## UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

## FORM 10-Q

# (Mark One) ☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2020

or  $\square$  Transition report pursuant to section 13 or 15(d) of the securities exchange act of 1934

For the trans	ition period from to	
	Commission File Number: 001-38029	
	AKOUSTIS	
	AKOUSTIS TECHNOLOGIES, INC. name of registrant as specified in its charter)	
Delaware		33-1229046
(State or other jurisdiction of incorporation or organization)		(IRS Employer Identification No.)
9805 Northcross Center Court, Suite A Huntersville, NC		28078
(Address of principal executive offices)		(Postal Code)
Registrant's telep	phone number, including area code: 1-704 - 9	97-5735
Securit	ties registered under Section 12(b) of the Act:	
Title of Each Class:	Trading Symbol	Name of each exchange on which registered:
Common Stock, \$0.001 par value	AKTS	The Nasdaq Stock Market LLC (Nasdaq Capital Market)
Securit	ties registered under Section 12(g) of the Act: None	
Indicate by check mark whether the registrant (1) has filed all reports months (or for such shorter period that the registrant was required to f		
Indicate by check mark whether the registrant has submitted electronic posted pursuant to Rule 405 of Regulation S-T (§232.405 of this charand post such files). Yes $\boxtimes$ No $\square$		
Indicate by check mark whether the registrant is a large accelerate company. See the definitions of "large accelerated filer," "accelerated		
Large accelerated filer □ Non-accelerated filer □		Accelerated filer Smaller reporting company Emerging growth company
If an emerging growth company, indicate by check mark if the regist accounting standards provided pursuant to Section 13(a) of the Excha		ition period for complying with any new or revised financial
Indicate by check mark whether the registrant is a shell company (as o	defined in Rule 12b-2 of the Exchange Act) Y	es □ No ⊠
As of April 24, 2020, there were 36,389,000 shares of the registrant's	common stock, \$0.001 par value per share, is	sued and outstanding.

# AKOUSTIS TECHNOLOGIES, INC. FORM 10-Q FOR THE QUARTERLY PERIOD ENDED MARCH31, 2020

## TABLE OF CONTENTS

	Page No.
PART I — FINANCIAL INFORMATION	
ITEM 1. FINANCIAL STATEMENTS	1
Condensed Consolidated Balance Sheets as of March 31, 2020 and June 30, 2019 (unaudited)	1
Condensed Consolidated Statements of Operations for the three and nine months ended March 31, 2020 and 2019 (unaudited)	2
Condensed Consolidated Statements of Changes in Stockholders' Equity for the three and nine months ended March 31, 2020 and 2019 (unaudited)	3
Condensed Consolidated Statements of Cash Flows for the nine months ended March 31, 2020 and 2019 (unaudited)	5
Notes to the Condensed Consolidated Financial Statements (unaudited)	6
ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	20
ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	26
ITEM 4. CONTROLS AND PROCEDURES	26
	20
PART II — OTHER INFORMATION	
ITEM 1. LEGAL PROCEEDINGS	27
ITEM 1A. RISK FACTORS	27
ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS	28
ITEM 3. DEFAULTS UPON SENIOR SECURITIES	29
ITEM 4. MINE SAFETY DISCLOSURES	29
ITEM 5. OTHER INFORMATION	29
	20
ITEM 6. EXHIBITS	29
EXHIBIT INDEX	29
<u>SIGNATURES</u>	30

## PART I - FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS.

## Akoustis Technologies, Inc. Condensed Consolidated Balance Sheets (In thousands, except share data) (Unaudited)

	March 31, 2020		J	une 30, 2019
Assets				
Assets:				
Cash and cash equivalents	\$	39,577	\$	30,054
Accounts receivable		692		285
Inventory		76		94
Other current assets		812		1,289
Total current assets		41,157		31,722
Property and equipment, net		19,942		15,178
Intangibles, net		494		388
Assets held for sale, net		21		300
Operating lease right-of-use asset, net		751		_
Restricted cash		100		100
Other assets		449		261
Total Assets	\$	62,914	\$	47,949
Liabilities and Stockholders' Equity				
Current Liabilities:				
Accounts payable and accrued expenses	\$	3,393	\$	3,211
Deferred revenue				5
Contingent real estate liability				446
Operating lease liability-current		223	_	2.662
Total current liabilities		3,616		3,662
Long-term Liabilities:				
Convertible notes payable, net		20,152		18,215
Operating lease liability - non current		534		
Other long-term liabilities	_	117	_	117
Total long-term liabilities		20,803		18,332
Total Liabilities		24,419		21,994
Stockholders' Equity				
Preferred Stock, par value \$0.001: 5,000,000 shares authorized; none issued and outstanding		_		
Common stock, \$0.001 par value; 100,000,000 shares authorized; 36,351,976 and 30,140,955 shares issued and outstanding at March 31,				
2020 and June 30, 2019, respectively		36		30
Additional paid in capital		131,997		93,399
Accumulated deficit		(93,538)		(67,474)
Total Stockholders' Equity	_	38,495	_	25,955
Total Liabilities and Stockholders' Equity	\$	62,914	\$	47,949

See accompanying notes to the condensed consolidated financial statements

## Akoustis Technologies, Inc.

## Condensed Consolidated Statements of Operations (In thousands, except per share data) (Unaudited)

	Mont Ma	Months Ended Montl March 31, Mai		Three Ended h 31,	Mon Ma	the Nine ths Ended arch 31, 2020	Mo	or the Nine onths Ended March 31, 2019		
Revenue										
Revenue with customers	\$	363	\$	237	\$	1,424	\$	764		
Grant revenue								109		
Total revenue		363		237		1,424		873		
Cost of revenue		217		299		1,340		813		
Gross profit (loss)		146		(62)		84		60		
Operating expenses										
Research and development		5,769		5,505	15,736			14,340		
General and administrative expenses		2,589		2,503	8,158			6,841		
Total operating expenses		8,358	8,008 23,894		8,008 23,894		8,008 23,894			21,181
Loss from operations		(8,212)		(8,070)		(23,810)		(21,121)		
Other (expense) income										
Interest (expense) income		(1,162)		(781)		(3,259)		(2,006)		
Rental income		54		70		164		207		
Change in fair value of contingent real estate liability		480		905		446		805		
Change in fair value of derivative liabilities		1,066		(1,558)		396		(1,372)		
Total other (expense) income		438		(1,364)		(2,253)		(2,366)		
Net loss	\$	(7,774)	\$	(9,434)	\$	(26,063)	\$	(23,487)		
Net loss per common share - basic and diluted	\$	(0.21)	\$	(0.31)	\$	(0.80)	\$	(0.88)		
Weighted average common shares outstanding - basic and diluted		36,263,779	29	,959,908		32,659,339		26,659,999		

See accompanying notes to the condensed consolidated financial statements

## A koustis Technologies, Inc.

## Condensed Consolidated Statements of Changes in Stockholders' Equity (In thousands) (Unaudited)

			For the Nin	e Mo	nths Ended Ma	arch 3	31, 2020		
	Comm	on Sto	ock		Additional Paid In	A	ccumulated		Stockholders'
	Shares		Par Value		Capital		Deficit	_	Equity
Balance, June 30, 2019	30,141	\$	30	\$	93,399	\$	(67,475)	\$	25,954
Common stock issued for services	283		_		1,703		_		1,703
Common stock issued for exercise of warrants	6		_		_		_		
Vesting of restricted shares	_		_		303		_		303
Common stock issued in payment of note interest	38		_		244		_		244
Net loss	_		_		_		(8,975)		(8,975)
Balance, September 30, 2019	30,468	\$	30	\$	95,649	\$	(76,450)	\$	19,229
Common stock issued for cash, net of issuance costs	5,520		6		32,164		_		32,170
Common stock issued for services	178		_		1,602		_		1,602
Common stock issued for exercise of warrants	68		_		_		_		_
Common stock issued for exercise of options	10		_		55		_		55
Common stock issued for equipment purchase	5		_		40		_		40
ESPP purchase	28		_		168		_		168
Common stock issued in payment of note interest	34		_		244		_		244
Repurchase and retirement of common shares	(99)		_		_		_		_
Net loss	_		_		_		(9,314)		(9,314)
Balance, December 31, 2019	36,212	\$	36	\$	129,922	\$	(85,764)	\$	44,194
Common stock issued for cash, net of issuance costs	_				19				19
					17				17

36,352

105

2 34

(1)

1,803

244

131,997

36

(7,774)

(93,538)

Common stock issued for services

Balance, March 31, 2020

Net loss

Common stock issued for exercise of options

Repurchase and retirement of common shares

Common stock issued in payment of note interest

1,803

244

(7,774)

38,495

9

## Akoustis Technologies, Inc.

# Condensed Consolidated Statements of Changes in Stockholders' Equity - Continued (In thousands) (Unaudited)

For the Nine Months Ended March 31, 2019

	Additional																
	Commo	on S	tock		Paid In	1	Accumulated	Stockholders'									
	Shares		Par Value	Capital			Deficit		Equity								
Balance, June 30, 2018	22,203	•	22	\$	52,074	\$	(38,246)	\$	13,850								
Cumulative-effect adjustment from adoption of ASC 60	22,203	Ф	22	Φ	32,074	Ф	20	Ф	20								
Common stock issued for cash, net of issuance costs	_				(81)		20		(81)								
Common stock issued for services	112		_		1,947		_		1,947								
Common stock issued for exercise of warrants	112		_		71				71								
Vesting of restricted shares	19		_		351		_		351								
Common stock issued in payment of note interest	40				290		_		290								
Net loss	40		_		290		(7,308)		(7,308)								
	22.274	Ф	22	Ф	54.652	Ф		Ф									
Balance, September 30, 2018	22,374	\$	22	\$	54,652	\$	(45,534)	\$	9,140								
G	7.262		0		20.722				28,741								
Common stock issued for cash, net of issuance costs Common stock issued for services	7,362 121		8		28,733	_		_									
	121		_		1,044	_			1,044								
Intrinsic value of beneficial conversion feature	_		_		3,951		_		3,951								
Vesting of restricted shares			_		177		_		177								
Common stock issued in payment of note interest	53		_		244		- (5.7.15)		244								
Net loss															(6,745)		(6,745)
Balance, December 31, 2018	29,910	\$	30	\$	88,801	\$	(52,279)	\$	36,552								
Common stock issued for cash, net of issuance costs	1		_		_		_		_								
Common stock issued for services	46		_		2,125		_		2,125								
Common stock issued for exercise of warrants	16		_		_		_		_								
Common stock issued for exercise of options	19		_		133		_		133								
Vesting of restricted shares	_		_		80		_		80								
Repurchase of common shares	(21)		_		_	_			_								
Common stock issued in payment of note interest	37		_		244		_	- 2									
Net loss	_		_		_	— (9,4			(9,434)								
Balance, March 31, 2019	30,008	\$	30	\$	91,383	\$	(61,713)	\$	29,700								

See accompanying notes to the condensed consolidated financial statements.

## Akoustis Technologies, Inc.

## Condensed Consolidated Statements of Cash Flows (In thousands, except per share data) (Unaudited)

		ne Months ended Jarch 31, 2020	ne Months ended (arch 31, 2019
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	\$	(26,063)	\$ (23,487)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization		2,194	1,815
Common stock issued for services		5,108	5,522
Amortization of debt discount		2,333	1,347
Change in fair value of derivative liabilities		(396)	1,372
Amortization of operating lease right of use asset		91	(20)
Loss on disposal of fixed assets		721	(38)
Non cash interest payment		731	777
Change in fair value of contingent real estate liability Changes in operating assets and liabilities:		(446)	(805)
Accounts receivable		(407)	55
Inventory		18	(92)
Other current assets		477	(60)
Other assets		(188)	(188)
Accounts payable and accrued expenses		195	410
Lease liabilities		(85)	_
Change in other long-term liabilities		(65)	19
Deferred revenue		(5)	(66)
Net Cash Used in Operating Activities		(16,443)	 (13,419)
The class case in Openhaug Technique		(10,115)	 (13,117)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Cash paid for machinery and equipment		(6,340)	(4,436)
Cash received from sale of assets held for sale		28	33
Cash paid for intangibles		(143)	(92)
Net Cash Used in Investing Activities		(6,455)	(4,495)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of common stock		32,189	28,659
Proceeds from stock option exercises		64	133
Proceeds from employee stock purchase plan		168	_
Proceeds from the exercise of warrants		_	71
Proceeds received from convertible note, net of issuance costs		_	8,867
Net Cash Provided by Financing Activities	_	32,421	37,730
Net Increase (Decrease) in Cash, Cash Equivalents and Restricted Cash		9,523	19,816
Cash, Cash Equivalents and Restricted Cash - Beginning of Period		30,154	14,817
Cash, Cash Equivalents and Restricted Cash - End of Period	\$	39,677	\$ 34,633
SUPPLEMENTARY CASH FLOW INFORMATION: Cash Paid During the Period for:			
Interest		488	256
SUPPLEMENTARY DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:			
Accrued interest paid in common shares		731	777
Stock compensation payable		303	203
ASC 606 transition adjustment		_	20
Convertible Notes – Beneficial Conversion Feature		_	3,951
Reclass from assets held for sale		(251)	_
Assets purchase using common stock		40	_
Fixed assets in accounts payable		290	
See accompanying notes to the condensed consolidated financial statements			

#### AKOUSTIS TECHNOLOGIES, INC.

## Notes to the Condensed Consolidated Financial Statements (Unaudited)

## 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 radio frequency ("RF") filter products for the wireless industry, including for products such as smartphones and tablets, cellular infrastructure equipment, WiFi Customer Premise Equipment ("CPE"), and military and defense communication applications. 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 resonator devices that are the building blocks for its RF filters, the Company has developed a family of novel, high purity acoustic piezoelectric materials as well as a unique microelectromechanical system ("MEMS") wafer process, collectively referred to as XBAW<sup>TM</sup> technology. The Company leverages its integrated device manufacturing ("IDM") business model to develop and sell high performance RF filters using its XBAW<sup>TM</sup> technology. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RFFE.

