

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

**FORM 10-K**

(Mark one)

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

For the fiscal year ended September 30, 2016

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

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

Commission file number 0-10976

**Microwave Filter Company, Inc**

(Exact name of registrant as specified in its charter)

New York  
(State or other jurisdiction of  
incorporation or organization)

16-0928443  
(I.R.S. Employer  
Identification No.)

6743 Kinne Street, East Syracuse, NY  
(Address of principal executive offices)

13057  
(Zip code)

Registrant's telephone number including area code (315) 438-4700

Securities registered pursuant to Section 12(b) of the Act: None

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

Common stock, par value \$.10 per share  
Title of class

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports, and (2) has been subject to such filing requirements for the past 90 days. YES  NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).  
YES  NO

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company (as defined in Rule 12b-2 of the Exchange Act).

Large accelerated filer  Accelerated filer  Non-accelerated filer  (Do not check if smaller reporting company) Smaller reporting company .

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter was \$1,587,875.

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Shares of common stock outstanding at November 16, 2016: 2,581,007

DOCUMENTS INCORPORATED BY REFERENCE

Part III: Portions of the Definitive Proxy Statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for the Company's 2017 Annual Meeting of Shareholders are incorporated by reference into Part III. (With the exception of those portions which are specifically incorporated by reference in this Form 10-K, the Proxy Statement is not deemed to be filed or incorporated by reference as part of this report.)

MICROWAVE FILTER COMPANY, INC.  
Form 10-K

Index

PART I

Item 1.	<a href="#">Business</a>	4
Item 1A.	<a href="#">Risk Factors</a>	8
Item 1B.	<a href="#">Unresolved Staff Comments</a>	8
Item 2.	<a href="#">Properties</a>	8
Item 3.	<a href="#">Legal Proceedings</a>	8
Item 4.	<a href="#">Mine Safety Disclosures</a>	8

PART II

Item 5.	<a href="#">Market for Registrant's Common Equity and Related Stockholder Matters</a>	9
Item 6.	<a href="#">Selected Financial Data</a>	10
Item 7.	<a href="#">Management's Discussion and Analysis of Financial Condition and Results of Operations</a>	11
Item 7A.	<a href="#">Quantitative and Qualitative Disclosures About Market Risk</a>	15
Item 8.	<a href="#">Financial Statements and Supplementary Data</a>	15
Item 9.	<a href="#">Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</a>	15
Item 9A.	<a href="#">Controls and Procedures</a>	16
Item 9B.	<a href="#">Other Information</a>	16

PART III

PART IV

Item 15.	<a href="#">Financial Statement Schedules and Exhibits</a>	18
	<a href="#">Signatures</a>	19

## PART I

### ITEM 1. BUSINESS.

#### FORWARD-LOOKING CAUTIONARY STATEMENT

In an effort to provide investors a balanced view of the Company's current condition and future growth opportunities, this Annual Report on Form 10-K may include comments by the Company's management about future performance. These statements which are not historical information are "forward-looking statements" pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These, and other forward-looking statements, are subject to business and economic risks and uncertainties that could cause actual results to differ materially from those discussed. These risks and uncertainties include, but are not limited to: risks associated with demand for and market acceptance of existing and newly developed products as to which the Company has made significant investments; general economic and industry conditions; slower than anticipated penetration into the satellite communications, mobile radio and commercial and defense electronics markets; competitive products and pricing pressures; increased pricing pressure from our customers; risks relating to governmental regulatory actions in broadcast, communications and defense programs; as well as other risks and uncertainties, including but not limited to those detailed from time to time in the Company's Securities and Exchange Commission filings. These forward-looking statements are made only as of the date hereof, and the Company undertakes no obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise. You are encouraged to review Microwave Filter Company's 2016 Annual Report and Form 10-K for the fiscal year ended September 30, 2016 and other Securities and Exchange Commission filings. Forward looking statements may be made directly in this document or "incorporated by reference" from other documents. You can find many of these statements by looking for words like "believes," "expects," "anticipates," "estimates," or similar expressions.

