018	1,338,859	6.06	6.64	1,627
Exercisable – June 30, 2018	120,000	1.50	6.90	692

The total intrinsic value of options exercised during the fiscal years ended June 30, 2018 and June 30, 2017 was \$0 million and \$0 million, respectively.

As of June 30, 2018, the Company has \$2,842,778 in unrecognized stock-based compensation expense attributable to the outstanding options, which will be amortized over a period of 2.69 years.

For the years ended June 30, 2018 and 2017, the Company recorded \$1,675,093 and \$27,932, respectively, in stock-based compensation related to stock options, which is reflected in the consolidated statements of operations.

Restricted Stock Units and Restricted Stock Awards

The Company recognizes the compensation expense for all share-based compensation granted based on the grant date fair value for directors and employees and the reporting period remeasured fair value for consultants. Share-based compensation expense is recognized on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in substance, multiple awards. The fair value of the award is recorded as share-based compensation expense over the respective restricted period. Any portion of the grant awarded to consultants, directors, employees, and other service providers as to which the repurchase option has not lapsed is accrued on the Balance Sheet as a component of accounts payable and accrued expenses. As of June 30, 2018 and 2017, the accrued stock-based compensation was \$395,539 and \$399,157, respectively. The Company has the right to repurchase some or all of such shares in certain circumstances upon termination of the recipient's service with the Company, for up to 60 months from the date of termination ("repurchase option"). The shares as to which the repurchase option has not lapsed are subject to forfeiture upon termination of consulting and employment relationships.

In September 2015, the Company amended the original restricted stock agreement for certain award recipients. Pursuant to the amendment, 75% of the shares as to which the repurchase option had not lapsed as of September 30, 2015 will be released from the repurchase option on the third anniversary of the original effective date of the agreement. The remaining 25% of the shares will be released from the repurchase option on the fourth anniversary of the original effective date.

A summary of unvested restricted stock awards ("RSAs") and restricted stock unit awards ("RSUs") outstanding as of June 30, 2018 and changes during the twelve months then ended is as follows:

	Number of RSAs/RSUs	Weighted Average Fair Value per Share/Unit
Outstanding - June 30, 2017	1,460,632	\$ 3.73
Granted	1,035,994	6.61
Vested	(653,420)	3.41
Forfeited/Cancelled/Repurchased	(244,151)	3.68
Outstanding – June 30, 2018	1,599,055	\$ 5.73

The weighted average grant date fair value per share for awards granted during the fiscal years ended June 30, 2018 and June 30, 2017 was \$6.61 and \$4.83, respectively. The total fair value of restricted awards that vested during the fiscal years ended June 30, 2018 and June 30, 2017 was \$3.8 million and \$3.7 million, respectively.

During the years ended June 30, 2018 and 2017, the Company recorded stock-based compensation expense of \$3,784,554 and \$3,223,398, respectively related to the RSAs and RSUs that have been issued to date.

As of June 30, 2018, the Company had approximately \$5.0 million in unrecognized stock-based compensation expense related to the unvested shares.

Performance Awards

In March 2018 the Company granted 139,500 performance-based restricted stock units (PBRSU) to employees with a grant date fair value per share of \$6.26. The PBRSU awards contain performance and service conditions which must be satisfied for an employee to earn the award. The performance condition is based primarily on the achievement of certain performance objectives. Once earned, the PBRSU awards vest 100% on the first anniversary of the grant date. The Company recognizes compensation expense for PBRSU awards using a graded vesting model, based on the probability of the performance condition being met. During the year, 15,000 of the PBRSU awards were earned and 124,500 of the awards were cancelled. For the year ended June 30, 2018, the Company recognized \$30,870 of stock compensation expense on PBRSU awards.

As of June 30, 2018, the Company had approximately \$0.06 million in unrecognized stock-based compensation expense related to the 15,000 unvested PBRSU awards.