## Note 2. Liquidity

At March 31, 2020, the Company had cash and cash equivalents of \$39.6 million and working capital of \$37.5 million. The Company has historically incurred recurring operating losses and has experienced net cash used in operating activities of \$16.4 million for the nine months ended March 31, 2020 which raises substantial doubt about the Company's ability to continue as a going concern within one year after the issuance date.

As of April 24, 2020, the Company had \$38.4 million of cash and cash equivalents, which the Company expects to be sufficient to fund its operations beyond the next twelve months from the date of filing of this Form 10-Q. These funds will be used to fund the Company's operations, including capital expenditures, 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. The Company has no commitments to obtain any additional funds, and there can be no assurance such funds will be available on acceptable terms or at all. If the Company is unable to obtain additional financing in a timely fashion and on acceptable terms, its financial condition and results of operations may be materially adversely affected and it may not be able to continue operations or execute its stated commercialization plan.

## Note 3. Summary of Significant Accounting Policies

## **Basis of Presentation**

The Company's unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and the rules and regulations of the Securities and Exchange Commission ("SEC") for interim financial information and the instructions to Form 10-Q. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP. In the opinion of management, all adjustments (consisting of normal accruals) considered necessary for a fair presentation have been included. The Company has evaluated subsequent events through the filing of this Form 10-Q. Operating results for the quarter ended March 31, 2020 are not necessarily indicative of the results that may be expected for the year ending June 30, 2020 or any future interim period. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements and notes thereto included in the Company's Form 10-K filed with the SEC on September 13, 2019 (the "2019 Annual Report").

## **Principles of Consolidation**

The accompanying unaudited condensed consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, Akoustis, Inc. All significant intercompany accounts and transactions have been eliminated in consolidation.

## **Significant Accounting Policies and Estimates**

The Company's significant accounting policies are disclosed in Note 3-Summary of Significant Accounting Policies in the 2019 Annual Report. Since the date of the 2019 Annual Report, other than adopting ASC 842 "Leases" discussed in the footnote below, there have been no material changes to the Company's significant accounting policies. The preparation of the unaudited condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the unaudited condensed consolidated financial statements and the accompanying notes thereto. The policies, estimates and assumptions include valuing equity securities and derivative financial instruments issued in financing transactions, deferred taxes and related valuation allowances, revenue recognition, contingent real estate liability and the fair values of long-lived assets. Actual results could differ from the estimates.

#### **Shares Outstanding**

Shares outstanding include shares of restricted stock with respect to which restrictions have not lapsed. Shares of restricted stock are included in the calculation of weighted average shares outstanding. Restricted stock included in reportable shares outstanding were as follows as of March 31, 2020 and 2019.

	March 31,	March 31,
	2020	2019
Shares of restricted stock included in reportable shares outstanding	116,250	311,328

## 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

#### **Restricted Cash**

Restricted cash at March 31, 2020 and June 30, 2019 represents a retained balance obligation included in a deposit account control agreement required by the Company's 6.5% Convertible Senior Secured Notes due 2023 issued in May 2018. The restriction on the cash will lapse in conjunction with the extinguishment of the debt.

## **Recently Issued Accounting Pronouncements**

Accounting Pronouncements Recently Adopted

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-02, "Leases (Topic 842)," with multiple amendments subsequently issued. The new guidance requires that lease arrangements be presented on the lessee's balance sheet by recording a right-of-use asset and a lease liability equal to the present value of the related future minimum lease payments. The Company adopted the standard in the first quarter of fiscal 2020, using the modified retrospective approach which permits lessees to recognize a cumulative-effect adjustment to the opening balance of accumulated deficit in the period of adoption. Upon adoption, the Company recorded a right-of-use asset of \$0.7 million and a lease liability of \$0.7 million.

The Company elected the transition package of practical expedients, under which the Company does not have to reassess (1) whether any expired or existing contracts are leases, or contain leases, (2) the lease classification for any expired or existing leases, and (3) initial direct costs for any existing leases. Further, the Company elected the practical expedient not to separate lease and non-lease components for substantially all of its classes of leases and to account for the combined lease and non-lease components as a single lease component. In addition, the Company made an accounting policy election to exclude leases with an initial term of 12 months or less from the balance sheet. This standard did not have a material impact on the Condensed Consolidated Statement of Operations or Condensed Consolidated Statement of Cash Flows. See Note 12 for further disclosures resulting from the adoption of this new standard.

In June 2018, the FASB issued ASU No. 2018-07, Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. Under the new standard, companies are no longer required to value non-employee awards differently from employee awards. Companies value all equity classified awards on their grant date under ASC718 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. The Company adopted the standard during the first quarter of fiscal year 2020. This standard did not have a material impact on the Company's condensed consolidated financial statements. Approximately \$0.3 million of accrued expenses associated with share-based compensation was reclassified to equity.

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 stock-based payment award require an entity to apply modification accounting in Topic 718. The Company adopted the standard during the first quarter of fiscal year 2020 and there was no material impact on its condensed consolidated financial statements.

## Note 4. Revenue Recognition from Contracts with Customers

Disaggregation of Revenue

The Company's primary revenue streams include foundry fabrication services and product sales.

## Foundry Fabrication Services

Foundry fabrication services revenue includes microelectromechanical systems ("MEMS") foundry services and Non-Recurring Engineering ("NRE"). Under these contracts, products are delivered to the customer at the completion of the service which represents satisfaction of the performance obligation as well as transfer of title. Depending on language with regards to enforceable right to payment for performance completed to date, related revenue will either be recognized over time or at a point in time.

## Product Sales

Product sales revenue consists of sales of RF filters and amps, which are sold with contract terms stating that title passes, and the customer takes control, at the time of shipment. Revenue is then recognized when the devices are shipped, and the performance obligation has been satisfied. If devices are sold under contract terms that specify that the customer does not take ownership until the goods are received, revenue is recognized when the customer receives the goods.

The following table summarizes the revenues of the Company's reportable segments for the three months ended March 31, 2020 (in thousands):

	Fab So	oundry rication ervices		uct Sales	R	Total evenue with
	R	evenue	e Revenue			stomers
MEMS	\$	8	\$		\$	8
NRE - RF Filters		224		_		224
Filters/Amps				131		131
Total	\$	232	\$	131	\$	363

The following table summarizes the revenues of the Company's reportable segments for the nine months ended March 31, 2020 (in thousands):

	1	Foundry Fabrication Services Product Sales Revenue Revenue				
	_			evenue	Customers	
MEMS	\$	265	\$	_	\$	265
NRE - RF Filters		652		_		652
Filters/Amps	_			507		507
Total	\$	917	\$	507	\$	1,424

The following table summarizes the revenues of the Company's reportable segments for the three months ended March 31, 2019 (in thousands):

	Fou	ndry			T	otal		
	Fabri	cation			Rev	venue		
	Ser	Services		Services		ict Sales	v	vith
	Rev	enue	e Revenue		Customer			
MEMS	\$	30	\$		\$	30		
NRE - RF Filters		129		_		129		
Filters/Amps				78		78		
Total	\$	159	\$	78	\$	237		

The following table summarizes the revenues of the Company's reportable segments for the nine months ended March 31, 2019 (in thousands):

		Foundry				otal
	I	abrication				venue
		Services		uct Sales		vith
		Revenue Revenue		evenue	Customers	
MEMS	\$	175	\$	_	\$	175
NRE - RF Filters		392		_		392
Filters/Amps				197		197
Total	\$	567	\$	197	\$	764
	·					

## Performance Obligations

The Company has determined that contracts for product sales revenue and foundry fabrication services revenue involve one performance obligation, which is delivery of the final product.

#### Contract Balances

The Company records a receivable when the title for goods has transferred. Generally, all sales are contract sales (with either an underlying contract or purchase order), resulting in all receivables being contract receivables. When invoicing occurs prior to revenue recognition a contract liability is recorded (as deferred revenue on the Condensed Consolidated Balance Sheet).

The following table summarizes the changes in the opening and closing balances of the Company's contract asset and liability for the nine months ended March 31, 2020 and 2019 (in thousands):

	Contract Assets		ntract bilities
Balance, June 30, 2019	\$ 140	\$	5
Closing, March 31, 2020	96		_
Increase/(Decrease)	(44)		(5)
Balance, June 30, 2018	\$ 7	\$	53
Closing, March 31, 2019	57		4
Increase/(Decrease)	50		(49)

The amount of revenue recognized in the nine months ended March 31, 2020 that was included in the opening contract liability balance was \$5 thousand, which related to filter sales. The amount of revenue recognized in the nine months ended March 31, 2019 that was included in the opening contract liability balance consisted of \$28 thousand that related to non-recurring engineering sales and \$25 thousand that related to MEMS business.

Contract assets are recorded when revenue recognized exceeds the amount invoiced. The difference between the opening and closing balances of the Company's contract assets and contract liabilities primarily results from the timing difference between the Company's performance and the customer's payment. The amount of contract assets invoiced in the nine months ended March 31, 2020 that was included in the opening contract asset balance was \$140 thousand, which primarily related to MEMS business.

Backlog of Remaining Customer Performance Obligations

Revenue expected to be recognized and recorded as sales during this fiscal year from the backlog of performance obligations that are unsatisfied (or partially unsatisfied) was \$0.3 million at March 31, 2020 and was \$0.2 million at March 31, 2019.

## **Grant Revenue**

From time to time the Company applies for grants from various government bodies (state & federal), such as the National Science Foundation ("NSF") or the Department of Defense (DoD), to support research and development. In addition, the Company is eligible for "matching awards" from state boards to provide additional funds to the Company to supplement the funds awarded under the federal grant program. The Company records grant revenue as a part of revenue from operations given that grant revenue is viewed as an ongoing function of its intended operations. The revenue from grants is not viewed as "incidental" or "peripheral" which would result in the presentation of grant revenue as "Other income". The Company recognizes non-refundable grant revenue when the performance obligations have been met, application has been submitted and approval is reasonably assured.

## Note 5. Common Stock Equivalents

The Company had the following common stock equivalents at March 31, 2020 and 2019. These are excluded from the loss per share calculation as they are considered anti-dilutive.

	March 31, 2020	March 31, 2019
Convertible Notes	4,960,800	4,960,800
Options	2,265,165	2,177,314
Warrants	541,999	708,651
Total	7,767,964	7,846,765

## Note 6. Property and Equipment, net

Property and equipment, net consisted of the following as of March 31, 2020 and June 30, 2019 (in thousands):

	Estimated Useful Life	N	March 31, 2020	June 30, 2019
Land	n/a	\$	1,000	\$ 1,000
Building	11 years		3,000	3,000
Equipment	2-10 years		20,381	13,611
Leasehold Improvements	*		949	949
Software	3 years		214	161
Furniture & Fixtures	5 years		11	11
Computer Equipment	3 years		260	 203
Total			25,815	18,935
Less: Accumulated depreciation			(5,873)	(3,757)
Total		\$	19,942	\$ 15,178

(\*) Leasehold improvements 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 \$0.7 million and \$0.6 million for the three months ended March 31, 2020 and 2019, respectively. The Company recorded depreciation expense of \$2.2 million and \$1.8 million for the nine months ended March 31, 2020 and 2019, respectively.

## Note 7. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consisted of the following at March 31, 2020 and June 30, 2019 (in thousands):

	March 31, 2020		ine 30, 2019
Accounts payable	\$ 607	\$	245
Accrued salaries and benefits	1,619		1,552
Accrued professional fees	140		315
Accrued utilities	117		193
Accrued interest	135		135
Accrued goods received not invoiced	127		69
Other accrued expenses	 648		702
Totals	\$ 3,393	\$	3,211

## Note 8. Derivative Liabilities

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 nine months ended March 31, 2020 (in thousands):

	Fair V	alue
	Measureme	
	Using Level 3	
	Inpu	uts
	Tot	al
Balance, June 30, 2019	\$	955
Change in fair value of derivative liabilities (included in other (expense) income)		(396)
Balance, March 31, 2020 (see footnote 9)	\$	559

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

	March 31, 2020	June 30, 2019
Remaining term (years)	3.16-3.67	3.92
Expected volatility	60%	49%
Risk free interest rate	0.30%-0.32%	1.73%
Dividend yield	0.00	0.00%

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 a blend of the Company's own historic volatility and the corresponding volatility of the Company's peer group stock price for a period consistent with the convertible notes' expected term.

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

## Note 9. Convertible Notes

The following table summarizes convertible debt as of March 31, 2020 (in thousands):

	Maturity Date	Stated Interested Rate	C	onversion Price	F	ace Value_	emaining Debt Discount)	I	air Value of Embedded Conversion Option	_ (	Carrying Value
Long Term convertible notes payable											
6.5% convertible senior secured notes	5/31/2023	6.50%	\$	5.00	\$	15,000	\$ (4,753)	\$	439	\$	10,686
6.5% convertible senior notes	11/30/2023	6.50%	\$	5.10		10,000	 (654)		120		9,466
Ending Balance as of March 31, 2020					\$	25,000	\$ (5,407)	\$	559	\$	20,152

The following table summarizes convertible debt as of June 30, 2019 (in thousands):

	Maturity Date	Stated Interested Rate	Co	onversion Price	Fa	ice Value	emaining Debt Discount)	1	air Value of Embedded Conversion Option	 Carrying Value
Long Term convertible notes payable										
6.5% convertible senior secured notes	5/31/2023	6.50%	\$	5.00	\$	15,000	\$ (6,825)	\$	955	\$ 9,130
6.5% convertible senior notes	11/30/2023	6.50%	\$	5.10		10,000	(915)			 9,085
Ending Balance as of June 30, 2019					\$	25,000	\$ (7,740)	\$	955	\$ 18,215

## Note 10. Concentrations

## $\underline{Vendors}$

Vendor concentration as a percentage of purchases for the three months ended March 31, 2020 and 2019 are as follows:

Vendor 1	Three Months Ended 03/31/2020	Three Months Ended 03/31/2019
Vendor concentration as a percentage of purchases for the nine months ended March 31, 2020 and 2019 are as follows:		21/4
· · · ·	Nine Months Ended 03/31/2020	Nine Months Ended 03/31/2019
Vendor 1	13%	_

## Customers

Customer concentration as a percentage of revenue for the three months ended March 31, 2020 and 2019 are as follows:

	Three Months	Three Months Ended 03/31/2019
Customer 1	38%	28%
Customer 2	33%	_
Customer 3	12%	_
Customer 4	11%	_
Customer 5	_	21%
Customer 6	_	23%

Customer concentration as a percentage of revenue (excluding grant revenue) for the nine months ended March 31, 2020 and 2019 are as follows:

	Nine Months Ended 03/31/2020	Nine Months Ended 03/31/2019
Customer 1	20%	22%
Customer 2	11%	_
Customer 3	13%	_
Customer 4	17%	12%
Customer 5	22%	_
Customer 6	_	14%
Customer 7	_	11%

## Note 11. Stockholders' Equity

## **Underwritten Public Offering of Common Stock**

During the nine months ended March 31, 2020, the Company sold a total of 5,520,000 shares of its common stock at a price to the public of \$6.25 per share for aggregate gross proceeds of \$34.5 million before deducting the underwriting discount and offering expenses payable by the Company of approximately \$2.3 million. The Company expects to use the proceeds of the offering to fund the Company's operations and growth of its business, including for capital expenditures, working capital, research and development, the commercialization of its technology and other general corporate purposes.