#### GENERAL DEVELOPMENT OF BUSINESS

Microwave Filter Company, Inc. (hereinafter referred to as MFC) was incorporated in New York State on September 26, 1967. MFC is the successor of Microwave Filter Company which was founded in April of 1967.

On July 1, 1990, MFC acquired Niagara Scientific, Inc. (hereinafter referred to as NSI.)

MFC and its subsidiaries are sometimes referred to collectively as the "Company."

#### NARRATIVE DESCRIPTION OF BUSINESS

Microwave Filter Company, Inc. (MFC)

Established in 1967 in East Syracuse, New York, MFC occupies a modern 40,000 square foot facility with an impressive complement of analytical and design software, test instrumentation, prototype and manufacturing equipment to create passive filters, components and sub systems in the frequency range of 10 MHz to 50 GHz.

MFC manufactures RF filters and related components for eliminating interference and facilitating signal processing for such markets as Cable Television, Broadcast, Commercial and Military Communications, Avionics, Radar, Navigation and Defense. The Company designs waveguide, stripline/ microstrip, transmission line, miniature/subminiature and lumped constant filters. Configurations include bandpass, highpass, lowpass, bandstop, multiplexers, tunable notch, tunable bandpass, high power filters, amplitude equalized, delay equalized and filter networks. The Company actively produces over 1,700 standard products and has designed more than 5,000 custom products for specialized applications.

The manufacturing facility includes a modern CAD system, a test department with automated network analyzers to 50 GHz, a high capacity conveyor soldering oven and a fully compliant finishing operation. The Company's Quality Management System has been certified ISO 9001:2008 recognizing the Company as a quality vendor.

Efficient computer simulation, design and analysis software enhanced by proprietary MFC developed software, allow rapid and accurate filter development at reasonable cost. Automated network analyzers provide rigorous product testing and performance data storage on a serial number basis in most cases.

A network based CAD system allows the transfer of data and programs to the CNC turning and milling centers for fabrication of machined parts. Prototype PC boards are similarly produced by computer controlled PC board mills.

A Grieve high capacity conveyor soldering oven is used for production of large quantity assemblies while smaller production quantities are assembled at hand soldering or brazing stations.

ISO 9001:2008 contract and design review procedures coupled with a QA department that is compliant with MIL-I-45208 inspection systems and MIL-STD-45622 calibration system standards assures process and product integrity.

Other in-house testing facilities include environmental chambers capable of testing products for temperatures of -40 to 200 degrees Celsius and humidity up to 100 percent. Several high power amplifiers are available for power tests. We have 2500 watt capability from 88-108Mhz with 200 watt capability up to 2200 Mhz. Facilities are also available for salt spray, sand and dust, shock and vibration, RFI leakage and altitude testing.

## MARKETS

### Microwave Filter Company, Inc. (MFC)

RF and Microwave - This market encompasses both commercial and military applications. Filters in defense applications are used for such purposes as air to ground communications, radar and land communications. In commercial areas, filters are used to protect such equipment as receivers, transmitters, transceivers and any other electronics used for signal processing. In addition to filters, this market is also served with MFC's Ferrosorb product line. Ferrosorb is a microwave absorbing material available in sheets, loads and a variety of other shapes. The product is used to offer protection by shielding signals or absorbing selective bands.

MFC's RF/Microwave products are sold primarily to Original Equipment Manufacturers that serve the mobile radio, commercial communications and defense electronics markets. The Company continues to invest in production engineering and infrastructure development to penetrate OEM market segments as they become popular. MFC is concentrating its technical resources and product development efforts toward potential high volume customers as part of a concentrated effort to provide substantial long-term growth. The Company is also actively sourcing complimentary products to distribute to augment sales.

Satellite - Microwave filters for removing interference are provided for commercial antennas. A variety of products are available that offer protection and or solutions to interference that affects the feedhorn, downconverter and receiver. An extensive offering of filters are also available for satellite services utilizing the higher KU and KA frequency bands. Management expects the demand for these types of filters to continue with the proliferation of earth stations world wide and increased sources of interference.

Mobile Radio and Data Links - MFC provides filters to a variety of mobile radio services such as cellular telephone, two way radio and paging to eliminate interference in transmit or receive equipment. More recently there has been demand for filters and diplexers for broadband microwave applications for Voice Over Internet Protocol ("VOIP") with the number of services increasing and ISP use. The advent of license exempt applications has increased the need for interference filtering. With the number of services increasing and our air waves becoming more congested, filters are increasingly important to many transmit operations.