Note 12. Commitments and contingencies

Employment Agreements

On June 15, 2015, the Company entered into a three-year employment agreement with its Chief Executive Officer (“CEO”). After the initial three-year term, the agreement is automatically renewed for successive one-year periods unless terminated by either party on at least 30 days’ written notice prior to the end of the then-current term. Under the employment agreement, the CEO’s annual base salary was \$150,000, subject to increase or decrease on each anniversary of the agreement as determined by the Board of Directors. The Board of Directors increased the CEO’s annual salary to \$154,500, effective July 4, 2016, and to \$163,770, effective September 11, 2017. By notice effective July 1, 2018, the Board of Directors increased the CEO’s annual salary to \$300,000. The CEO is eligible, at the discretion of our Board of Directors, to receive an annual cash bonus of up to 100% of his annual base salary, which may be based on the Company achieving certain operational, financial or other milestones (the “Milestones”) that may be established by the Board of Directors. The CEO is entitled to receive stock options or other equity incentive awards under the 2016 Plan as and when determined by the Board, and is entitled to receive perquisites and other fringe benefits that may be provided to, and is eligible to participate in any other bonus or incentive program established by the Company, for the executives. The CEO and his dependents are also entitled to participate in any of the employee benefit plans subject to the same terms and conditions applicable to other employees. The CEO will be entitled to be reimbursed for all reasonable travel, entertainment and other expenses incurred or paid by him in connection with, or related to, the performance of his duties, responsibilities or services under his employment agreement, in accordance with policies and procedures, and subject to limitations, adopted by us from time to time. In the event that the CEO is terminated by the Company without Cause (as defined in his employment agreement) or he resigns for Good Reason (as defined in his employment agreement) during the term of his employment agreement, the CEO would be entitled to (x) an amount equal to his annual base salary then in effect (payable in accordance with the Company’s normal payroll practices) for a period of 24 months commencing on the effective date of his termination (the “Severance Period”) (in the case of termination by the executive for Good Reason, reduced by any cash remuneration paid to him because of any other employment or self-employment during the Severance Period), and (y) if and to the extent the Milestones are achieved for the annual bonus for the year in which the Severance Period commences (or, in the absence of Milestones, the Board of Directors has, in its sole discretion, otherwise determined an amount of the CEO’s annual bonus for such year), an amount equal to such annual bonus pro-rated for the portion of the performance year completed before the CEO employment terminated, (z) any unvested stock options, restricted stock or similar incentive equity instruments will vest immediately. For the duration of the Severance Period, the CEO will also be eligible to participate in our benefit plans or programs, provided the CEO was participating in such plan or program immediately prior to the date of employment termination, to the extent permitted under the terms of such plan or program (collectively, the “Termination Benefits”). If the CEO’s employment is terminated during the term of his employment agreement by the Company for Cause, by the CEO for any reason other than Good Reason or due to his death, then he will not be entitled to receive the Termination Benefits, and shall only be entitled to the compensation and benefits which shall have accrued as of the date of such termination (other than with respect to certain benefits that may be available to the CEO as a result of a Permanent Disability (as defined in his employment agreement)).

On July 14, 2017, the Board named a new Chief Financial Officer who would also serve as the Company’s Chief Accounting Officer, effective as of the same date.

In connection with the election of the new Chief Financial Officer of the Company, the Company entered into a one-year employment agreement, dated July 14, 2017 (the “Employment Agreement”), with the Chief Financial Officer with essentially the same terms as the Chief Executive Officer employment agreement described above with the exception of the following:

- Monthly living expenses of \$1,600.
- Target annual bonus each fiscal year equal to 70% of his annual base salary, based on certain Company operation, financial, and other milestones set by the Board and/or its Compensation Committee.
- A restricted stock award for 100,000 shares of Common Stock and options for 75,000 shares of Common Stock to be granted during the Company's next open trading window. The Awards will be granted under the 2016 Plan and will vest 25% on each of the first, second, third, and fourth anniversaries of the grant date, subject to the CFO's continued employment and the terms and conditions of the 2016 Plan and the applicable award agreements.

The term of the Employment Agreement extends through July 31, 2018, and the Employment Agreement will automatically renew for successive one- year periods unless either party gives at least 30 days written notice of non-renewal to the other party prior to the end of the then applicable term.

Operating leases

The Company leased three office locations in Huntersville, NC pursuant to five- and three-year lease agreements, and month to month. The three-year lease agreement expired in April 2018 in connection with a move in corporate office location, and the five-year lease agreement expires in November 2022. The operating leases provide for annual real estate tax and cost of living increases and contain predetermined increases in the rentals payable during the terms of the leases. The aggregate rent expense is recognized on a straight-line basis over the lease term. The total lease rental expense was \$143,112 and \$56,808 for the years ended June 30, 2018 and 2017, respectively.

The Company leased equipment for the NY Facility on a month-to-month basis until November 2017. The original lease agreement had a three-month term beginning on June 16, 2017. The aggregate rent expense is recognized on a straight-line basis over the lease term. The total lease rental expense was \$79,375, and \$8,125 for the year ended June 30, 2018 and 2017, respectively. Additionally, the Company leases a copier for the NC office location pursuant to a five year lease agreement. The total lease rental expense was \$1,348 and \$0 for the years ended June 30, 2018 and 2017.

The following table outlines the minimum future lease payments for the next five years and thereafter:

June 30,		
2019	\$	120,859
2020		124,478
2021		128,206
2022		132,046
2023		55,825
Thereafter		—
Total	\$	561,414

Ontario County Industrial Development Authority Agreement

On February 27, 2018, the Company entered into a Lease and Project Agreement (the "Lease and Project Agreement") and a Company Lease Agreement (the "Company Lease Agreement" and together with the Lease and Project Agreement, the "Agreements"), each dated as of February 1, 2018, with the Ontario County Industrial Development Agency, a public benefit corporation of the State of New York (the "OCIDA"). Pursuant to the Agreements, the Company will lease for \$1.00 annually to the OCIDA an approximately 9.995 acre parcel of land in Canandaigua, New York, together with the improvements thereon (including the Company's New York fabrication facility), and transfer title to certain related equipment and personal property to the OCIDA (collectively, the "Facility"). The OCIDA will lease the Facility back to the Company for annual rent payments specified in the Lease and Project Agreement for the Company's primary use as research and development, manufacturing, warehouse and professional office space in its business, and to be subleased, in part, by the Company to various existing tenants. The Company estimates substantial tax savings during the term of the Agreements, which expire on December 31, 2028. In addition, subject to the terms of the Lease and Project Agreement, certain purchases and leases of eligible items will be exempt from the imposition of sales and use taxes. Subject to the terms of the Lease and Project Agreement, the OCIDA has also granted to the Company an exemption from certain mortgage recording taxes for one or more mortgages securing an aggregate principal amount not to exceed \$12.0 million, or such greater amount as approved by the OCIDA in its sole and absolute discretion. The benefits provided to the Company pursuant to the terms of the Lease and Project Agreement are subject to claw back over the life of the Agreements upon certain recapture events, including certain events of default.