## **Equity Incentive Plans**

During the nine months ended March 31, 2020, the Company granted employees and directors options to purchase an aggregate of 222,500 shares of common stock with a weighted average grant date fair value of \$4.26. 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:

	Nine Months
	Ended
	March 31,
	2020
Exercise price	\$ 4.71 - 8.09
Expected term (years)	4.75 - 5.00
Risk-free interest rate	0.64% - 1.74%
Volatility	65 - 67%
Dividend yield	0%
Weighted Average Grant Date Fair Value of Options granted during the period	\$4.26

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.

During the nine months ended March 31, 2020 the Company awarded certain employees and contractors grants of an aggregate of 872,061 restricted stock units ("RSUs") with a weighted average grant date fair value of \$7.65. The RSUs will be expensed over the requisite service period. The terms of the RSUs include vesting provisions based solely on continued service. If the service criteria are satisfied, the RSUs will generally vest over 4 – 5 years.

Compensation expense related to our stock-based awards described above was as follows (in thousands):

	 Three Months Ended March 31,			Nine Months Ended March 31,				
	2020		2019		2020		2019	
Research and Development	\$ 929	\$	1,468	\$	2,675	\$	3,027	
General and Administrative	 874		787		2,433		2,495	
Total	\$ 1,803	\$	2,255	\$	5,108	\$	5,522	

Unrecognized stock-based compensation expense and weighted-average years to be recognized are as follows (in thousands):

	As	of Marc	h 31, 2020	
		Weighted-		
	Unrecogn	ized	average	
	stock-		years	
	based		to be	
	compensation		recognized	
Options	\$	2,147	2.06	
Restricted stock awards/units	\$	7,203	2.09	

## Note 12. Commitments and Contingencies

## Leases

The Company leases office space and office equipment in Huntersville, NC as well as equipment in Canandaigua, NY. On January 7, 2020, the Company entered into an amended lease agreement with the current lessor in order to extend the lease term and increase office space at our Huntersville, NC corporate office. The amended lease expands our space to 22,000 square feet and extends the term to February 2023. This resulted in a remeasurement of the previous right of use liability which resulted in an increase of approximately \$0.2 million.

Following adoption of ASC 842, lease expense excludes capital area maintenance and property taxes.

The components of lease expense were as follows (in thousands):

	Three M End March 202	ed 1 31,	Three Montl Ended March 31 2019		Nine Mont Ended March 31 2020		Nine M End March 201	ed h 31,
rating Lease Expense	\$	55	\$	51	\$	144	\$	161

Supplemental balance sheet information related to leases was as follows (in thousands):

	Classification on the Condensed Consolidated Balance Sheet	arch 31, 2020
Assets		 
Operating lease assets	Other non-current assets	\$ 751
Liabilities		
Other current liabilities	Current liabilities	223
Operating lease liabilities	Other non-current liabilities	534
Weighted Average Remaining Lease Term:		
Operating leases		2.9 Years
Weighted Average Discount Rate:		
Operating leases		12.47%
The following table outlines the minimum future lease payments for	or the next five years and thereafter, (in thousands):	
For the year ending June 30,		
2020		 76
2021		305
2022		312
2023		204
2024		7
Thereafter		 
Total lease payments (Undiscounted cash flows)		904
Less imputed interest		(147)
Total		\$ 757

15

#### 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 leases 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 transferred title to certain related equipment and personal property to the OCIDA (collectively, the "Facility"). The OCIDA leases 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 subleased, in part, by the Company to various 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 clawback over the life of the Agreements upon certain recapture events, including certain events of default.

## **Real Estate Contingent Liability**

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 MEMS operation with associated wafer-manufacturing tools, and the associated real estate and improvements located in Canandaigua, NY used in the operation of STC-MEMS (the assets and real estate and improvements referred to together herein as the "STC-MEMS Business").

In connection with the acquisition of the STC-MEMS Business, the Company agreed to pay to FRMC a penalty, if the Company sold 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 \$1.75 million, subject to certain enumerated exceptions. The penalty imposed would have been equivalent to the amount that the sales price of the property exceeded \$1.75 million up to a maximum penalty. Due to the lapse of the three-year penalty period, the maximum penalty as of March 31, 2020 was \$0.

Maximum Penalty

## Year 3, ending March 23, 2020

The fair value of the contingent liability was reduced to zero due to the lapse of the sale restriction period. As of March 31, 2020, and June 30, 2019, the fair value of the contingent liability was \$0.0 million and \$0.4 million, respectively. During the three months ended March 31, 2020 and 2019, the Company marked the contingent liability to fair value and recorded a gain of \$0.48 million and \$0.91 million, respectively, relating to the change in fair value. During the nine months ended March 31, 2020 and 2019, the Company marked the contingent liability to fair value and recorded a gain of \$0.45 million and \$0.80 million, 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.

Effective November 5, 2018, the employment by the Company of its former principal financial officer, John T. Kurtzweil (the "Former CFO"), ended, after which the Former CFO filed for an arbitration hearing pursuant to the terms of his employment agreement and filed a complaint under the whistleblower provisions of the Sarbanes-Oxley Act of 2002 with the Occupational Safety and Health Administration ("OSHA") of the U.S. Department of Labor. On October 28, 2019, the Company and the Former CFO entered into a Settlement Agreement that resolved all pending disputes between the parties with no admission of liability by either party. OSHA approved the Settlement Agreement and closed its investigation of the Former CEO's whistleblower complaint on November 26, 2019. Pursuant to the Settlement Agreement, the Company paid the Former CFO an all-inclusive settlement amount of \$375 thousand in cash. As part of the Settlement Agreement, all unvested restricted stock units and stock options were acknowledged as forfeited as of such date. The arbitration was closed on December 30, 2019.

## **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 March 31, 2020 and \$0.1 million as of June 30, 2019 and is recorded on the Consolidated Balance Sheet as a long-term liability.

## Note 13. Related Party Transactions

## Consulting Services

Total stock-based compensation expense related to stock-based awards granted in prior years for consulting services provided by a firm owned by one of the Co-Chairmen of the Company's board of directors was \$8 thousand and \$17 thousand for the three months ended March 31, 2020 and 2019, respectively, and \$32 thousand for the nine months ended March 31, 2020 and 2019, respectively.

## Equipment Purchase

On October 11, 2019, the Company issued 2,500 shares of common stock to the brother of the Company's Chief Executive Officer in exchange for equipment with a fair market value of \$20,000.

## Note 14. 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 Product, which consists of amplifier and filter product sales, and grant revenue. The Company records all general and administrative costs in the RF Product segment.

The Company evaluates performance of its operating segments based on revenue and operating profit (loss). Segment information for the three and nine months ended March 31, 2020 and 2019 are as follows (in thousands):

		Foundry/ Fabrication		RF Product		
	Service	Services				Total
Three months ended March 31, 2020						
Revenue with customers	\$	232	\$	131	\$	363
Total Revenue	Ψ	232	Ψ	131	Ψ	363
Cost of revenue		138	_	79		217
Gross margin		94	_	52	_	146
Research and development		<del></del>		5,769		5,769
General and administrative		_		2,589		2,589
Income (Loss) from Operations	<u>s</u>	94		(8,306)		(8,212)
Income (Loss) from Operations	y.	74	_	(0,500)	_	(0,212)
Three months ended March 31, 2019						
Revenue with customers	\$	159	\$	78	\$	237
Total Revenue		159		78		237
Cost of revenue		176		123		299
Gross margin		(17)		(45)		(62)
Research and development		_		5,505		5,505
General and administrative		_		2,503		2,503
Income (Loss) from Operations	\$	(17)	\$	(8,053)		(8,070)
Nine months ended March 31, 2020						
Revenue with customers	\$	917	\$	507	\$	1,424
Total Revenue	•	917	-	507	-	1,424
Cost of revenue		545		795		1,340
Gross margin	<del></del>	372		(288)		84
Research and development		_		15,736		15,736
General and administrative		_		8,158		8,158
Income (Loss) from Operations	\$	372		(24,182)		(23,810)
Nine months ended March 31, 2019						
Revenue with customers	\$	567	\$	197	\$	764
Grant revenue	Ψ	307	Ψ	177	Ψ	704
Office (CVC) and				109		109
Total Revenue		567		306		873
Cost of revenue		666		147		813
Gross margin		(99)		159		60
Research and development				14,340		14,340
General and administrative		_		6,841		6,841
Income (Loss) from Operations	\$	(99)	\$	(21,022)		(21,121)
As of March 31, 2020						
Accounts receivable	\$	574	\$	118	\$	692
Property and equipment, net		_	\$	19,942	\$	19,942
As of June 30, 2019						
Accounts receivable	\$	150	\$	135	\$	285
Property and equipment, net	\$	54	\$	15,124	\$	15,178

## **Note 15. Subsequent Events**

Supplemental Indentures

On April 17, 2020, the Company entered into supplemental indentures to the indentures governing its outstanding 6.5% Convertible Senior Secured Notes due 2023 and its outstanding 6.5% Convertible Senior Notes due 2023. Among other things, the supplemental indentures permit the incurrence of indebtedness made available through the CARES Act and regulations thereunder.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

References in this report to "Akoustis," the "Company," "we," "us," and "our" refer to Akoustis Technologies, Inc. and its consolidated subsidiary, Akoustis, Inc. each of which is a Delaware corporation.

## **Cautionary Note Regarding Forward-Looking Statements**

This quarterly report on Form 10-Q contains forward-looking statements that relate to our plans, objectives, estimates, and goals. Any and all statements contained in this report that are not statements of historical fact may be deemed to be 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 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) projections 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 this management's discussion and analysis of financial condition or in the results of operations included pursuant to the rules and regulations of the Securities and Exchange Commission (the "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 (i), (ii), (iii), (iv) or (v) above.

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 ability to continue as a going concern; 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; the impact of the COVID-19 pandemic on our operations, financial condition and the worldwide economy; 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 scale our New York wafer fabrication facility and related operations while maintaining quality control and assurance and avoiding delays in output; 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

These and other risks and uncertainties, which are described in more detail in the section of this report titled "Risk Factors" and in our Annual Report on Form 10-K, filed with the SEC on September 13, 2019 (the "2019 Annual Report"), could cause our actual results to differ materially from those expressed or implied by the forward-looking statements in this report. Readers are cautioned not to place undue reliance on forward-looking statements because of the risks and uncertainties related to them. 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.

#### Overview

Akoustis® is an emerging commercial company focused on developing, designing, and manufacturing innovative RF filter products for the wireless industry, including for products such as smartphones and tablets, network infrastructure equipment, WiFi Customer Premise Equipment ("CPE") and defense applications. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RF front-end ("RFFE"). Located between the device's antenna and its digital backend, the "RFFE" is the circuitry that performs the analog signal processing and contains components such as amplifiers, filters and switches. We have developed a proprietary microelectromechanical system ("MEMS") based bulk acoustic wave ("BAW") technology and a unique manufacturing process flow, called "XBAW", for our filters produced for use in RFFE modules. Our XBAW<sup>TM</sup> filters incorporate optimized high purity piezoelectric materials for high power, high frequency and wide bandwidth operation.

We believe owning the core resonator device technology, manufacturing facility and intellectual property ("IP") to produce our RF filter designs is the most direct and efficient means of delivering our solutions to the market. Furthermore, our technology is based upon bulk-mode acoustic resonance, which we believe is superior to surface-mode resonance for high-band applications that include 4G/LTE, 5G, WiFi, and defense applications. Although some of our target customers utilize or make the RFFE module, they may lack access to critical ultra-high-band (UHB) filter technology needed to compete in high frequency applications. We seek to design, manufacture, and market our RF filter products to mobile phone original equipment manufacturers ("OEMs"), defense OEMs, network infrastructure OEMs, and WiFi CPE OEM's to enable broader competition among the front-end module manufacturers. We operate as a "pure-play" RF filter supplier and align with the front-end module manufacturers who seek to acquire high performance filters to expand their module business.

We currently build high performance RF filter circuits, using our first generation XBAW<sup>TM</sup> wafer process, in our 120,000-square foot wafer-manufacturing facility located in Canandaigua, New York, which we acquired in June 2017. As of April 24, 2020, our intellectual property (IP) portfolio included 31 patents, including a blocking patent that we have licensed from Cornell University. Additionally, as of April 24, 2020, we have 61 pending patent applications. These patents cover our XBAW <sup>TM</sup> RF filter technology from raw materials through the system architectures. 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, 5G, WiFi and defense bands using our proprietary resonator device models and product design kits (PDKs). As we qualify our first RF filter products, we are engaging with target customers to evaluate our filter solutions. Our initial designs target UHB, sub 7 GHz 4G/LTE, 5G, WiFi and defense 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 standardized filters that we design and offer as standard catalog components. Second, we expect to deliver unique filters to customer-supplied specifications, which we will design and fabricate on a customized basis. Finally, we may offer our models and design kits for our customers to design their own filters 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 and production orders, government grants, MEMS foundry and engineering services, and sales of debt and equity securities. We have incurred losses totaling approximately \$93.5 million from inception through March 31, 2020. 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 design solutions.