Cable Television (CATV) - The CATV marketplace continues to change as cable operators begin the process of migrating to the latest DOCSIS (Data Over Cable Service Interface Specification) standard, DOCSIS 3.1.

DOCSIS 3.1 continues the evolution of digital CATV systems with the focus of improving spectrum efficiency and providing greater programming flexibility to benefit consumers. These changes move CATV systems from one that is channelized to one segmented into larger frequency blocks. The ultimate goal of DOCSIS 3.1 is to expand the operating frequency capabilities beyond 1700MHz. DOCSIS 3.1 will provide substantial increases in internet speed and allow for increased TV picture resolution; i.e., Ultra High Definition (UHD) or 4K TV and beyond. DOCSIS 3.1 allows CATV operators to remain competitive with their fiber optic counterparts.

MFC primarily serves this market with standard and custom filters used at the headend to process signals and remove interference. A very popular application involves removing or re-routing TV channels to organize programming line ups in multi-dwelling facilities (i.e. hospitals, senior living facilities.)

Since all cable operators initially receive substantial programming via satellite, products from our satellite market cross over into the cable television market. C-band satellite receive systems are prone to various types of terrestrial interference which are curable in many cases by applying MFC bandpass filters.

Broadcast – MFC continues to develop and expand its series of wireless diplexers which has accounted for an increase in Broadcast sales. Management expects this demand to remain steady over the foreseeable future.

Due to analog to digital conversion within the TV (UHF/VHF) broadcast industry, Microwave Filter Company has developed new filter products to accommodate the wider bandwidths necessary for the digital transmission. In order to accommodate the wider digital TV signal bandwidths, customers have been forced to replace their existing (narrower bandwidth) analog filters with (wider bandwidth) digital filters.

Another result of this analog to digital conversion was the elimination of the uppermost UHF channels (52-69) that operated between 698 - 806 MHz. Subsequently, part of this vacated frequency band was allocated for Public Safety communication use, while much of the remaining band has been auctioned off for Internet Service Provider (ISP) operations (e.g. - Verizon, AT&T, etc.) Now referred to as the “700 MHz Band” - many of these new applications utilize newly developed MFC filter products.

MFC also continues to serve other segments of the Broadcast industry such as FM radio, STL (TV Studio-to-Transmitter Links) and the BAS (Broadcast Auxiliary Service) band (formerly known as the ENG (Electronic News Gathering) band.)

#### WORLD TRADE

Management believes that international marketing is a route to the expansion of sales for MFC. Significant efforts have been made over the last few years to identify key international markets and to establish distributors with appropriate technical backgrounds to represent our products in those regions. The Company’s international sales increased \$315,841 or 72.1% to \$753,930 for the fiscal year ended September 30, 2016 when compared to international sales of \$438,089 during the fiscal year ended September 30, 2015. The increase in international sales can primarily be attributed to an increase in sales of the Company’s filters which suppress strong out-of-band interference caused by military and civilian radar systems and other sources.

#### SUPPLIERS

The Company depends on outside suppliers for raw materials, components and parts, and services. Although items are generally available from a number of suppliers, the Company purchases certain raw materials and components from a single supplier. If such a supplier should cease to supply an item, the Company believes that new sources could be found to provide the raw materials and components. However, manufacturing delays and added costs could result. The Company has not experienced significant delays of this nature in the past, but there can be no assurance that delays in delivery due to supply shortages will not occur in the future. Substantial periods of lead time for delivery of certain materials are sometimes experienced by the Company, making it necessary to inventory varied quantities of materials.

#### PATENTS AND LICENSES

The Company has no patents, trademarks, copyrights, licenses or franchises of material importance.

#### SEASONAL FLUCTUATIONS

There are no significant seasonal fluctuations in the Company’s business.

#### GOVERNMENT CONTRACTS

The Company is not dependent in any material respect on government contracts.