Real Estate Contingent Liability

In connection with the acquisition of the STC-MEMS Business, the Company agreed to pay to FRMC a penalty, as set forth below, if the Company sells the property subject to the related Definitive Real Property Purchase Agreement within three (3) years after the date of such agreement for an amount in excess of \$1,750,000, subject to certain enumerated exceptions. The penalty imposed shall be equivalent to the amount that the sales price of the property exceeds \$1,750,000 up to the maximum penalty ("Maximum Penalty") defined below:

	Maximum Penalty
Year 1, ended June 26, 2018	\$ 5,960,000
Year 2, ending June 26, 2019	\$ 3,973,333
Year 3, ending June 26, 2020	\$ 1,986,667

The fair value of the contingent liability was calculated by an independent third-party appraisal firm, utilizing a present value calculation

based on the probability the Company sells the property triggering the contingent penalty and a discount rate of 17.0%. The 17.0% discount rate was derived from a weighted average cost of capital, modified to include the effects of the bargain purchase price. As of June 30, 2018 and 2017, the fair value of the contingent liability was \$1,229,966 and \$1,730,542, respectively. During the year ended June 30, 2018 and 2017, the Company marked the contingent liability to fair value and recorded a gain of \$500,756 and \$0, respectively, relating to the change in fair value.

Litigation, Claims and Assessments

From time to time, the Company may become involved in lawsuits, investigations and claims that arise in the ordinary course of business. The Company believes it has meritorious defenses against all pending claims and intends to vigorously pursue them. While it is not possible to predict or determine the outcomes of any pending actions, the Company believes the amount of liability, if any, with respect to such actions, would not materially affect its financial position, results of operations or cash flows.

Tax Credit Contingency

The Company accrues a liability for indirect tax contingencies when it believes that it is both probable that a liability has been incurred and that it can reasonably estimate the amount of the loss. The Company reviews these accruals and adjusts them to reflect ongoing negotiations, settlements, rulings, advice of legal counsel and other relevant information. To the extent new information is obtained and the Company's views on the probable outcomes of claims, suits, assessments, investigations or legal proceedings change, changes in the Company's accrued liabilities would be recorded in the period in which such determination is made.

The Company's gross unrecognized indirect tax credits totaled \$0.1 million as of June 30, 2018 and \$0.0 million as of June 30, 2017 and is recorded on the Consolidated Balance Sheet as a long term liability.

Note 13. Related Party Transactions

Consulting Services

AEG Consulting, a firm owned by one of the Company's Co-Chairmen, received \$7,395 and \$15,195 for consulting fees for the years ended June 30, 2018 and 2017, respectively.

On September 27, 2017, the Company granted a restricted stock award of 11,000 shares of the Company's common stock with a fair value on the grant date of \$78,320 to a director for board advisory services provided from January 2017 to June 2017, prior to the director's appointment to the Board of Directors on July 14, 2017. The award vests 25% on each of the first four anniversaries of the grant date.

Offering/Private Placement

The Company's CEO and Vice President of Engineering participated in the closing of the 2016-2017 Offering that occurred on November 25, 2016 where they each purchased 20,000 shares of Common Stock at a price of \$5.00 per share. The Company's Vice-President of Operations also purchased 2,000 shares of Common Stock in the closing at an aggregate purchase price of \$10,000. One of the Co-Chairmen of the Company's Board purchased 200,000 shares of Common Stock at a price of \$5.00 per share at an aggregate purchase price of \$1,000,000. The brother of the CEO purchased 14,000 shares of Common Stock in the closing at an aggregate purchase price of \$70,000.

The Company's second Co-Chairman participated in the closing of the 2016-2017 Offering that occurred on December 27, 2016 where he purchased 2,000 shares of Common Stock at a price of \$5.00 per share for an aggregate purchase price of \$10,000. A second brother of the CEO purchased 20,000 shares of Common Stock in the closing at an aggregate purchase price of \$100,000.

On November 14, 2017, certain members of the Company's Board of Directors purchased shares of the Company's common stock at a price of \$5.50 per share in a private placement. One of the Company's Co-Chairmen purchased 154,545 shares at a price of \$5.50 per share for an aggregate purchase price of \$849,998. The other Co-Chairman purchased 1,818 shares at a price of \$5.50 per share for an aggregate purchase price of \$9,999. Three additional members of the Company's Board of Directors each purchased 5,454 shares at a price of \$5.50 per share for an aggregate purchase price of \$29,997 for each such Board member.

On December 1, 2017 a brother of the Company's Chief Executive Officer purchased 12,000 shares of the Company's common stock in a private placement at a price of \$5.50 per share for an aggregate purchase price of \$66,000.