## Impact of COVID-19 on our Business

Although the ultimate impact of the COVID-19 pandemic on our business is unknown, in an effort to protect the health and safety of our employees, we have taken proactive, precautionary action and adopted social distancing policies at our locations, including the implementation of new staffing plans in our facilities whereby many employees work remotely and the remaining on-site force is divided into multiple shifts or segregated in different parts of the facility. In an effort to contain COVID-19 or slow its spread, governments around the world have also enacted various measures, including orders to close all businesses not deemed "essential," isolate residents to their homes or places of residence, and practice social distancing when engaging in essential activities. These measures have impacted the method and timing of certain business meetings and deliverables to certain customers, as well as our ability to obtain certain materials or equipment from suppliers.

We anticipate that these actions and the global health crisis caused by COVID-19 will negatively impact business activity across the globe. We have observed declining demand and price reductions in the electronics industry as business and consumer activity decelerates across the globe. When COVID-19 is demonstrably contained, we anticipate a rebound in economic activity, depending on the rate, pace, and effectiveness of the containment efforts deployed by various national, state, and local governments; however, the timing and extent of any such rebound is uncertain.

We will continue to actively monitor the situation and may take further actions altering our business operations that we determine are in the best interests of our employees, customers, partners, suppliers, and stakeholders, or as required by federal, state, or local authorities. It is not clear what the potential effects any such alterations or modifications may have on our business, including the effects on our customers, employees, and prospects, or on our financial results for the remainder of fiscal year 2020 or beyond.

## 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, 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.

To succeed, we must convince mobile phone OEMs, RFFE module manufacturers, cellular infrastructure OEMs, WiFi CPE OEMs and military customers to use our XBAW<sup>TM</sup> 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.

We plan to pursue RF filter design and R&D development agreements and potentially joint ventures with target customers and other strategic partners, although 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 April 24, 2020, the Company had \$38.4 million of cash and cash equivalents to fund our operations, including capital expenditures, 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. 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, and our success in commercialization. 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 between \$8 million and \$10 million for the purchase of equipment and software during the next 12 months.

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 and changes in or revisions to our marketing strategies.

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**

On January 7, 2020, the Company announced that it had received an order and shipped its 5.2 GHz and 5.6 GHz coexistence WiFi filters to an original equipment manufacturer (OEM).

On January 30, 2020, Akoustis announced that it had locked the design of its Citizen's Broadband Radio Service 5G network infrastructure filter and had shipped samples to three OEM's.

On February 3, 2020, the Company announced that it had received its first volume commercial order for 5G network infrastructure filters from a small cell base station provider focused on markets in Asia.

In mid-February, Akoustis announced the entry into a new market with an order for the design and development of XBAW filters for a customer for unmanned aircraft systems (UAS), commonly referred to as drones. The filters will be used for control and non-payload communication links.

On April 8, 2020, the Company announced that it had achieved its first non-defense commercial design win for XBAW filters in the 5G small cell network equipment market.

## **Underwritten Public Offering of Common Stock**

During the nine months ended March 31, 2020, the Company sold a total of 5,520,000 shares of its common stock at a price to the public of \$6.25 per share for aggregate gross proceeds of \$34.5 million before deducting the underwriting discount and offering expenses payable by the Company of approximately \$2.3 million. The Company expects to use the proceeds of the offering to fund the Company's operations and growth of its business, including for capital expenditures, working capital, research and development, the commercialization of its technology and other general corporate purposes.

## **Critical Accounting Policies**

There have been no material changes to our critical accounting policies and estimates from the information provided in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," under the heading "Critical Accounting Policies" included in our 2019 Annual Report.

## **Results of Operations**

#### Three Months Ended March 31, 2020 and 2019

## Revenue

The Company recorded revenue of \$0.4 million during the three months ended March 31, 2020 as compared to \$0.2 million for the three months ended March 31, 2019. Revenue recorded during the three months ended March 31, 2020 included \$0.1 million of RF filter and amplifier sales and \$0.2 million of non-recurring engineering services. The RF filters sales were primarily sales of defense filters. Revenue for the three months ended March 31, 2019 consisted of \$0.1 million of non-recurring engineering services and \$0.1 million of RF filter and amplifier sales.

## Cost of Revenue

The Company recorded cost of revenue of \$0.2 million in the three months ended March 31, 2020 and \$0.3 million in the three months ended March 31, 2019, which included direct labor, direct materials and facility costs. The decrease in cost of revenue was primarily related to a lower amount of sales of WiFi filters during the third quarter of fiscal year 2020.

## Research and Development Expenses

R&D expenses were \$5.8 million for the three months ended March 31, 2020 and were \$0.3 million, or 5%, higher than the prior year amount for the same period of \$5.5 million. The period-over-period increase was primarily due to an increase in parts and equipment expense and equipment depreciation at the Company's Canandaigua NY wafer-manufacturing facility (the "NY Facility").

## General and Administrative Expense

General and administrative ("G&A") expenses 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. G&A expenses for the three months ended March 31, 2020 were \$2.6 million, which is an increase of \$0.1 million compared to the three months ended March 31, 2019. Year over year changes within G&A expenses include an increase in employee compensation, including stock-based compensation of \$0.2 million. In addition, bad debt expense and marketing expenses increased by a total of \$0.1 million. These increases were partially offset by a decrease in professional fees of \$0.2 million.

#### Other (Expense)/Income

Other income for the three months ended March 31, 2020 was \$0.4 million, which was comprised of a gain on the change in the fair value of the derivative liability of \$1.1 million and a gain on the change in the fair value of our real estate contingent liability of \$0.5 million. Offsetting these income items was debt discount amortization of \$0.8 million and interest expense, net of \$0.3 million. Other (expense) for the three months ended March 31, 2019 was \$1.4 million, which included a gain on the contingent real estate liability of \$0.9 million, interest income of \$0.2 million and rental income of \$0.1 million, offset by \$1.0 million of interest expense related to the amortization of debt issuance costs and interest on the convertible notes and a loss of \$1.6 million on the change in the fair value of the derivative liability related to our convertible senior secured notes.

## Net Loss

The Company recorded a net loss of \$7.8 million for the three months ended March 31, 2020, compared to a net loss of \$9.4 million for the three months ended March 31, 2019. The period-over-period change of \$1.7 million, or 18%, was primarily driven by the change in derivative valuation of \$2.6 million. This change was partially offset by a change in the gain on real estate liability valuation of \$0.4 million and an increase in interest expense, net of \$0.4 million and real estate contingent liability of \$0.5 million.

## Nine Months Ended March 31, 2020 and 2019

#### Revenue

The Company recorded revenue of \$1.4 million during the nine months ended March 31, 2020 as compared to \$0.9 million for the nine months ended March 31, 2019. Revenue recorded during the nine months ended March 31, 2020 included \$0.5 million of RF filter and amplifier sales, \$0.3 million of foundry services, and \$0.6 million of revenue for non-recurring engineering services. The revenue for the nine months ended March 31, 2019 consisted of \$0.4 million of revenue for non-recurring engineering services, \$0.2 million of revenue for foundry services, \$0.1 million of grant revenue and \$0.2 million of RF filter and amplifier sales.

## Cost of Revenue

The Company recorded cost of revenue of \$1.3 million in the nine months ended March 31, 2020 and \$0.8 million in the nine months ended March 31, 2019, which included direct labor, direct materials and facility costs. The increase in cost of sales was primarily related to sales of infrastructure and WiFi filters which was partially offset by a decrease in the cost of foundry services.

## Research and Development Expenses

R&D expenses were \$15.7 million for the nine months ended March 31, 2020 and were \$1.4 million, or 10%, higher than the prior year amount for the same period of \$14.3 million. The period-over-period increase was primarily in the areas of R&D personnel costs and R&D equipment depreciation. Personnel costs, including stock-based compensation, were \$9.2 million compared to \$8.5 million in the prior year period, an increase of \$0.7 million or 8%. The higher personnel cost was due to additional R&D headcount at both the Huntersville, NC location and the NY Facility. R&D and Fabrication materials totaled \$2.6 million which represents an increase of \$0.5 million over the prior year. Depreciation expense of \$2.1 million was \$0.3 million higher than the prior year. These increases were partially offset by a decrease in facility costs of \$0.2 million compared to the prior year.

## General and Administrative Expense

G&A expenses 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. G&A expenses for the nine months ended March 31, 2020 were \$8.2 million, which is an increase of \$1.4 million compared to the nine months ended March 31, 2019. Year over year changes within G&A expenses include an increase in employee compensation including stock compensation of \$0.8 million, an increase in professional fees of \$0.3 million and an increase in other administrative expenses of \$0.2 million.

#### Other (Expense)/Income

Other (expense) for the nine months ended March 31, 2020 was \$2.3 million, which included debt discount amortization of \$2.3 million and interest expense, net of \$1.2 million. These expenses were partially offset by a reduction in the fair value of our derivative liability of \$0.4 million, the expiration of the real estate contingent liability, resulting in \$0.4 million of income, and interest income of \$0.3 million. Other (expense) for the nine months ended March 31, 2019 were \$2.4 million, primarily consisting of \$1.3 million of debt discount amortization, interest expense of \$1.0 million and an increase to our derivative liability of \$1.4 million. These were partially offset by interest income of \$0.3 million and a reduction to our real estate contingent liability of \$0.8 million.

Net Loss

The Company recorded a net loss of \$26.1 million for the nine months ended March 31, 2020, compared to a net loss of \$23.5 million for the nine months ended March 31, 2019. The period-over-period incremental loss of \$2.5 million, or 11%, was primarily driven by an increase in R&D expenses of \$1.4 million and an increase in G&A expenses of \$1.4 million. These expenses were partially offset by a decrease in other expenses.

## Liquidity and Capital Resources

## Financing Activities

The Company had \$39.6 million of cash and cash equivalents on hand as of March 31, 2020, which reflects an increase of \$9.5 million compared to \$30.1 million as of June 30, 2019. The \$9.5 million increase is primarily due to \$32.5 million of financing activities, primarily comprised of \$32.3 in net cash proceeds from the December 2019 underwritten offering of common stock. The Company used \$16.4 million for operating activities and \$6.3 million in capital expenditures for the nine months ended March 31, 2020. The Company estimates that cash on hand will fund its operations, including current capital expense commitments, beyond the next twelve months from the date of filing of this Form 10-Q.

## **Balance Sheet and Working Capital**

March 31, 2020 compared to June 30, 2019

As of March 31, 2020, the Company had current assets of \$41.2 million made up primarily of total cash on hand of \$39.6 million. As of June 30, 2019, current assets were \$31.7 million comprised primarily of total cash on hand of \$30.1 million.

Property, Plant and Equipment was \$19.9 million as of March 31, 2020 as compared to a balance of \$15.2 million as of June 30, 2019. The approximate \$4.7 million increase is primarily due to the purchase of R&D and manufacturing equipment of \$6.9 million, offset by depreciation of \$2.2 million.

Total assets as of March 31, 2020 and June 30, 2019 were \$62.9 million and \$47.9 million, respectively.

Current liabilities as of March 31, 2020 and June 30, 2019 were \$3.6 million and \$3.6 million, respectively.

Long-term liabilities totaled \$20.8 million as of March 31, 2020, compared to \$18.3 million as of June 30, 2019. The increase of \$2.5 million was due to the increase in convertible notes, net of debt discount and issuance costs, as well as the establishment of a right of use liability upon adoption of ASC 842 which totaled \$0.5 million.

Stockholders' equity was \$38.5 million as of March 31, 2020, compared to \$26.0 million as of June 30, 2019, an increase of \$12.5 million, or 48%. This increase was primarily due to common stock issued for cash, net of issuance costs of \$32.2 million, common stock issued for services of \$5.1 million, vesting of restricted shares of \$0.3 million, employee stock purchases of \$0.2 million and common stock issued for payment of note interest of \$0.7 million. These were offset by the net loss for the nine months ended March 31, 2020 of \$26.1 million.

## Cash Flow Analysis

Operating activities used cash of \$16.4 million during the nine months ended March 31, 2020 and \$13.4 million during the 2019 comparative period. The \$3.0 million period-over-period 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).

Investing activities used cash of \$6.5 million for the nine months ended March 31, 2020 compared to \$4.5 million for the comparative period ended March 31, 2019. The \$2.0 million period-over-period increase was primarily due to increased spend on R&D equipment.

Cash provided by financing activities was \$32.4 million for the nine months ended March 31, 2020 compared to \$37.7 million for the comparative period ended March 31, 2019. The \$5.3 million period-over-period decrease was due a reduction in cash received from equity and convertible note issuances in the comparative period.

## **Off-Balance Sheet Arrangements**

We did not have any off-balance sheet arrangements as of March 31, 2020.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not applicable to smaller reporting companies.

## ITEM 4. 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 Interim Chief Financial Officer (our principal executive officer and principal financial officer) of the effectiveness of the design and operation of our disclosure controls and procedures as of March 31, 2020. Based on that evaluation, our Chief Executive Officer and Interim Chief Financial Officer concluded that our disclosure controls and procedures were not effective as of such date due to the material weaknesses described below with respect to our internal control over financial reporting.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, 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. As previously disclosed in our 2019 Annual Report, we identified the following material weaknesses in the Company's internal controls over financial reporting as of June 30, 2019:

- 1. The Company did not design and implement effective Information Technology General Controls ("ITGC") for certain information systems that are relevant to the preparation of the Company's financial statements. Specifically, applications supporting the processes of payroll, cash management, fixed assets and financial close included deficiencies related to user access controls, change management, information technology operations and third-party service providers. These ITGC deficiencies, combined with inadequate compensating review controls, create a reasonable possibility that a material misstatement to the consolidated financial statements will not be prevented or detected on a timely basis.
- 2. Management review controls designed to address risks associated with complex accounting matters that arise from significant routine and non-routine transactions related to revenue, share-based compensation, research and development expense, and debt to ensure that those transactions are properly accounted for in accordance with U.S. GAAP did not operate effectively.