#### SIGNIFICANT CUSTOMERS

Sales to one customer represented approximately 28% of total sales for the fiscal year ended September 30, 2016 compared to approximately 33% of total sales for the fiscal year ended September 30, 2015. A loss of this customer or programs related to this customer could materially impact the Company.

## EXPORT CONTROLS

Our products are subject to the Export Administration Regulations (“EAR”) administered by the U.S. Department of Commerce and may, in certain instances, be subject to the International Traffic in Arms Regulations (“ITAR”) administered by the U.S. Department of State. EAR restricts the export of defense products, technical data and defense services. We believe that we have implemented internal export procedures and controls in order to achieve compliance with the applicable U.S. export control regulations.

## ENVIRONMENTAL REGULATION

Compliance with federal, state and local requirements relating to the discharge of substances into the environment, the disposal of hazardous waste and other activities affecting the environment has been accomplished without material effect on the Company’s liquidity and capital resources, competitive position or financial statements and management believes that such compliance will not have a material effect on the Company’s liquidity and capital resources, competitive position or financial statements in the future

## BACKLOG

At September 30, 2016, the Company’s total backlog of orders, which represents firm orders from customers, was \$314,717 compared to \$431,287 at September 30, 2015. The total Company backlog at September 30, 2016 is scheduled to ship during fiscal 2017. However, backlog is not necessarily indicative of future sales. Accordingly, the Company does not believe that its backlog as of any particular date is representative of actual sales for any succeeding period.

## EMPLOYEES

At September 30, 2016, the Company employed 37 full-time and 5 part-time employees.

## RESEARCH AND DEVELOPMENT

The Company maintains and expects to continue to maintain an active research and development program. The Company believes that such a program is needed to maintain its competitive position in existing markets and to provide products for emerging markets. Costs in connection with research and development were \$360,437 and \$350,651 for the fiscal years 2016 and 2015, respectively. Research and development costs are charged to operations as incurred.

## COMPETITION

The principal competitive factors facing both MFC are price, technical performance, service and the ability to produce in quantity to specific delivery schedules. Based on these factors, the Company believes it competes favorably in its markets.

## AVAILABLE INFORMATION

Our Internet address is [www.microwavefilter.com](http://www.microwavefilter.com). There we make available, free of charge, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, our proxy statement and any amendments to those reports or statements filed or furnished pursuant to Section 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC). Our SEC reports can be accessed through the investor relations link of our Web site. The information found on our Web site is not part of this or any other report we file with or furnish to the SEC.

The public may read and copy any materials that we file with the SEC at the SEC’s Public Reference Room located at 450 Fifth Street NW, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains electronic versions of our reports on its website at [www.sec.gov](http://www.sec.gov).

ITEM 1A. RISK FACTORS

Not applicable.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES.

MFC's office and manufacturing facility is located at 6743 Kinne Street, East Syracuse, New York. This facility, which is owned by MFC, consists of 40,000 square feet of office and manufacturing space located on 3.7 acres.

On July 2, 2013, Microwave Filter Company, Inc. (the "Company") entered into a Ten Year Term Loan with KeyBank National Association in the amount of Five Hundred Thousand and No/100 Dollars (\$500,000.00). The amount of all advances outstanding together with accrued interest thereon shall be due and payable on July 2, 2023 ("Maturity"). The Company shall pay interest on the outstanding principal balance of this Note at the rate per annum equal to 4.5%. The net proceeds from the Term Loan will be available to provide working capital as needed. The total amount outstanding as of September 30, 2016 and 2015 was \$365,650 and \$410,178, respectively.

The Company has secured this Note by: (a) a Mortgage, Assignment of Rents, Security Agreement and Fixture Filing which creates a 1<sup>st</sup> lien on real property situated in the Town of Dewitt, County of Onondaga, and State of New York and known as 6743 Kinne Street, East Syracuse, New York; (b) a General Assignment of Rents and Leases; (c) an Environmental Compliance and Indemnification; and (d) such other security as may now or hereafter be given to Lender as collateral for the loan.

ITEM 3. LEGAL PROCEEDINGS.

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

The Company's securities are currently quoted on the OTC marketplace ([www.otcm Markets.com](http://www.otcm Markets.com)) under the symbol "MFCO."