Note 14. Income Taxes

On December 22, 2017, the Tax Cuts and Jobs Act ("Tax Act") was signed into law. ASC 740, Accounting for Income Taxes, requires companies to recognize the effects of changes in tax laws and rates on deferred tax assets and liabilities and the retroactive effects of changes in tax laws in the period in which the new legislation is enacted. Due to the timing of the Company's fiscal year. The lower corporate tax rate will be phased in, resulting in a U.S. statutory federal rate of approximately 27.6% for our fiscal year ended June 30, 2018 and 21% for subsequent fiscal years.

The SEC issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the appropriate accounting treatment when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. SAB 118 allows for a measurement period of up to one year after the enactment date of the Tax Act to finalize the recording of the related tax impacts. In the interim periods, provisional amounts are to be recorded where the income tax effect can be reasonably estimated. The Company's accounting for the Tax Act is incomplete, but the Company has recorded the provisional estimates discussed below and will finalize and record any resulting adjustments within the one-year measurement period. The final transitional impacts of the Tax Act may differ from the below provisional estimates, possibly materially, due to, among other things: legislation by states with respect to the Tax Act; evolving technical interpretations of the Tax Act; legislative action to address questions that arise because of the Tax Act; clarification of the application of accounting standards for income taxes or related interpretations in response to the Tax Act; or updates or changes to provisional amounts the Company has utilized to calculate the transitional impacts, including impacts from changes to current year earnings and tax liabilities, and deferred tax assets and liabilities.

The deferred tax assets and liabilities of the Company are impacted by the Tax Act. The reduction in the U.S. federal corporate tax rate from 35% to 21% for tax years beginning after December 31, 2017, requires the Company to remeasure its deferred tax assets and liabilities. The Company has evaluated this change and recorded a decrease to net deferred tax assets with a corresponding decrease to the Company's valuation allowance against deferred tax assets of \$4.6 million. The Company is still in the process of evaluating the state tax impact of the Tax Act on deferred tax balances.

The Company had no income tax expense due to operating losses incurred for the years ended June 30, 2018 and 2017.

The provision for/(benefit from) income tax differs from the amount computed by applying the statutory federal income tax rate to income before the provision for/(benefit from) income taxes. The sources and tax effects of the differences are as follows:

	For the Year Ended June 30, 2018	For the Year Ended June 30, 2017
Income taxes at Federal statutory rate	(27.55)%	(34.00)%
State income taxes, net of Federal income tax benefit	(1.96)%	(2.63)%
Tax Credits	(0.21)%	—
Permanent differences	0.04%	(6.36)%
Other	1.90%	6.49%
Change in Valuation Allowance	12.19%	36.50%
Effect of changes in income tax rate applied to net deferred taxes	15.59%	0.00%
Income Tax Provision	0.00%	0.00%

The tax effects of temporary differences that give rise to the Company's deferred tax assets and liabilities are as follows:

	June 30, 2018	June 30, 2017
Net Operating Loss Carryforwards	\$ 7,848,901	\$ 5,352,238
Share-based compensation	1,283,454	406,498
Accumulated depreciation/basis differences	(919,211)	—
Credits	45,681	—
Other	116,819	(33,028)
	<u>8,375,644</u>	<u>5,725,708</u>
Valuation Allowance	(8,375,644)	(5,725,708)
Net Deferred Tax Assets	\$ —	\$ —

At June 30, 2018, the Company had approximately \$34.1 million of federal and state NOL carry overs that may be available to offset future taxable income.

The NOL carry overs, if not utilized, will expire in stages beginning 2034.

Based on a history of cumulative losses at the Company and the results of operations for the years ended June 30, 2018 and 2017, the Company determined that it is more likely than not it will not realize benefits from the deferred tax assets. The Company will not record income tax benefits in the financial statements until it is determined that it is more likely than not that the Company will generate sufficient taxable income to realize the deferred income tax assets. As a result of the analysis, the Company determined that a full valuation allowance against the deferred tax assets is required. The net change in the valuation allowance during the year ended June 30, 2018 was an increase of approximately \$2.6 million.

As a result of the reverse merger that occurred on May 22, 2015, the Company's previous NOL may be significantly limited. The Company has not performed a detailed analysis to determine whether an ownership change under IRC Section 382 or similar rules has occurred. The effect of an ownership change would be the imposition of annual limitation on the use of NOL carry forwards attributable to periods before the change which total approximately \$421,000. Any limitation may result in expiration of a portion of the NOL before utilization. The Company recognizes interest and penalties related to uncertain tax positions in selling, general and administrative expenses.

The Company's gross unrecognized tax benefits totaled \$0.3 million as of June 30, 2018 and \$0.0 million as of June 30, 2017. Of these amounts, \$0.3 million and \$0.0 as of June 30, 2018 and June 30, 2017, respectively, represent the amounts of unrecognized tax benefit that, if recognized, would impact the effective tax rate in each of the fiscal years.

A reconciliation of June 30, 2017 through June 30, 2018 beginning and ending amount of gross unrecognized tax benefits is as follows (in thousands):

	June 30, 2018	June 30, 2017
Beginning Balance	\$ —	\$ —
Additions based on positions related to the current year	250	—
Additions for tax positions in prior years	<u>46</u>	<u>—</u>
Reductions for tax positions in prior years	—	—
Expiration of statute of limitations	—	—
Ending Balance	<u>\$ 296</u>	<u>\$ —</u>

The unrecognized tax benefit of \$0.3 million at the end of June 30, 2018 is recorded on the Consolidated Balance Sheet as a reduction to the carrying value of the gross deferred tax assets.