#### Remediation Plan

IT General Controls: During the first quarter of fiscal year 2020, key mitigating controls were designed and implemented to mitigate risks in the absence of full year coverage of SSAE-18 (SOC1) reports. These controls are being tested for design and operating effectiveness.

Non-Routine Transaction Review: During the first quarter of fiscal year 2020, controls were designed and implemented to mitigate risks related to review of all non-routine, material transactions specifically around revenue, share-based compensation, research and development expense and debt. These controls are being tested for design and operating effectiveness.

## **Changes in Internal Control over Financial Reporting**

Other than the mitigating controls referenced above, there have been no changes in our internal control over financial reporting that occurred during the quarterly period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## **PART II - OTHER INFORMATION**

## ITEM 1. 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 these or other matters may arise from time to time that may have an adverse effect on our business, financial condition or 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 1A. RISK FACTORS.

In addition to the risk factor set forth below and the other information set forth in this report, you should carefully consider the factors discussed under Part I, Item 1A, "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019. These factors could materially adversely affect our business, financial condition, liquidity, results of operations and capital position, and could cause our actual results to differ materially from our historical results or the results contemplated by the forward-looking statements contained in this report. Other than as described below, there have been no material changes to the risk factors described in Part I, Item 1A, "Risk Factors," included in our 2019 Annual Report.

We are dependent on the proper functioning of our critical facilities, our supply chain and distribution networks and the financial stability of our customers, all of which could be negatively impacted by the COVID-19 pandemic in a manner materially adverse to our business, financial condition or results of operations.

Our ability to manufacture products may be materially adversely impacted by COVID-19.

The COVID-19 pandemic is impacting worldwide economic activity. Estimates for economic growth have been reduced as a result of COVID-19, which may have a corresponding effect on our sales activity. The virus continues to spread globally, has been declared a pandemic by the World Health Organization and has spread to over 100 countries, including the United States. The impact of this pandemic has been and will likely continue to be extensive in many aspects of society, and has resulted in and will likely continue to result in significant disruptions to the global economy, as well as businesses and capital markets around the world. With the spread of the COVID-19 pandemic to the United States and other countries, it is unclear how economic activity and workflows might be impacted on a worldwide basis. Many employers in the United States are requiring their employees to work from home or not come into their offices or facilities. We manufacture primarily out of one facility in Canandaigua, New York. In order to mitigate the risk posed by COVID-19, we have implemented a new staffing plan whereby many employees work remotely, and the remaining on-site force is divided into two shifts. If the manufacturing capabilities of this facility are adversely impacted as a result of COVID-19, whether by a decrease in productivity caused by precautionary measures or by one or more employees becoming ill, it may not be possible for us to timely manufacture relevant products at required levels or at all. A reduction or interruption in any of our manufacturing processes could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We also might be unable to obtain certain supplies, product components, or equipment from our suppliers and vendors due to constraints created by COVID-19. For instance, we have observed delays in certain suppliers' deliveries of materials necessary for us to manufacture our products and in certain vendors' ability to manufacture equipment used in our production process. Additionally, travel restrictions and stay-at-home orders or similar mandates of foreign and domestic governments have prevented us from visiting suppliers' facilities as part of our quality control processes. These impacts may delay our launch of new products, adversely affect our ability to deliver customers' orders timely or in the requested quantities and inhibit our ability to ensure the quality of supplies used in our products.

Our sales may be materially adversely impacted by COVID-19.

Our sales efforts typically function by in-person meetings with customers and potential customers to discuss our products. The method and timing of these meetings has been altered due to stay-at-home orders and travel restrictions relating to COVID-19. This limitation on the ability of our sales personnel to maintain their customary interaction with customers for a period of time may negatively affect demand for our products. We have also found that potential customers have been forced to slow and reprioritize various product development projects as a result of COVID-19. This disruption to our sales activity and our customers' businesses, and the resulting delay in the growth of our business, may have a material adverse effect on our results of operations, financial condition and cash flows. Furthermore, a reduction or delay in revenues will prolong our dependence on capital raising to finance our operations.

Our ability to raise capital may be materially adversely impacted by COVID-19.

A sustained disruption in the capital markets from the COVID-19 pandemic could negatively impact our ability to raise capital. In the past, we have financed our operations by the issuance of equity and debt securities. However, we cannot predict when the macro-economic disruption stemming from COVID-19 will ebb or when the economy will return to pre-COVID-19 levels, if at all. This macro-economic disruption may disrupt our ability to raise additional capital to finance our operations in the future, which could materially and adversely affect our business, financial condition and prospects, and could ultimately cause our business to fail.

COVID-19 may heighten other risks.

The COVID-19 pandemic may have the effect of heightening many of the other risks described in Part I, Item 1A, "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019, such as risks related to the operation of our manufacturing facility, acceptance of our products into the market, doing business in foreign countries, attracting and retaining qualified personnel, our reliance on third parties to complete certain processes in connection with the manufacture of products, product quality and defects, successfully scaling the New York fabrication facility, stock volatility and illiquidity and maintaining effective internal control over financial reporting.

## ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

## **Unregistered Sales of Equity Securities**

Other than any sales previously reported in the Company's Current Reports on Form 8-K, the Company did not sell any unregistered securities during the period covered by this report.

## ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

## ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

## ITEM 5. OTHER INFORMATION.

The Company is disclosing under this Item 5 the following information otherwise disclosable in a Current Report on Form 8-K under "Item 5.03. Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year":

On May 1, 2020, the Company's Board of Directors (the "Board") approved the Company's Amended and Restated Bylaws (the "Amended and Restated Bylaws"), effective immediately. The Amended and Restated Bylaws amend and restate in their entirety the Company's bylaws to, among other things: (i) amend the description of certain information a stockholder must provide with respect to a proposal to nominate a person for election or reelection as a Company director or business to be considered at a stockholders meeting and the procedure for making such proposal; (ii) revise requirements and procedures for stockholder actions by written consent; (iii) require the majority of the entire Board to approve certain actions; (iv) require a two-thirds vote for stockholders to amend the Amended and Restated Bylaws; (v) provide that the forum for the resolution of internal corporate claims shall be the Court of Chancery in the State of Delaware; and (vi) make other technical amendments.

The foregoing summary is subject to, and qualified in its entirety by, the full text of the Amended and Restated Bylaws, a copy of which is filed as Exhibit 3.5 to this Quarterly Report on Form 10-Q and is incorporated by reference into this Item 5.

## ITEM 6. EXHIBITS.

The exhibits in the Exhibit Index below are filed or furnished, as applicable, as part of this report.

## EXHIBIT INDEX

Exhibit Number	Description
3.1	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)
3.2	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 16, 2016)
3.3	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 16, 2016)
3.4	Certificate of Amendment to the Certificate of Incorporation of the Company, as filed with the Delaware Secretary of State on November 4, 2019 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on November 6, 2019)
3.5*	Amended and Restated Bylaws of the Company
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 Officer
32.1*	Section 1350 Certification of Principal Executive Officer
32.2*	Section 1350 Certification of Principal Financial 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

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Akoustis Technologies, Inc. Dated: May 1, 2020

By: /s/ Kenneth E. Boller

Kenneth E. Boller Interim Chief Financial Officer

(Principal Financial and Accounting Officer)

By: /s/ Kenneth E. Boller

30

#### AKOUSTIS TECHNOLOGIES, INC.

Incorporated Under the Laws of the State of Delaware

## AMENDED AND RESTATED BYLAWS

ARTICLE I OFFICES

Akoustis Technologies, Inc. (the "Corporation") shall maintain a registered office in the State of Delaware. The Corporation may also have other offices at such places, either within or without the State of Delaware, as the Board of Directors may from time to time designate or the business of the Corporation may require.

## ARTICLE II STOCKHOLDERS

Section 1. <u>Place of Meetings</u>. Meetings of the stockholders for the election of directors or for any other purpose shall be held on such date, at such time and at such place, if any, either within or without the State of Delaware, as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting or in a duly executed waiver of notice thereof. Only if so determined by the Board of Directors, in its sole discretion, (a) stockholders may participate in a meeting of stockholders by means of a telephone conference or similar methods of communication by which all persons participating in the meeting can hear each other and/or (b) a meeting of stockholders may be held not at any place, but may instead be held solely by means of electronic communication, as provided in Section 211 of the General Corporation Law of the State of Delaware (the "DGCL").

Section 2. <u>Annual Meeting</u>. The Annual Meeting of Stockholders shall be held on such date and at such time as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting, at which meeting the stockholders shall elect a Board of Directors and transact only such other business as is properly brought before the meeting in accordance with these Bylaws. A Notice of the Annual Meeting stating the date, time and place, if any, of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting, shall be given as permitted by law to each stockholder entitled to vote at such meeting as of the record date for notice of the meeting not less than ten (10) nor more than sixty (60) days before the date of the meeting.

Section 3. Special Meetings. Unless otherwise prescribed by law or the Certificate of Incorporation of the Corporation (such Certificate, as amended from time to time, including resolutions adopted from time to time by the Board of Directors establishing the designation, rights, preferences and other terms of any class or series of capital stock, the "Certificate of Incorporation"), special meetings of the stockholders may be called, only at the request of a majority of the entire Board of Directors, by the Chairman of the Board, if any, the Chief Executive Officer, if any, the President or the Secretary. Notice of a Special Meeting stating the purpose or purposes for which the meeting is called and the date, time and place of the meeting, and the means of electronic communications, if any, by which stockholders and proxies shall be deemed to be present in person and vote, shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting as of the record date for notice of the meeting. Only such business as is specified in the notice of special meeting shall come before such meeting.

Section 4. Quorum. Except as otherwise provided by law or by the Certificate of Incorporation, the holders of shares of capital stock issued and outstanding entitled to vote thereat representing at least a majority of the votes entitled to be cast thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business. Whether or not a quorum is present, the chairman of the meeting, or the stockholders entitled to vote thereat, present or represented by proxy, holding shares representing at least a majority of the votes so present or represented and entitled to be cast thereon, shall have the power to adjourn the meeting from time to time, without notice other than announcement at the meeting. At such adjourned meeting at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally noticed. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder entitled to vote at the meeting. When a quorum is once present, it is not broken by the subsequent withdrawal of any stockholder.

Section 5. Appointment of Inspectors of Election. The Board of Directors shall, in advance of sending to the stockholders any notice of a meeting of the holders of any class of shares, appoint one or more inspectors of election ("inspectors") to act at such meeting or any adjournment or postponement thereof and make a written report thereof. The Board of Directors may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is so appointed or if no inspector or alternate is able to act, the Chairman of the Board, or if none, the Secretary shall appoint one or more inspectors to act at such meeting. Each inspector, before entering upon the discharge of such inspector's duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of such inspector's ability.

Section 6. <u>Voting</u>. Except as otherwise provided by law or by the Certificate of Incorporation, each stockholder of record of any class or series of stock other than the common stock, par value \$0.001 per share, of the Corporation ("Common Stock") shall be entitled on each matter submitted to a vote at each meeting of stockholders to such number of votes for each share of such stock as may be fixed in the Certificate of Incorporation, and each stockholder of record of Common Stock shall be entitled at each meeting of stockholders to one vote for each share of such stock, in each case, registered in such stockholder's name on the books of the Corporation on the date fixed pursuant to Section 5 of Article VI of these Bylaws as the record date for the determination of stockholders entitled to vote at such meeting, or if no such record date shall have been so fixed, then at the close of business on the day next preceding the day on which the meeting is held.

Each stockholder entitled to vote at any meeting may vote either in person or by proxy duly appointed.

At all meetings of stockholders, all matters, except as otherwise provided by law, the Certificate of Incorporation, these Bylaws, the rules or regulations of any stock exchange applicable to the Corporation or pursuant to any other regulation applicable to the Corporation or its securities, shall be determined by the affirmative vote of the stockholders present in person or represented by proxy holding shares representing at least a majority of the votes so present or represented by proxy and entitled to be cast thereon, and where a separate vote by class is required, a majority of the votes represented by the shares of the stockholders of such class present in person or represented by proxy and entitled to be cast thereon shall be the act of such class.

The vote on any matter, including the election of directors, shall be by written ballot, or, if authorized by the Board of Directors, in its sole discretion, by electronic ballot given in accordance with a procedure set out in the notice of such meeting. Each ballot shall state the number of shares voted.

If mailed, proxy cards shall be returned in envelopes addressed to the inspectors, who shall receive, inspect and tabulate the proxies. Comments on proxies, consents or ballots shall be transcribed and provided to the Secretary with the name and address of the stockholder. Nothing in this Article II shall prohibit the inspector from making available to the Corporation, prior to, during or after any annual or special meeting, information as to which stockholders have not voted and periodic status reports on the aggregate vote.

Except as otherwise provided by law, the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at a meeting of stockholders may be taken without a meeting if, before or after the action, a written (or electronic) consent thereto is given by stockholders holding shares representing at least a majority of the votes entitled to vote thereon, except that if a different proportion of voting power is required for such action at a meeting, then that proportion of written (or electronic) consents is required.

Section 7. List of Stockholders Entitled to Vote. The Corporation shall prepare, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting; provided, however, if the record date for determining the stockholders entitled to vote is less than 10 days before the meeting date, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date, arranged in alphabetical order and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Nothing contained in this Section shall require the Corporation to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, for a period of at least ten (10) days prior to the meeting, either (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation. If the meeting is to be held at a place, the list shall also be produced and kept at the time and place of the meeting during the whole time thereof and may be inspected by any stockholder of the Corporation who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

Section 8. <u>Stock Ledger</u>. The stock ledger of the Corporation shall be the only evidence as to who are the stockholders entitled to examine the stock ledger, the list required by Section 7 of this Article II or the books of the Corporation, or to vote in person or by proxy at any meeting of stockholders.