The following table shows the high and low closing sales prices for MFC's common stock for each full quarterly period within the two most recent fiscal years. The quotations represent prices in the over-the-counter market between dealers in securities. They do not include retail mark-ups, mark-downs or commissions.

Fiscal 2016	High	Low
Oct. 1, 2015 to Dec. 31, 2015	\$ 0.55	\$ 0.44
Jan. 1, 2016 to Mar. 31, 2016	0.66	0.48
Apr. 1, 2016 to June 30, 2016	0.75	0.55
July 1, 2016 to Sept. 30, 2016	0.70	0.40

  

Fiscal 2015	High	Low
Oct. 1, 2014 to Dec. 31, 2014	\$ 0.71	\$ 0.25
Jan. 1, 2015 to Mar. 31, 2015	0.65	0.45
Apr. 1, 2015 to June 30, 2015	0.59	0.45
July 1, 2015 to Sept. 30, 2015	0.53	0.35

The Company had 552 holders of record of its common stock at November 16, 2016. Included in this number are shares held in "nominee" or "street" name and, therefore, the number of beneficial owners of the common stock is believed to be substantially in excess of the foregoing number.

Payment of future dividends, if any, will be at the discretion of the Board of Directors after taking into consideration various factors, including the Company's financial condition, operating results and current and anticipated cash needs.

ITEM 6. SELECTED FINANCIAL DATA.

The following selected financial information is derived from and should be read in conjunction with the financial statements, including the notes thereto, appearing in Item 8. - "Financial Statements and Supplemental Data."

Five Year Summary of Financial Data

	2016	2015	2014	2013	2012
Net Sales	\$ 3,545,330	\$ 3,541,053	\$ 3,627,445	\$ 2,872,491	\$ 4,458,819
Net (Loss) Income	\$ (32,594)	\$ (202,682)	\$ 38,567	\$ (551,473)	\$ 75,801
Total Assets	\$ 2,132,101	\$ 2,216,236	\$ 2,497,294	\$ 2,424,430	\$ 2,599,344
Equity	\$ 1,471,001	\$ 1,503,830	\$ 1,707,708	\$ 1,670,044	\$ 2,221,661
Long Term Debt	\$ 318,998	\$ 365,650	\$ 410,178	\$ 452,771	\$ 0
Basic Earnings (Loss)					
Per Share	\$ (0.01)	\$ (0.08)	\$ 0.01	\$ (0.21)	\$ 0.03
Diluted Earnings (Loss)					
Per Share	\$ (0.01)	\$ (0.08)	\$ 0.01	\$ (0.21)	\$ 0.03
Shares Used In Computing Net Earnings (Loss) Per Share:					
Basic	2,581,168	2,581,864	2,584,564	2,585,204	2,585,845
Diluted	2,581,168	2,581,864	2,584,564	2,585,204	2,585,845
Cash (\$) Dividends Paid Per Share	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0.05
Net income (loss) as a percentage of:	2016	2015	2014	2013	2012
Net Sales	(0.92%)	(5.72%)	1.06%	(19.20%)	1.70%
Assets	(1.53%)	(9.15%)	1.54%	(22.75%)	2.90%
Equity	(2.22%)	(13.48%)	2.26%	(33.02%)	3.40%

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

Microwave Filter Company, Inc. (MFC) operates primarily in the United States and principally in one industry. The Company extends credit to business customers, including original equipment manufacturers (OEMs), distributors and other end users, based upon ongoing credit evaluations. Microwave Filter Company, Inc. designs, develops, manufactures and sells electronic filters, both for radio and microwave frequencies, to help process signal distribution and to prevent unwanted signals from disrupting transmit or receive operations. Markets served include cable television, television and radio broadcast, satellite broadcast, mobile radio and commercial and defense electronics. NSI’s sales consist of spare parts orders.

RESULTS OF OPERATIONS

The following table sets forth the Company’s net sales by major product group for each of the fiscal years in the two year period ended September 30, 2016.