The Company's fiscal 2015 federal and North Carolina returns and subsequent tax years remain open for examination. The Company is not currently under examination by any taxing authorities.

Note 15. Segment Information

Operating segments are defined as components of an enterprise about which separate financial information is available and evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is its Chief Executive Officer. The Company operates in two segments, Foundry Fabrication Services which consists of engineering review services and STC-MEMS foundry services; and RF Filters which consists of amplifier and filter product sales, and grant revenue. The Company records all of its general and administrative costs in the RF Filters segment.

The Company evaluates performance of its operating segments based on revenue and operating profit (loss). Segment information for the years ended June 30, 2018 and 2017 are as follows:

	Foundry Fabrication Services	RF Filters	Total
Year ended June 30, 2018			
Revenue	\$ 1,006,993	\$ 53,640	\$ 1,060,633
Grant revenue	—	147,232	147,232
Cost of revenue	<u>1,016,413</u>	<u>3,077</u>	<u>1,019,490</u>
Gross margin	(9,420)	197,795	188,375
Research and development	—	13,266,975	13,266,975
General and administrative	—	8,804,103	8,804,103
Other operating expenses	—	395,025	395,025
Income/(Loss) from Operations	\$ (9,420)	\$ (22,268,308)	\$ (22,277,728)
Year ended June 30, 2017			
Revenue	\$ 14,500	\$ 471,996	\$ 486,496
Cost of revenue	—	—	—
Gross margin	<u>14,500</u>	<u>471,996</u>	<u>486,496</u>
Research and development	—	5,013,260	5,013,260
General and administrative	—	6,156,807	6,156,807
Loss from Operations	\$ 14,500	\$ (10,698,071)	\$ (10,683,571)
As of June 30, 2018			
Accounts receivable	\$ 191,846	\$ 22,813	\$ 214,659
Property and equipment	465,360	12,354,809	12,820,169
As of June 30, 2017			
Accounts receivable	\$ —	\$ —	\$ —
Property and equipment	424,174	7,429,640	7,853,814

Note 16. Subsequent Events

Grant Agreement

On July 24, 2018 the Company executed a grant agreement with the Town of Canandaigua, through the Community Development Block Grant. The purpose of the grant is to provide financing in support of the purchase and installation of new machinery and equipment at its NY Facility made between June 27, 2017 and June 27, 2019. The grant is subject to certain terms and conditions and allows for disbursement of up to \$734,000 in grants.

Warrant Exercise

In July 2018, 20,079 warrants were exercised resulting in the receipt of \$70,520 and the issuance of 19,086 shares of Common Stock.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management is responsible for establishing and maintaining a system of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that is designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

We conducted an evaluation under the supervision and with the participation of our Chief Executive Officer and our Chief Financial Officer of the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2018. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of such date.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Our management assessed the effectiveness of our internal control over financial reporting as of June 30, 2018. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control Integrated Framework (2013). Based on that evaluation under this framework, our management concluded that our internal control over financial reporting was effective.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness as to future periods are subject to risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Further, because of changes in conditions, effectiveness of internal control over financial reporting may vary over time. Our system contains self-monitoring mechanisms, and actions are taken to correct deficiencies as they are identified.

This Report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company (as an emerging growth company) to provide only management's report in this annual report.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended June 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

Information to be provided in the Company's proxy statement filing

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following Consolidated Financial Statements as set forth in Part II, Item 8 of this report are filed herein.

Consolidated Financial Statements

Consolidated Balance Sheets
Consolidated Statements of Income and Comprehensive Income
Consolidated Statements of Equity
Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