## Section 9. Advance Notice of Stockholder-Proposed Business and Nominations

- (a) Nominations of persons for election to the Board of Directors and the proposal of other business to be considered by the stockholders may be made at an annual meeting of stockholders only (i) pursuant to the Corporation's notice of meeting (or any supplement thereto), (ii) by or at the direction of the Board of Directors or any committee thereof, or (iii) by any stockholder of the Corporation who was a stockholder of record of the Corporation at the time the notice provided for in Section 9 of this Article II is delivered to the Secretary of the Corporation, who is entitled to vote at the meeting and who complies with the notice procedures set forth in Section 9 of this Article II.
- (b) For any nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of paragraph (a) of Section 9 of this Article II, the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation and any such proposed business (other than the nominations of persons for election to the Board of Directors) must constitute a proper matter for stockholder action. To be timely, a stockholder's notice shall be delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day, nor earlier than the close of business on the one hundred twentieth (120th) day, prior to the first anniversary of the preceding year's annual meeting (provided, however, that in the event that the date of the annual meeting is more than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by the Corporation). In no event shall the public announcement of an adjournment or postponement of an annual meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

Such stockholder's notice shall set forth:

(i) as to each person whom the stockholder proposes to nominate for election as a director (1) all information relating to such person that is required to be disclosed, whether in a proxy statement, or other filings required to be made in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to and in accordance with Section 14(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the rules and regulations promulgated thereunder, (2) such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected; (3) such person's written representation and agreement (A) that such person is not and will not become party to any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such person, if elected as a director of the Corporation, will act or vote on any issue or question (a "Voting Commitment") that has not been disclosed to the Corporation or any Voting Commitment that could limit or interfere with such person's ability to comply, if elected as a director of the Corporation, with such person's fiduciary duties under applicable law, (B) that such person is not and will not become a party to any agreement, arrangement, or understanding with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director that has not been disclosed to the Corporation, and (C) that, in such person's individual capacity and on behalf of any person or entity on whose behalf the nomination is being made, such person would, if elected as a director, comply with all of the Corporation's ethics and other guidelines applicable generally to the Corporation's directors and, if elected as a director of the Corporation, such person currently would be in compliance with any such policies and guidelines that have been publicly disclosed; and (4) a description of all direct and indirect compensation and other material monetary agreements, arrangements and understandings during the past three (3) years, and any other material relationships, between or among the stockholder making the nomination and any beneficial owner on whose behalf the nomination is made, and their respective affiliates and associates, or any other person or persons (including their names) acting in concert therewith, on the one hand, and each proposed nominee, and his or her respective affiliates or associates, or any other person or persons (including their names) acting in concert therewith, on the other hand, including, without limitation, all information that would be required to be disclosed pursuant to Item 404 promulgated under Regulation S-K if the stockholder making the nomination and any beneficial owner on whose behalf the nomination is made, if any, or any affiliate or associate thereof or person acting in concert therewith, were the "registrant" for purposes of such rule and the nominee were a director or executive officer of such registrant;

(ii) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the Bylaws of the Corporation, the language of the proposed amendment), the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made; and

(iii) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (1) the name and address of such stockholder, as they appear on the Corporation's books, and of such beneficial owner, (2) the class or series and number of shares of capital stock of the Corporation which are owned beneficially and of record by such stockholder and such beneficial owner, (3) a description of any agreement, arrangement or understanding with respect to the nomination or proposal between or among such stockholder and/or such beneficial owner, any of their respective affiliates or associates, and any others acting in concert with any of the foregoing, including, in the case of a nomination, the nominee, (4) a description of any agreement, arrangement or understanding (including any derivative or short positions, profit interests, options, warrants, convertible securities, stock appreciation or similar rights, hedging transactions, and borrowed or loaned shares) that has been entered into as of the date of the stockholder's notice by, or on behalf of, such stockholder and such beneficial owners, whether or not such instrument or right shall be subject to settlement in underlying shares of capital stock of the Corporation, the effect or intent of which is to mitigate loss to, manage risk or benefit of share price changes for, or increase or decrease the voting power of, such stockholder or such beneficial owner, with respect to securities of the Corporation, (5) a representation that the stockholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business or nomination, (6) a representation whether the stockholder or the beneficial owner, if any, intends or is part of a group which intends (A) to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the Corporation's outstanding capital stock required to approve or adopt the proposal or elect the nominee and/or (B) otherwise to solicit proxies or votes from stockholders in support of such proposal or nomination, and (7) any other information relating to such stockholder and beneficial owner, if any, required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for, as applicable, the proposal and/or for the election of directors in an election contest pursuant to and in accordance with Section 14(a) of the Exchange Act and the rules and regulations promulgated thereunder. The foregoing notice requirements of Section 9 of this Article II shall be deemed satisfied by a stockholder with respect to business other than a nomination if the stockholder has notified the Corporation of his, her or its intention to present a proposal at an annual meeting in compliance with applicable rules and regulations promulgated under the Exchange Act and such stockholder's proposal has been included in a proxy statement that has been prepared by the Corporation to solicit proxies for such annual meeting. The Corporation may require any proposed nominee to furnish such other information as the Corporation may reasonably require to determine the eligibility of such proposed nominee to serve as a director of the Corporation.

- (c) Notwithstanding anything in the second sentence of paragraph (b) of Section 9 of this Article II, to the contrary, in the event that the number of directors to be elected to the Board of Directors at the annual meeting is increased effective after the time period for which nominations would otherwise be due under paragraph (b) of Section 9 of this Article II and there is no public announcement by the Corporation naming the nominees for the additional directorships at least one hundred (100) days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by Section 9 of this Article II shall also be considered timely, but only with respect to nominees for the additional directorships, if it shall be delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the Corporation.
- (d) Special Meetings of Stockholders. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting. Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected pursuant to the corporation's notice of meeting (1) by or at the direction of the Board of Directors or any committee thereof or (2) provided that the Board of Directors has determined that directors shall be elected at such meeting, by any stockholder of the Corporation who is a stockholder of record at the time the notice provided for in this Section 9 is delivered to the Secretary of the Corporation, who is entitled to vote at the meeting and upon such election and who complies with the notice procedures set forth in this Section 9. In the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder entitled to vote in such election of directors may nominate a person or persons (as the case may be) for election to such position(s) as specified in the Corporation's notice of meeting, if the stockholder's notice required by Section 9(a) shall be delivered to the Secretary at the principal executive offices of the Corporation not earlier than the close of business on the one hundred twentieth (120 th) day prior to such special meeting and not later than the close of business on the later of the ninetieth (90 th) day prior to such special meeting or the tenth (10 th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In no event shall the public announcement of an adjournment or postponement of a special meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.
- (e) General. (1) Except as otherwise expressly provided in any applicable rule or regulation promulgated under the Exchange Act, only such persons who are nominated in accordance with the procedures set forth in this Section 9 shall be eligible to be elected at an annual or special meeting of stockholders of the Corporation to serve as directors and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 9. Except as otherwise provided by law, the chairman of the meeting shall have the power and duty (a) to determine whether a nomination or any business proposed to be brought before the meeting was made or proposed, as the case may be, in accordance with the procedures set forth in this Section 9 (including whether the stockholder or beneficial owner, if any, on whose behalf the nomination or proposal is made solicited (or is part of a group which solicited) or did not so solicit, as the case may be, proxies or votes in support of such stockholder's nominee or proposal in compliance with such stockholder's representation as required by clause (6) of Section 9(a)(iii) and (b) if any proposed nomination or business was not made or proposed in compliance with this Section 9, to declare that such nomination shall be disregarded or that such proposed business shall not be transacted. Notwithstanding the foregoing provisions of this Section 9, unless otherwise required by law, if the stockholder (or a qualified representative of the stockholder) does not appear at the annual or special meeting of stockholders of the Corporation to present a nomination or proposed business, such nomination shall be disregarded and such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Section 9, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager or

- (2) For purposes of this Section 9, "public announcement" shall include disclosure in a press release reported by the Dow Jones News Service, Associated Press or other national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act and the rules and regulations promulgated thereunder.
- (3) Notwithstanding the foregoing provisions of this Section 9, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations promulgated thereunder with respect to the matters set forth in this Section 9; provided however, that any references in these Bylaws to the Exchange Act or the rules and regulations promulgated thereunder are not intended to and shall not limit any requirements applicable to nominations or proposals as to any other business to be considered pursuant to this Section 9, and compliance with Section 9(a)(iii) and Section 9(b) shall be the exclusive means for a stockholder to make nominations or submit other business (other than, as provided in the penultimate sentence of 9(b), business other than nominations brought properly under and in compliance with Rule 14a-8 of the Exchange Act, as may be amended from time to time). Nothing in this Section 9 shall be deemed to affect any rights (a) of stockholders to request inclusion of proposals or nominations in the Corporation's proxy statement pursuant to applicable rules and regulations promulgated under the Exchange Act or (b) of the holders of any series of Preferred Stock to elect directors pursuant to any applicable provisions of the Corporation's certificate of incorporation.

### Section 10. Actions by Written Consent.

(a) In order that the Corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. Any stockholder of record seeking to have the stockholders authorize or take corporate action by written consent shall, by written notice to the Secretary, request that the Board of Directors fix a record date. The Board of Directors shall promptly, but in all events within ten (10) days after the date on which such written notice is received, adopt a resolution fixing the record date unless a record date has previously been fixed by the Board of Directors pursuant to the first sentence of Section 10(a) of this Article II. If no record date has been fixed by the Board of Directors pursuant to the first sentence of Section 10(a) of this Article II or otherwise within ten (10) days after the date on which such written notice is received, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by applicable law, shall be the first date after the expiration of such ten (10) day time period on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in Delaware, its principal place of business, or to any officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. If no record date has been fixed by the Board of Directors pursuant to the first sentence of Section 10(a) of this Article II, the record date for determining stockholders entitled to consent to corporate action in writing

- (b) In the event of the delivery, in the manner provided by this Article II, Section 10 and applicable law, to the Corporation of written consent or consents to take corporate action and/or any related revocation or revocations, the Corporation may engage independent inspectors of elections for the purpose of performing promptly a ministerial review of the validity of the consents and revocations. For the purpose of permitting the inspectors to perform such review, no action by written consent shall be effective until such inspectors have completed their review, determined that the requisite number of valid and unrevoked consents delivered to the Corporation in accordance with Section 10 of this Article II, and applicable law have been obtained to authorize or take the action specified in the consents, and certified such determination for entry in the records of the Corporation kept for the purpose of recording the proceedings of meetings of stockholders. Nothing contained in Section 10(b) of this Article II shall in any way be construed to suggest or imply that the Board of Directors or any stockholder shall not be entitled to contest the validity of any consent or revocation thereof, whether before or after such certification by the independent inspectors, or to take any other action (including, without limitation, the commencement, prosecution or defense of any litigation with respect thereto, and the seeking of injunctive relief in such litigation).
- (c) Any stockholder's notice required by paragraph (a) of this Article II, Section 10 must describe the action that the stockholder proposes to take by consent. For each such proposal, every notice by a stockholder must state the text of the proposal (including the text of any resolutions to be effected by consent and the language of any proposed amendment to the Bylaws of the Corporation).
- (d) No written consent shall be effective to take the corporate action referred to therein unless written consents signed by a sufficient number of holders to take action are delivered to the Corporation in the manner required by this Article II, Section 10 within 60 days of the first date on which a written consent is so delivered to the Corporation. Any person executing a consent may provide, whether through instruction to an agent or otherwise, that such a consent will be effective at a future time (including a time determined upon the happening of an event), no later than 60 days after such instruction is given or such provision is made, if evidence of such instruction or provision is provided to the Corporation. Unless otherwise provided, any such consent shall be revocable prior to its becoming effective.

Section 11. Notices to Stockholders. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders, directors, officers or agents given by the Corporation may be given in writing directed to such recipient's mailing address (or by electronic transmission directed to the recipient's electronic mail address, as applicable) as it appears on the records of the Corporation and shall be given (1) if mailed, when notice is deposited in the U.S. mail, postage prepaid, (2) if delivered by courier service, the earlier of when the notice is received or left at such recipient's address or (3) if given by electronic mail, when directed to such recipient's electronic mail address. Notice to a stockholder may not be given by electronic mail if the stockholder has notified the Corporation in writing or by electronic transmission of an objection to receiving notice by electronic mail or such notice is prohibited by law. A notice to stockholders by electronic mail must include a prominent legend that the communication is an important notice regarding the Corporation.

## ARTICLE III DIRECTORS

Section 1. Number: Resignation; Removal. Except as otherwise required by the Certificate of Incorporation, the number of directors which shall constitute the whole Board of Directors shall be fixed from time to time by a majority of the entire Board, but shall not be less than one (1). Except as provided in Section 2 of this Article III and in the Certificate of Incorporation, a nominee for director shall be elected to the Board of Directors by a plurality of the votes cast at the Annual Meeting of Stockholders. A director may resign at any time upon notice to the Corporation. A director may be removed, with or without cause, by the affirmative vote of holders of shares of capital stock issued and outstanding entitled to vote at an election of directors representing at least a majority of the votes entitled to be cast thereon.

Section 2. <u>Vacancies</u>. Vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled only by a majority of the remaining directors then in office, though less than a quorum, or by a sole remaining director, and the directors so elected shall hold office until the next Annual Meeting of stockholders and until their successors are duly elected and qualified, or until their earlier resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Section 3. <u>Duties and Powers</u>. The business of the Corporation shall be managed by or under the direction of the Board of Directors which may exercise all such powers of the Corporation and do all such lawful acts and things as are not by statute or by the Certificate of Incorporation or by these Bylaws directed or required to be exercised or done solely by the stockholders. The following transactions shall require the approval of a majority of the entire Board: (a) a merger or consolidation in which the Corporation or any subsidiary of the Corporation is a constituent party unless after any such merger or consideration the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock or other equity interests that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock or other equity interests of (1) the surviving or resulting corporation or other entity, or (2) if the surviving or resulting corporation or other entity is a wholly owned subsidiary of another corporation or other entity immediately following such merger or consolidation, the parent corporation or entity of such surviving or resulting corporation or entity; (b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole; or (c) a liquidation or dissolution of the Corporation.