Product group	<u>Fiscal 2016</u>	<u>Fiscal 2015</u>
Microwave Filter:		
RF/Microwave	\$ 1,556,238	\$ 1,756,953
Satellite	1,107,036	1,084,255
Cable TV	525,309	472,104
Broadcast TV	348,595	218,978
Niagara Scientific	8,152	8,763
Total	<u>\$ 3,545,330</u>	<u>\$ 3,541,053</u>
Sales backlog at 9/30	<u>\$ 314,717</u>	<u>\$ 431,287</u>

Fiscal 2016 compared to fiscal 2015

Consolidated net sales for the fiscal year ended September 30, 2016 equaled \$3,545,330, an increase of \$4,277 or 0.1%, when compared to consolidated net sales of \$3,541,053 during the fiscal year ended September 30, 2015.

MFC’s RF/Microwave product sales decreased \$200,715 or 11.4% to \$1,556,238 during the fiscal year ended September 30, 2016 when compared to sales of \$1,756,953 during the fiscal year ended September 30, 2015. MFC’s RF/Microwave products are sold primarily to Original Equipment Manufacturers (OEM) that serve the mobile radio, commercial communications and defense electronics markets. Sales to one OEM customer decreased \$166,502 to \$995,520 during the fiscal year ended September 30, 2016 representing approximately 28% of total sales when compared to sales of \$1,162,022 during the fiscal year ended September 30, 2015 representing approximately 33% of total sales for the fiscal year. The Company continues to invest in production engineering and infrastructure development to penetrate OEM market segments as they become popular. MFC is concentrating its technical resources and product development efforts toward potential high volume customers as part of a concentrated effort to provide substantial long-term growth.

MFC’s Satellite product sales increased \$22,781 or 2.1% to \$1,107,036 during the fiscal year ended September 30, 2016 when compared to sales of \$1,084,255 during the fiscal year ended September 30, 2015. The increase can be attributed to an increase in demand for filters which suppress strong out-of-band interference caused by military and civilian radar systems and other sources. Although economic conditions do impact sales, management expects demand for these types of filters to continue with the proliferation of earth stations world wide and increased sources of interference.

MFC’s Cable TV product sales increased \$53,205 or 11.3% to \$525,309 during the fiscal year ended September 30, 2016 when compared to Cable TV product sales of \$472,104 during the fiscal year ended September 30, 2015. Management continues to project flat or a decrease in demand for Cable TV products due to the shift from analog to digital television. Due to the inherent nature of digital modulation versus analog modulation, fewer filters will be required. The Company has developed filters for digital television and there will still be requirements for analog filters for limited applications in commercial and private cable systems.

MFC's Broadcast TV product sales increased \$129,617 or 59.2% to \$348,595 for the fiscal year ended September 30, 2016 when compared to sales of \$218,978 for the fiscal year ended September 30, 2015. The increase can primarily be attributed to the sales of recently developed wireless diplexers whose primary function is to isolate the transmit and receive frequencies that share a common antenna.

At September 30, 2016, the Company's total backlog of orders, which represents firm orders from customers, equaled \$314,717 compared to \$431,287 at September 30, 2015. The total Company backlog at September 30, 2016 is scheduled to ship during fiscal 2017. However, backlog is not necessarily indicative of future sales. Accordingly, the Company does not believe that its backlog as of any particular date is representative of actual sales for any succeeding period.

Gross profit decreased \$16,969 or 1.3% to \$1,300,147 during the fiscal year ended September 30, 2016 when compared to gross profit of \$1,317,116 during the fiscal year ended September 30, 2015. As a percentage of sales, gross profit equaled 36.7% during the fiscal year ended September 30, 2016 compared to 37.2% during the fiscal year ended September 30, 2015

Selling, general and administrative (SG&A) expenses decreased \$187,276 or 12.3% to \$1,329,451 during the fiscal year ended September 30, 2016 when compared to SG&A expenses of \$1,516,727 during the fiscal year ended September 30, 2015. The decrease can be attributed to lower payroll and payroll related expenses primarily due to the retirement of the Company's CEO in January 2016, lower depreciation expense, planned decreases in media advertising and direct mail and lower auditing fees this year when compared to the same period last year. As a percentage of sales, SG&A expenses decreased to 37.5% during fiscal 2016 compared to 42.8% during fiscal 2015.