Financial Statement Schedules

All financial statement schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

Exhibits

EXHIBIT INDEX

Exhibit Number	Description
<u>2.1</u>	<u>Plan of Conversion, dated December 15, 2016 (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on December 16, 2016)</u>
<u>2.2</u>	<u>Definitive Asset Purchase Agreement dated March 23, 2017 by and between The Research Foundation for the State University of New York and the Company (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on March 24, 2017)</u>
<u>2.3</u>	<u>Definitive Real Property Purchase Agreement dated March 23, 2017, by and between Fuller Road Management Corporation and the Company (incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed with the SEC on March 24, 2017)</u>
<u>3.1</u>	<u>Articles of Conversion of the Company, as filed with the Nevada Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on December 16, 2016)</u>
<u>3.2</u>	<u>Certificate of Conversion of the Company, as filed with the Delaware Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the SEC on December 15, 2016)</u>
<u>3.3</u>	<u>Certificate of Incorporation, as filed with the Delaware Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed with the SEC on December 15, 2016)</u>
<u>3.4</u>	<u>Bylaws of the Company (incorporated by reference to Exhibit 3.4 to the Company's Current Report on Form 8-K filed with the SEC on December 15, 2016)</u>
<u>4.1</u>	<u>Indenture, dated as of May 14, 2018, by and among Akoustis Technologies Inc., Akoustis, Inc. and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the SEC on May 15, 2018)</u>
<u>10.1.1†</u>	<u>Akoustis, Inc. 2014 Stock Plan (incorporated by reference to Exhibit 10.10 to the Company's Transition Report on Form 10-K filed with the SEC on October 31, 2016)</u>
<u>10.1.2†</u>	<u>Form of Restricted Stock Purchase Agreement under the 2014 Stock Plan between the Company (as assignee of Akoustis, Inc.) and each of Steve DenBaars, Mark Boomgarden and Arthur Geiss (incorporated by reference to Exhibit 10.12 to the Company's Current Report on Form 8-K filed with the SEC on May 29, 2015)</u>
<u>10.1.3†</u>	<u>Form of Amendment to Restricted Stock Purchase Agreement under the 2014 Stock Plan between the Company and each of Steve DenBaars and Mark Boomgarden (incorporated by reference to Exhibit 10.18 to the Company's Annual Report on Form 10-K filed with the SEC on June 29, 2016)</u>
<u>10.1.4†</u>	<u>Declaration of Amendment to the Akoustis, Inc. 2014 Stock Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the SEC on November 14, 2017)</u>
<u>10.2</u>	<u>Joint Development Agreement, dated February 27, 2015, between Akoustis, Inc. and Global Communication Semiconductors, LLC (incorporated by reference to Exhibit 10.13 to the Company's Current Report on Form 8-K filed with the SEC on May 29, 2015)</u>
<u>10.3</u>	<u>Foundry Agreement, dated February 27, 2015, between Akoustis, Inc. and Global Communication Semiconductors, LLC (incorporated by reference to Exhibit 10.14 to the Company's Current Report on Form 8-K filed with the SEC on May 29, 2015)</u>
<u>10.4</u>	<u>Form of 2015 Placement Agent Warrant for Common Stock of the Company in connection with the Company's 2015 private placement offering (incorporated by reference to Exhibit 10.8 to the Company's Current Report on Form 8-K filed with the SEC on May 29, 2015)</u>

- [10.5](#) [Form of 2015 Registration Rights Agreement \(incorporated by reference to Exhibit 10.9 to the Company's Current Report on Form 8-K filed with the SEC on May 29, 2015\)](#)
- [10.6.1†](#) [Akoustis Technologies, Inc. 2015 Equity Incentive Plan \(incorporated by reference to Exhibit 10.10 to the Company's Current Report on Form 8-K filed with the SEC on May 29, 2015\)](#)
- [10.6.2†](#) [Form of Stock Option Agreement under the Akoustis Technologies, Inc. 2015 Equity Incentive Plan \(incorporated by reference to Exhibit 10.11 to the Company's Current Report on Form 8-K filed with the SEC on May 29, 2015\)](#)
- [10.6.3†](#) [Form of Restricted Stock Agreement, under the Akoustis Technologies, Inc. 2015 Equity Incentive Plan, between the Company and each of Mark Boomgarden, Dave Aichele and Cindy Payne \(incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K filed with the SEC on June 29, 2016\)](#)
- [10.7†](#) [Employment Agreement between the Company and Jeffrey Shealy dated as of June 15, 2015 \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on June 19, 2015\)](#)
- [10.8.1†](#) [Employment Agreement between the Company and David M. Aichele dated as of June 15, 2015 \(incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on June 19, 2015\)](#)
- [10.8.2†](#) [Offer Letter from the Company to David M. Aichele \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on May 30, 2017\)](#)
- [10.9.1†](#) [Employment Agreement between the Company and Mark Boomgarden dated as of June 15, 2015 \(incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed with the SEC on June 19, 2015\)](#)
- [10.9.2†](#) [Offer Letter from the Company to Mark D. Boomgarden \(incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on May 30, 2017\)](#)
- [10.10.1†](#) [Employment Agreement between the Company and Cindy C. Payne dated as of June 15, 2015 \(incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed with the SEC on June 19, 2015\)](#)
- [10.10.2†](#) [Offer Letter from the Company to Cindy C. Payne \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on May 26, 2017\)](#)
- [10.11](#) [Form of 2016 Subscription Agreement between the Company and the investors party thereto \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on April 20, 2016\)](#)
- [10.12](#) [Form of 2016 Placement Agent Warrant for Common Stock of the Company in connection with the Company's 2016 private placement offering \(incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on April 20, 2016\)](#)
- [10.13](#) [Form of 2016 Registration Rights Agreement \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on March 11, 2016\)](#)
- [10.14.1](#) [Form of Registration Rights Agreement by and among the Company and the investors in the 2016-2017 Offering \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on November 25, 2016\)](#)