Section 4. Meetings. The Board of Directors of the Corporation may hold meetings, both regular and special, either within or without the State of Delaware. Regular meetings of the Board of Directors may be held without notice at such time and at such place as may from time to time be determined by the Board of Directors. Special meetings of the Board of Directors may be called by the Chairman of the Board, if any, or by any director. Notice thereof stating the date, time and place of the meeting shall be given to each director either (i) by mail or courier not less than forty-eight (48) hours before the date of the meeting or (ii) by telephone, facsimile e-mail or other electronic transmission, not less than twenty-four (24) hours before the time of the meeting or on such shorter notice as the person or persons calling such meeting may deem necessary or appropriate in the circumstances (provided that notice of any meeting need not be given to any director who shall either submit, before or after such meeting, a waiver of notice or attend the meeting without protesting, at the beginning thereof, the lack of notice).

Section 5. Quorum. Except as may be otherwise provided by law, the Certificate of Incorporation or these Bylaws, a majority of the entire Board of Directors shall be necessary to constitute a quorum for the transaction of business, and the vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors. Whether or not a quorum is present at a meeting of the Board of Directors, a majority of the directors present may adjourn the meeting to such time and place as they may determine without notice other than an announcement at the meeting.

Section 6. <u>Action without a Meeting</u>. Unless otherwise provided by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken by the Board of Directors or any committee thereof may be taken without a meeting if all members of the Board of Directors or the committee consent in writing or by electronic transmission to the adoption of a resolution authorizing the action. The resolution and the consents thereto in writing or by electronic transmission by the members of the Board of Directors or committee shall be filed with the minutes of the proceedings of the Board of Directors or such committee.

Section 7. <u>Participation by Telephone</u>. Unless otherwise provided by the Certificate of Incorporation or these Bylaws, any one or more members of the Board of Directors or any committee thereof may participate in a meeting of the Board of Directors or such committee by means of a conference telephone or other communications equipment allowing all persons participating in the meeting to hear each other. Participation by such means shall constitute presence in person at the meeting.

Section 8. <u>Compensation</u>. The directors may be paid their expenses, if any, for attendance at each meeting of the Board of Directors or any committee thereof and may be paid compensation as a director, committee member or chairman of any committee and for attendance at each meeting of the Board of Directors or committee thereof. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefore or entering into transactions otherwise permitted by the Certificate of Incorporation, these Bylaws or applicable law.

Section 9. Resignation. Any director may resign at any time. Such resignation shall be made in writing or by electronic transmission and shall take effect at the time or upon the happening of the event specified therein, or, if no time or event be specified, at the time of its receipt by the Chairman of the Board, if any, the Chief Executive Officer, if any, the President or the Secretary. The acceptance of a resignation shall not be necessary to make it effective unless so specified therein.

### ARTICLE IV COMMITTEES

Section 1. Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of any such committee. In the absence or disqualification of a member of a committee, and in the absence of a designation by the Board of Directors of an alternate member to replace the absent or disqualified member, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or member constitute a quorum, may by unanimous vote appoint another member of the Board of Directors to act at the meeting in the place of any absent or disqualified member. Any committee, to the extent allowed by law and provided in the resolution establishing such committee or in these Bylaws, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, but no such committee shall have power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval (other than the election or removal of directors) or (ii) adopting, amending or repealing any Bylaw of the Corporation. All acts done by any committee within the scope of its powers and duties pursuant to these Bylaws and the resolutions adopted by the Board of Directors shall be deemed to be, and may be certified as being, done or conferred under authority of the Board of Directors. The Secretary or any Assistant Secretary is empowered to certify that any resolution duly adopted by any such committee is binding upon the Corporation and to execute and deliver such certifications from time to time as may be necessary or proper to the conduct of the business of the Corporation.

Section 2. <u>Resignation</u>. Any member of a committee may resign at any time. Such resignation shall be made in writing or by electronic transmission and shall take effect at the time or upon the happening of the event specified therein, or, if no time or event be specified, at the time of its receipt by the Chairman of the Board, if any, the Chief Executive Officer, if any, the President or the Secretary. The acceptance of a resignation shall not be necessary to make it effective unless so specified therein.

Section 3. Quorum. A majority of the members of a committee shall constitute a quorum. The vote of a majority of the members of a committee present at any meeting at which a quorum is present shall be the act of such committee.

Section 4. Record of Proceedings. Each committee shall keep a record of its acts and proceedings, and shall report the same to the Board of Directors when and as required by the Board of Directors.

Section 5. <u>Organization, Meetings, Notices</u>. A committee may hold its meetings at the principal office of the Corporation, or at any other place upon which a majority of the committee may at any time agree. Each committee may make such rules as it may deem expedient for the regulation and carrying on of its meetings and proceedings.

## ARTICLE V OFFICERS

Section 1. General. The officers of the Corporation shall be elected by the Board of Directors and shall consist of a President, a Secretary and a Treasurer. The Board of Directors, in its discretion, may also elect and specifically identify as officers of the Corporation a Chairman of the Board, a Chief Executive Officer, a Chief Financial Officer, a Controller, one or more vice presidents, assistant secretaries and assistant treasurers, and such other officers and agents as in its judgment may be necessary or desirable. Any number of offices may be held by the same person, unless otherwise prohibited by law, the Certificate of Incorporation or these Bylaws. The officers of the Corporation need not be stockholders or directors of the Corporation. Any officer named or provided for in this Article V (including, without limitation, Chairman of the Board, Chief Executive Officer, Chief Financial Officer, President, Secretary, Treasurer and Controller) may, at any time and from time to time, be held by one or more persons. If an office is held by more than one person, each person holding such office shall serve as a co-officer (with the appropriate corresponding title) and shall have general authority, individually and without the need for any action by any other co-officer, to exercise all the powers of the holder of such office of the Corporation specified in these Bylaws and shall perform such other duties and have such other powers as may be prescribed by the Board of Directors or such other officer specified in this Article V.

Section 2. <u>Election</u>; <u>Removal</u>; <u>Remuneration</u>. The Board of Directors at its first meeting held after each Annual Meeting of Stockholders shall elect the officers of the Corporation who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors and may elect additional officers and may fill vacancies among the officers previously elected at any subsequent meeting of the Board of Directors; and all officers of the Corporation shall hold office until their successors are chosen and qualified, or until their earlier resignation or removal. Any officer elected by the Board of Directors may be removed at any time, either for or without cause, by the affirmative vote of a majority of the Board of Directors.

Section 3. Voting Securities Owned by the Corporation. Powers of attorney, proxies, waivers of notice of meetings, consents and other instruments relating to securities owned by the Corporation may be executed in the name of and on behalf of the Corporation by the Chairman of the Board, if any, the Chief Executive Officer, if any, the President or the Secretary, and any such officer may, in the name and on behalf of the Corporation, take all such action as any such officer may deem advisable to vote in person or by proxy at any meeting of security holders of any company, partnership or other entity in which the Corporation may own securities, or to execute written consents in lieu thereof, and at any such meeting, or in giving any such consent, shall possess and may exercise any and all rights and powers incident to the ownership of such securities and which, as the owner thereof, the Corporation might have exercised and possessed if present. The Board of Directors may, by resolution, from time to time confer like powers upon any other person or persons.

Section 4. Chairman of the Board. The Chairman of the Board, if any, may be, but need not be, a person other than the Chief Executive Officer or the President of the Corporation. The Chairman of the Board may be, but need not be, an officer or employee of the Corporation. The Chairman of the Board shall preside at meetings of the Board of Directors and shall establish agendas for such meetings. In addition, the Chairman of the Board shall assure that matters of significant interest to stockholders and the investment community are addressed by management.

Section 5. Chief Executive Officer. The Chief Executive Officer, if any, shall, subject to the direction of the Board of Directors, have general and active control of the affairs and business of the Corporation and general supervision of its officers, officials, employees and agents. The Chief Executive Officer shall preside at all meetings of the stockholders and shall preside at all meetings of the Board of Directors and any committee thereof of which he or she is a member, unless the Board of Directors or such committee shall have chosen another chairman. The Chief Executive Officer shall see that all orders and resolutions of the Board are carried into effect, and in addition, the Chief Executive Officer shall have all the powers and perform all the duties generally appertaining to the office of the chief executive officer of a corporation. The Chief Executive Officer shall designate the person or persons who shall exercise his powers and perform his duties in his absence or disability and the absence or disability of the President.

Section 6. <u>President</u>. The President shall have such powers and perform such duties as are prescribed by the Chief Executive Officer or the Board of Directors, and in the absence or disability of the Chief Executive Officer, the President shall have the powers and perform the duties of the Chief Executive Officer, except to the extent the Board of Directors shall have otherwise provided. In addition, the President shall have such powers and perform such duties generally appertaining to the office of the president of a corporation, except to the extent the Chief Executive Officer, if any, or the Board of Directors shall have otherwise provided.

Section 7. Vice President. The Vice Presidents of the Corporation shall perform such duties and have such powers as may, from time to time, be assigned to them by the Board of Directors, the Chief Executive Officer, if any, the President or these Bylaws.

Section 8. Secretary. The Secretary shall attend all meetings of the Board of Directors and of the stockholders and record all votes and the minutes of all proceedings in a book to be kept for that purpose, and shall perform like duties for any committee appointed by the Board of Directors. The Secretary shall keep in safe custody the seal of the Corporation and affix it to any instrument when so authorized by the Board of Directors. The Secretary shall give or cause to be given, notice of all meetings of stockholders and special meetings of the Board of Directors and shall perform generally all the duties usually appertaining to the office of secretary of a corporation and shall perform such other duties and have such other powers as may be prescribed by the Board of Directors or these Bylaws. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest the affixing by his or her signature.

Section 9. <u>Assistant Secretary</u>. The Assistant Secretary shall be empowered and authorized to perform all of the duties of the Secretary in the absence or disability of the Secretary and shall perform such other duties and have such other powers as may be prescribed by the Board of Directors, the Secretary or these Bylaws.

Section 10. Chief Financial Officer. The Chief Financial Officer, if any, shall have responsibility for the administration of the financial affairs of the Corporation and shall exercise supervisory responsibility for the performance of the duties of the Treasurer and the Controller, if any. The Chief Financial Officer shall render to the Board of Directors, at its regular meetings, or when the Board of Directors so requires, an account of all of the transactions effected by the Treasurer and the Controller, if any, and of the financial condition of the Corporation. The Chief Financial Officer shall generally perform all the duties usually appertaining to the affairs of a chief financial officer of a corporation and shall perform such other duties and have such other powers as may be prescribed by the Board of Directors or these Bylaws.

Section 11. Treasurer. The Treasurer shall have the custody of the corporate funds and securities and shall cause to be kept full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all monies and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by persons authorized by the Board of Directors. The Treasurer shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the Chairman of the Board, if any, the Chief Executive Officer, if any, the President and the Board of Directors whenever they may require it, an account of all of the transactions effected by the Treasurer and of the financial condition of the Corporation. The Treasurer may be required to give a bond for the faithful discharge of his or her duties. The Treasurer shall generally perform all duties appertaining to the office of treasurer of a corporation and shall perform such other duties and have such other powers as may be prescribed by the Board of Directors, the Chief Executive Officer, if any, the President or these Bylaws.

Section 12. <u>Assistant Treasurer</u>. The Assistant Treasurer shall be empowered and authorized to perform all the duties of the Treasurer in the absence or disability of the Treasurer and shall perform such other duties and have such other powers as may be prescribed by the Board of Directors, the Treasurer or these Bylaws.

Section 13. Controller. The Controller, if any, shall prepare and have the care and custody of the books of account of the Corporation. The Controller shall keep a full and accurate account of all monies, received and paid on account of the Corporation, and shall render a statement of the Controller's accounts whenever the Board of Directors shall require. The Controller shall generally perform all the duties usually appertaining to the affairs of the controller of a corporation and shall perform such other duties and have such other powers as may be prescribed by the Board of Directors, the Chief Financial Officer, if any, the President or these Bylaws. The Controller may be required to give a bond for the faithful discharge of his or her duties.

Section 14. <u>Additional Powers and Duties</u>. In addition to the foregoing especially enumerated duties and powers, the several officers of the Corporation shall perform such other duties and exercise such further powers as the Board of Directors may, from time to time, determine or as may be assigned to them by any superior officer.

Section 15. Other Officers. The Board of Directors may designate such other officers having such duties and powers as it may specify from time to time.

## ARTICLE VI CAPITAL STOCK

Section 1. Form of Certificate: Uncertificated Shares. The shares of the Corporation shall be represented by certificates, provided that the Board of Directors may provide by resolution or resolutions that some or all of any or all classes or series of its stock may be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation. Every holder of stock in the Corporation represented by a certificate shall be entitled to have a certificate signed in the name of the Corporation by any two "authorized officers" of the Corporation representing the number of shares registered in certificate form owned by such holder. The President, Chief Executive Officer and Secretary and any other officer of the Corporation designated by the Board of Directors shall be "authorized officers" within the meaning of this Article VI. Except as otherwise provided by law or these Bylaws, the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

Section 2. <u>Signatures</u>. Any signature required to be on a certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue.

Section 3. Lost, Stolen or Destroyed Certificates. The Board of Directors may direct a new certificate to be issued in place of any certificate theretofore issued by the Corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate, or his legal representative, to advertise the same in such manner as the Board of Directors shall require and/or to give the Corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

Section 4. <u>Transfers</u>. Stock of the Corporation shall be transferable in the manner prescribed by law and in these Bylaws. Transfers of stock shall be made on the books of the Corporation only by the holder of record or by such person's attorney duly authorized, and upon the surrender of properly endorsed certificates for a like number of shares (or, with respect to uncertificated shares, by delivery of duly executed instructions or in any other manner permitted by applicable law).

Section 5. Record Date. In order that the Corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, unless otherwise required by law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If the Board of Directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board of Directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting,

In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which shall not be more than sixty (60) days prior to such other action. If no such record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 6. <u>Beneficial Owners</u>. The Corporation shall be entitled to recognize the exclusive right of the person registered on its books as the owner of a share to receive dividends and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by law.