- [10.14.2](#) [Amendment No. 1 to Registration Rights Agreement by and among the Company and the investors in the 2016-2017 Offering \(incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on December 28, 2016\)](#)
- [10.15](#) [Form of Placement Agent Warrant in the 2016-2017 Offering \(incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed with the SEC on December 28, 2016\)](#)
- [10.16.1](#) [Form of Subscription Agreement by and among the Company and the investors in the 2016-2017 Offering \(incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2017\)](#)
- [10.16.2](#) [Form of Amended Subscription Agreement by and among the Company and the investors in the 2016-2017 Offering \(incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2017\)](#)
- [10.17.1](#) [Placement Agent Agreement, dated December 8, 2016, by and between the Company and Katalyst Securities LLC in connection with the 2016-2017 Offering \(incorporated by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2017\)](#)
- [10.17.2](#) [Amendment to Placement Agent Agreement, dated May 8, 2017, by and between the Company and Katalyst Securities LLC \(incorporated by reference to Exhibit 10.40 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-218245\) filed with the SEC on May 25, 2017\)](#)
- [10.18.1](#) [Placement Agent Agreement, dated December 12, 2016, by and between the Company and Drexel Hamilton, LLC in connection with the 2016-2017 Offering \(incorporated by reference to Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2017\)](#)
- [10.18.2](#) [Amendment to Placement Agent Agreement by and between the Company and Drexel Hamilton LLC \(incorporated by reference to Exhibit 10.39 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-218245\) filed with the SEC on May 25, 2017\)](#)
- [10.19](#) [Placement Agent Agreement, dated December 14, 2016, by and between the Company and Joseph Gunnar & Co., LLC in connection with the 2016-2017 Offering \(incorporated by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2017\)](#)
- [10.20](#) [Placement Agent Agreement, dated December 19, 2016, by and between the Company and Northland Securities, Inc. in connection with the 2016-2017 Offering \(incorporated by reference to Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2017\)](#)
- [10.21](#) [Form of Amended and Restated Placement Agent Warrant for Common Stock of the Company in connection with the Company's 2015 private placement offering and 2016 private placement offering \(incorporated by reference to Exhibit 10.12 to the Company's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2017\)](#)
- [10.22.1†](#) [Akoustis Technologies, Inc. 2016 Stock Incentive Plan \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on December 16, 2016\)](#)
- [10.22.2†](#) [Form of Restricted Stock Award Agreement under the Akoustis Technologies, Inc. 2016 Stock Incentive Plan \(incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2017\)](#)
- [10.22.3†](#) [Revised Form of Restricted Stock Award Agreement under the Akoustis Technologies, Inc. 2016 Stock Incentive Plan \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on June 23, 2017\)](#)

- [10.23.1](#) [Form of Subscription Agreement by and among the Company and the investors in the 2017 Offering \(incorporated by reference to Exhibit 10.35 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-218245\) filed with the SEC on May 25, 2017\)](#)
- [10.23.2](#) [Form of Amended Subscription Agreement by and among the Company and the investors in the 2017 Offering \(incorporated by reference to Exhibit 10.36 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-218245\) filed with the SEC on May 25, 2017\)](#)
- [10.24](#) [Form of Registration Rights Agreement by and among the Company and the investors in the 2017 Offering \(incorporated by reference to Exhibit 10.37 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-218245\) filed with the SEC on May 25, 2017\)](#)
- [10.25](#) [Form of Placement Agent Warrant in the 2017 Offering \(incorporated by reference to Exhibit 10.38 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-218245\) filed with the SEC on May 25, 2017\)](#)
- [10.26](#) [Purchase Order for Deposition Tool \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on June 20, 2017\)](#)
- [10.27.1†](#) [Employment Agreement by and between John T. Kurtzweil and the Company, dated July 14, 2017 \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on July 17, 2017\)](#)
- [10.27.2†](#) [Form of Restricted Stock Award Agreement to be entered into by and between John T. Kurtzweil and the Company in connection with Mr. Kurtzweil's employment \(incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on July 17, 2017\)](#)
- [10.27.3†](#) [Form of Option Agreement to be entered into by and between John T. Kurtzweil and the Company in connection with Mr. Kurtzweil's employment \(incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on July 17, 2017\)](#)
- [10.28†](#) [Summary of Akoustis Technologies, Inc. Director Compensation Program, effective October 3, 2017 \(incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q filed with the SEC on November 14, 2017\)](#)
- [10.29.1](#) [Form of Subscription Agreement by and among the Company and the director investors in the first round of the 2017 Offering \(incorporated by reference to Exhibit 10.29.1 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- [10.29.2](#) [Form of Subscription Agreement by and among the Company and the non-director investors in the first round of the 2017 Offering \(incorporated by reference to Exhibit 10.29.2 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- [10.29.3](#) [Form of Subscription Agreement by and among the Company and certain investors in the second round of the 2017 Offering \(incorporated by reference to Exhibit 10.29.3 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- [10.29.4](#) [Form of Subscription Agreement by and among the Company and the certain investors in the second round of the 2017 Offering \(incorporated by reference to Exhibit 10.29.4 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- [10.29.5](#) [Form of Subscription Agreement by and among the Company and the investors in the third round of the 2017 Offering \(incorporated by reference to Exhibit 10.29.5 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)