Section 7. <u>Dividends</u>. Subject to the provisions of the Certificate of Incorporation or applicable law, dividends upon the capital stock of the Corporation, if any, may be declared by the Board of Directors at any regular or special meeting, and may be paid in cash, in property, or in shares of capital stock. Before payment of any dividend, there may be set aside out of any funds of the Corporation available for dividends such sum or sums as the Board of Directors from time to time, in its absolute discretion, deems proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Corporation or for any proper purpose, and the Board of Directors may modify or abolish any such reserve.

Section 8. Common Stock. The voting, dividend and liquidation rights of the holders of shares of Common Stock are subject to, and qualified by, the rights of the holders of the preferred stock, if any, of the Corporation. Each share of Common Stock shall be treated identically as all other shares of Common Stock with respect to dividends, distributions, rights in liquidation and in all other respects.

## ARTICLE VII INDEMNIFICATION

Section 1. Indemnification Respecting Third Party Claims. The Corporation, to the full extent and in a manner permitted by Delaware law as in effect from time to time, shall indemnify, in accordance with the provisions of this Article, any person (including the heirs, executors, and administrators of any such person) who was or is made a party to or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (including any appeal thereof), whether civil, criminal, administrative, or investigative (other than an action by or in the right of the Corporation or by any corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise of which the Corporation owns, directly or indirectly through one or more other entities, a majority of the voting power or otherwise possesses a similar degree of control), by reason of the fact that such person is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, member, manager, partner, trustee, fiduciary, employee or agent (a "Subsidiary Officer") of another corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise (any such entity for which a Subsidiary Officer so serves, an "Associated Entity"), against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful; provided, however, that (i) the Corporation shall not be obligated to indemnify a person who is or was a director, officer, employee or agent of the Corporation or a Subsidiary Officer of an Associated Entity against expenses incurred in connection with an action, suit, proceeding or investigation to which such person is threatened to be made a party but does not become a party unless the incurring of such expenses was authorized by or under the authority of the Board of Directors and (ii) the Corporation shall not be obligated to indemnify against any amount paid in settlement unless the Board of Directors has consented to such settlement. The termination of any action, suit or proceeding by judgment, order, settlement or conviction or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the Corporation, or with respect to any criminal action or proceeding, that such person had reasonable cause to believe that his conduct was unlawful. Notwithstanding anything to the contrary in the foregoing provisions of this Section 1, a person shall not be entitled, as a matter of right, to indemnification pursuant to this Section 1 against costs or expenses incurred in connection with any action, suit or proceeding commenced by such person against the Corporation or any Associated Entity or any person who is or was a director, officer, fiduciary, employee or agent of the Corporation or a Subsidiary Officer of any Associated Entity (including, without limitation, any action, suit or proceeding commenced by such person to enforce such person's rights under this Article, unless and only to the extent that such person is successful on the merits of such claim), but such indemnification may be provided by the Corporation in a specific case as permitted by Section 7 below in this Article.

Section 2. <u>Indemnification Respecting Derivative Claims</u>. The Corporation, to the full extent and in a manner permitted by Delaware law as in effect from time to time, shall indemnify, in accordance with the provisions of this Article, any person (including the heirs, executors, and administrators of any such person) who was or is made a party to or is threatened to be made a party to any threatened, pending or completed action or suit (including any appeal thereof) brought by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a Subsidiary Officer of an Associated Entity, against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless, and only to the extent that, the Court of Chancery or the court in which such action or suit was brought determines upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper; *provided, however*, that the Corporation shall not be obligated to indemnify a director, officer, employee or agent of the Corporation or a Subsidiary Officer of an Associated Entity against expenses incurred in connection with an action or suit to which such person is threatened to be made a party but does not become a party unless the incurrence of such expenses was authorized by or under the authority of the Board of

Section 3. <u>Determination of Entitlement to Indemnification</u>. Any indemnification to be provided under either of Section 1 or 2 above in this Article (unless ordered by a court of competent jurisdiction or advanced as provided in Section 5 of this Article) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper under the circumstances. Such determination must be made (a) by the stockholders, (b) by a majority vote of the directors who are not parties to the action, suit or proceeding, even though less than a quorum, (c) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (d) if there are no such directors, or if such directors so elect, by independent legal counsel in a written opinion. In the event a request for indemnification is made by any person referred to in Section 1 or 2 above in this Article, the Corporation shall use its reasonable best efforts to cause such determination to be made not later than sixty (60) days after such request is made after the final disposition of such action, suit or proceeding.

Section 4. Right to Indemnification upon Successful Defense and for Service as a Witness. (a) Notwithstanding the other provisions of this Article, to the extent that a present or former director or officer has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in either of Section 1 or 2 above in this Article, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

(b) Except as otherwise required by law, to the extent any person who is or was a director, officer, employee or agent of the Corporation or a Subsidiary Officer of an Associated Entity has served or prepared to serve as a witness in, but is not a party to, any action, suit or proceeding (whether civil, criminal, administrative, regulatory or investigative in nature), including any investigation by any legislative or regulatory body or by any securities or commodities exchange of which the Corporation or an Associated Entity is a member or to the jurisdiction of which it is subject, by reason of his or her services as a director, officer, employee or agent of the Corporation, or his or her service as a Subsidiary Officer of an Associated Entity (assuming such person is or was serving at the request of the Corporation as Subsidiary Officer of such Associated Entity), the Corporation may indemnify such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith and, if the Corporation has determined to so indemnify such person, shall use its reasonable best efforts to provide such indemnity within sixty (60) days after receipt by the Corporation from such person of a statement requesting such indemnification, averring such service and reasonably evidencing such expenses; it being understood, however, that the Corporation shall have no obligation under this Article to compensate such person for such person's time or efforts so expended.

Section 5. <u>Advance of Expenses</u>. (a) Expenses (including attorneys' fees) incurred by any present or former director or officer of the Corporation in defending any civil, criminal, administrative or investigative action, suit or proceeding shall, to the extent permitted by law, be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking in writing by or on behalf of such person to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation as authorized by this Article.

(b) Expenses and costs incurred by any other person referred to in Section 1 or 2 above in this Article in defending a civil, criminal, administrative, regulatory or investigative action, suit or proceeding may be paid by the Corporation in advance of the final disposition of such action, suit or proceeding as authorized by or under the authority of the Board of Directors upon receipt of an undertaking in writing by or on behalf of such person to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation in respect of such expenses as authorized by this Article and subject to any limitations or qualifications provided by or under the authority of the Board of Directors.

Section 6. Notice of Action; Assumption of the Defense. Promptly after receipt by any person referred to in Section 1, 2 or 5 above in this Article of notice of the commencement of any action, suit or proceeding in respect of which indemnification or advancement of expenses may be sought under any such Section, such person (the "Indemnitee") shall notify the Corporation thereof. The Corporation shall be entitled to participate in the defense of any such action, suit or proceeding and, to the extent that it may wish, except in the case of a criminal action or proceeding, to assume the defense thereof with counsel chosen by it. If the Corporation shall have notified the Indemnitee of its election so to assume the defense, it shall be a condition of any further obligation of the Corporation under such Sections to indemnify the Indemnitee with respect to such action, suit or proceeding that the Indemnitee shall have provided an undertaking in writing to repay all legal or other costs and expenses subsequently incurred by the Corporation in conducting such defense if it shall ultimately be determined that the Indemnitee is not entitled to be indemnified in respect of the costs and expenses of such action, suit or proceeding by the Corporation as authorized by this Article. Notwithstanding anything in this Article to the contrary, after the Corporation shall have notified the Indemnitee of its election so to assume the defense, the Corporation shall not be liable under such Sections for any legal or other costs or expenses subsequently incurred by the Indemnitee in connection with the defense of such action, suit or proceeding, unless (a) the parties thereto include both (i) the Corporation and the Indemnitee, or (ii) the Indemnitee and other persons who may be entitled to seek indemnification or advancement of expenses under any such Section and with respect to whom the Corporation shall have elected to assume the defense, and (b) the counsel chosen by the Corporation to conduct the defense shall have determined, in

Section 7. <u>Indemnification Not Exclusive</u>. The provision of indemnification, or the advancement of expenses, to any person under this Article, or the entitlement of any person to indemnification or advancement of expenses under this Article does not exclude any other rights to which a person seeking indemnification or advancement of expenses may be entitled under the Certificate of Incorporation or any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, for either an action in such person's official capacity or an action in another capacity while holding such office.

Section 8. Corporate Obligations: Reliance. The provisions of Sections 1, 2, 4(a) and 5(a) above of this Article shall be deemed to create a binding obligation on the part of the Corporation to the directors, officers, employees and agents of the Corporation, and the persons who are serving at the request of the Corporation as Subsidiary Officers of Associated Entities, on the effective date of this Article and persons thereafter elected as directors and officers or retained as employees or agents, or serving at the request of the Corporation as Subsidiary Officers of Associated Entities, on or after such date but who are no longer so serving at the time they present claims for advancement of expenses or indemnity), and such persons in acting in their capacities as directors, officers, employees or agents of the Corporation, or serving at the request of the Corporation as Subsidiary Officers of any Associated Entity, shall be entitled to rely on such provisions of this Article.

Section 9. <u>Further Changes</u>. Neither the amendment nor repeal of this Article, nor the adoption of any provision of the Certificate of Incorporation inconsistent with this Article, shall eliminate or reduce the effect of such provisions in respect of any act or omission or any matter occurring prior to such amendment, repeal or adoption of an inconsistent provision regardless of when any cause of action, suit or claim relating to any such matter accrued or matured or was commenced, and such provision shall continue to have effect in respect of such act, omission or matter as if such provision had not been so amended or repealed or if a provision inconsistent therewith had not been so adopted.

Section 10. <u>Successors</u>. The right, if any, of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a Subsidiary Officer of an Associated Entity, to indemnification or advancement of expenses under Sections 1 through 9 above in this Article shall continue after such person shall have ceased to be a director, officer, employee or agent of the Corporation or a Subsidiary Officer of an Associated Entity and shall inure to the benefit of the heirs, executors and administrators of such person.

Section 11. Insurance. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a Subsidiary Officer of any Associated Entity, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Corporation would have the power to indemnify such person against such liability.

Section 12. <u>Definitions of Certain Terms</u>. For purposes of this Article, references to "fines" shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to "serving at the request of the Corporation" shall include any service as a director, officer employee or agent of the Corporation or as a Subsidiary Officer of any Associated Entity which service imposes duties on, or involves services by, such person with respect to any employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Corporation" as referred to in this Article.

## ARTICLE VIII GENERAL

- Section 1. Fiscal Year. The fiscal year of the Corporation shall be such date as shall be fixed by resolution of the Board of Directors from time to time.
- Section 2. <u>Corporate Seal</u>. The corporate seal shall have inscribed thereon the name of the Corporation, the year of its organization and the words "Corporate Seal, Delaware". The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise upon any paper, certificate or document.
- Section 3. <u>Disbursements</u>. All checks, drafts or demands for money out of the funds of the Corporation and all notes and other evidences of indebtedness of the Corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.
- Section 4. <u>Amendments</u>. These Bylaws may be altered, amended or repealed, in whole or in part, or new Bylaws may be adopted by the stockholders or by the Board of Directors at any meeting thereof; *provided, however*, that notice of such alteration, amendment, repeal or adoption of new Bylaws shall be contained in the notice of such meeting of stockholders or in a notice of such meeting of the Board of Directors, as the case may be. Unless a higher percentage is required by law or by the Certificate of Incorporation as to any matter which is the subject of these Bylaws, all such amendments must be approved by either the affirmative vote of holders of shares of capital stock issued and outstanding entitled to vote thereon representing at least sixty-six and two-thirds (66 2/3) of the votes entitled to be cast thereon or by a majority of the entire Board of Directors then in office.
- Section 5. Forum for Adjudication of Disputes. Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for all "internal corporate claims." "Internal corporate claims" means claims, including claims in the right of the corporation, (i) that are based upon a violation of a duty by a current or former director or officer or stockholder in such capacity or (ii) as to which the General Corporation Law of the State of Delaware confers jurisdiction upon the Court of Chancery, except for, as to each of (i) and (ii) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction; provided, however, if (and only if) the Court of Chancery declines to accept jurisdiction over a particular matter, the U.S. District Court for the District of Delaware shall be the sole and exclusive forum for all "internal corporate claims" unless the Corporation consents in writing to the selection of an alternative forum; provided, however, if (and only if) the U.S. District Court for the District of Delaware declines to accept jurisdiction over a particular matter, the Superior Court of the State of Delaware (Complex Commercial Litigation Division) shall be the sole and exclusive forum for all "internal corporate claims" unless the Corporation consents in writing to the selection of an alternative forum. If any provision of provisions of this Article VIII, Section 5 shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest ex
- Section 6. Forum for Adjudication of Securities Act Disputes. Unless the Corporation consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933. Any person or entity e Corporation shall be deemed to have notice of and consented to this Section 6 of Article VIII.
- Section 7. <u>Definitions</u>. As used in this Article and in these Bylaws generally, the term "entire Board of Directors" means the total number of authorized directors whether or not there exist any vacancies in previously authorized directorships or any unfilled newly-created directorships.

## 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 Quarterly Report on Form 10-Q of Akoustis Technologies, Inc.;
- 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: May 1, 2020 /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, Kenneth E. Boller, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Akoustis Technologies, Inc.;
- 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: May 1, 2020 /s/ Kenneth E. Boller

Kenneth E. Boller Interim 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 Quarterly Report of Akoustis Technologies, Inc. (the "Company") on Form 10-Q for the quarterly period ended March 31, 2020, 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: May 1, 2020 /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 Quarterly Report of Akoustis Technologies, Inc. (the "Company") on Form 10-Q for the quarterly period ended March 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kenneth E. Boller, Interim 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: May 1, 2020 /s/ Kenneth E. Boller

Kenneth E. Boller Interim 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.