- 10.29.6 [Form of Subscription Agreement by and among the Company and the director investors in the fourth round of the 2017 Offering \(incorporated by reference to Exhibit 10.29.6 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- 10.30 [Form of Registration Rights Agreement by and among the Company and the investors in the 2017 Offering \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on November 17, 2017\)](#)
- 10.31 [Placement Agent Agreement by and between the Company and Katalyst Securities, LLC in connection with the 2017 Offering \(incorporated by reference to Exhibit 10.31 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- 10.32 [Placement Agent Agreement by and between the Company and Drexel Hamilton, LLC in connection with the 2017 Offering \(incorporated by reference to Exhibit 10.32 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- 10.33 [Placement Agent Agreement by and between the Company and Joseph Gunnar in connection with the 2017 Offering \(incorporated by reference to Exhibit 10.33 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- 10.34 [Form of Placement Agent Warrant in the 2017 Offering \(incorporated by reference to Exhibit 10.34 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-222552\) filed with the SEC on January 16, 2018\)](#)
- 10.35 [Purchase Agreement, dated as of May 10, 2018, by and among Akoustis Technologies, Inc., Akoustis, Inc. and Oppenheimer & Co. Inc., as representative of the several Initial Purchasers named in Schedule 1 thereto \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on May 15, 2018\)](#)
- 10.36 [Registration Rights Agreement, dated as of May 14, 2018, by and among Akoustis Technologies, Inc., Akoustis, Inc. and Oppenheimer & Co. Inc., as representative of the several Initial Purchasers named in Schedule 1 thereto \(incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on May 15, 2018\)](#)
- 10.37 [Pledge and Security Agreement, dated as of May 14, 2018, by and among Akoustis Technologies, Inc., Akoustis, Inc. and The Bank of New York Mellon Trust Company, N.A., as Collateral Agent \(incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed with the SEC on May 15, 2018\)](#)
- 10.38 [Grant Agreement, dated as of July 24, 2018, by and among Akoustis Technologies, Inc., Akoustis, Inc. and the Town of Canandaigua \(incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on July 27, 2018\)](#)
- 21.1 [Subsidiaries of the Company \(incorporated by reference to Exhibit 21.1 to the Company's Registration Statement on Form S-1 \(SEC File No. 333-218245\) filed with the SEC on May 25, 2017\)](#)
- 23.1* [Consent of Marcum LLP](#)
- 31.1* [Rule 13\(a\)-14\(a\)/15\(d\)-14\(a\) Certification of Principal Executive Officer](#)
- 31.2* [Rule 13\(a\)-14\(a\)/15\(d\)-14\(a\) Certification of Principal Financial and Accounting Officer](#)
- 32.1* [Section 1350 Certification of Principal Executive Officer](#)
- 32.2* [Section 1350 Certification of Principal Financial and Accounting Officer](#)

101§* Interactive Data Files of Financial Statements and Notes.
101.ins* Instant Document
101.sch* XBRL Taxonomy Schema Document
101.cal* XBRL Taxonomy Calculation Linkbase Document
101.def* XBRL Taxonomy Definition Linkbase Document
101.lab* XBRL Taxonomy Label Linkbase Document
101.pre* XBRL Taxonomy Presentation Linkbase Document

* Filed herewith

† Management contract or compensatory plan or arrangement

SIGNATURES

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

AKOUSTIS TECHNOLOGIES, INC.

Dated: August 29, 2018

By: /s/ Jeffrey B. Shealy
Jeffrey B. Shealy
President and Chief Executive Officer

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
<u>/s/ Jeffrey B. Shealy</u> Jeffrey B. Shealy	Chief Executive Officer (Principal Executive Officer), Director	August 29, 2018
<u>/s/ John T. Kurtzweil</u> John T. Kurtzweil	Chief Financial Officer and Chief Accounting Officer (Principal Financial and Accounting Officer)	August 29, 2018
<u>/s/ Arthur E. Geiss</u> Arthur E. Geiss	Co-Chairman of the Board	August 29, 2018
<u>/s/ Jerry D. Neal</u> Jerry D. Neal	Co-Chairman of the Board	August 29, 2018
<u>/s/ Steven P. DenBaars</u> Steven P. DenBaars	Director	August 29, 2018
<u>/s/ Jeffrey K. McMahon</u> Jeffrey K. McMahon	Director	August 29, 2018
<u>/s/ Steven P. Miller</u> Steven P. Miller	Director	August 29, 2018
<u>/s/ Suzanne B. Rudy</u> Suzanne B. Rudy	Director	August 29, 2018

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in the Registration Statements of Akoustis Technologies, Inc. (the "Company") on Form S-8, File No. 333-215153, and Form S-1, File No. 333-225870, of our report, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, dated August 29, 2018, with respect to our audits of the consolidated financial statements of Akoustis Technologies, Inc. and Subsidiary as of June 30, 2018 and 2017 and for the two years in the period ended June 30, 2018, which report is included in this Annual Report on Form 10-K of Akoustis Technologies, Inc. for the year ended June 30, 2018.

/s/ Marcum llp

Marcum llp
New York, NY
August 29, 2018

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Jeffrey B. Shealy, certify that:

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

Date: August 29, 2018

/s/ Jeffrey B. Shealy

Jeffrey B. Shealy
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, John T. Kurtzweil, certify that:

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

Date: August 29, 2018

/s/ John T. Kurtzweil

John T. Kurtzweil

Chief Financial Officer

(Principal Financial and Accounting Officer)

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

In connection with the Annual Report of Akoustis Technologies, Inc. (the "Company") on Form 10-K for the fiscal year ended June 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey B. Shealy, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: August 29, 2018

/s/ Jeffrey B. Shealy

Jeffrey B. Shealy
President and Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

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

In connection with the Annual Report of Akoustis Technologies, Inc. (the "Company") on Form 10-K for the fiscal year ended June 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John T. Kurtzweil, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: August 29, 2018

/s/ John T. Kurtzweil

John T. Kurtzweil
Chief Financial Officer
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.