Other income (expense) was an expense of \$6,290 for the fiscal year ended September 30, 2016 compared an expense of \$5,139 for the fiscal year ended September 30, 2015. Interest expense equaled \$17,680 for the fiscal year ended September 30, 2016 compared to interest expense of \$19,622 for the same period last year. Miscellaneous non-operating income consists primarily of sales of scrap material and the forfeiture of non-refundable deposits.

The Company recorded a benefit for income taxes of \$3,000 for the fiscal year ended September 30, 2016 compared to a benefit for income taxes of \$2,068 for the fiscal year ended September 30, 2015. The benefit for both fiscal years can be attributed to a prior year's federal refund. Any provision for income tax expense was fully offset by a reversal of a portion of the Company's valuation allowance. Any benefit for losses has been subject to a valuation allowance since the realization of the deferred tax benefit is not considered more likely than not. As required by FASB ASC 740 the Company has evaluated the positive and negative evidence bearing upon the realization of its deferred tax assets. The Company has determined that, at this time, it is more likely than not that the Company will not realize all of the benefits of federal and state deferred tax assets, and, as a result, a valuation allowance was established.

## LIQUIDITY AND CAPITAL RESOURCES

MFC defines liquidity as the ability to generate adequate funds to meet its operating and capital needs. The Company's primary source of liquidity has been funds provided by operations.

	September 30	
	2016	2015
Cash & cash equivalents	\$ 923,117	\$ 896,667
Working capital	\$ 1,438,068	\$ 1,434,405
Current ratio	5.20 to 1	5.14 to 1
Long-term debt	\$ 318,998	\$ 365,650

Cash and cash equivalents increased \$26,450 to \$923,117 at September 30, 2016 when compared to \$896,667 at September 30, 2015. The increase was a result of \$82,917 in net cash provided by operating activities, \$11,704 in net cash used for capital expenditures, \$44,528 in net cash used for repayment of a note payable and \$235 in net cash used to purchase treasury stock.

The \$82,917 in net cash provided by operating activities can primarily be attributed to the net loss of \$32,594 net of depreciation expense of \$94,848 and favorable changes in assets and liabilities. The decrease of \$46,255 in accounts receivable can primarily be attributed to the timing of shipments and collections.

On July 2, 2013, Microwave Filter Company, Inc. (the "Company") entered into a Ten Year Term Loan with KeyBank National Association in the amount of Five Hundred Thousand and No/100 Dollars (\$500,000.00). The amount of all advances outstanding together with accrued interest thereon shall be due and payable on July 2, 2023 ("Maturity"). The Company shall pay interest on the outstanding principal balance of this Note at the rate per annum equal to 4.5%. The net proceeds from the Term Loan will be available to provide working capital as needed. The total amount outstanding as of September 30, 2016 and 2015 was \$365,650 and \$410,178, respectively.

The Company has secured this Note by: (a) a Mortgage, Assignment of Rents, Security Agreement and Fixture Filing which creates a 1<sup>st</sup> lien on real property situated in the Town of Dewitt, County of Onondaga, and State of New York and known as 6743 Kinne Street, East Syracuse, New York; (b) a General Assignment of Rents and Leases; (c) an Environmental Compliance and Indemnification; and (d) such other security as may now or hereafter be given to Lender as collateral for the loan.

Management believes that its working capital requirements for the foreseeable future will be met by its existing cash balances, future cash flows from operations and its current credit arrangements.

### Off-Balance Sheet Arrangements

At September 30, 2016 and 2015, the Company did not have any unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which might have been established for the purpose of facilitating off-balance sheet arrangements.

## Critical Accounting Policies

The Company's consolidated financial statements are based on the application of accounting principles generally accepted in the United States of America (GAAP). GAAP requires the use of estimates, assumptions, judgments and subjective interpretations of accounting principles that have an impact on the assets, liabilities, revenue and expense amounts reported. The Company believes its use of estimates and underlying accounting assumptions adhere to GAAP and are consistently applied. Valuations based on estimates are reviewed for reasonableness and adequacy on a consistent basis throughout the Company. Primary areas where financial information of the Company is subject to the use of estimates, assumptions and the application of judgment include revenues, receivables, inventories, warranty reserves and taxes.

Revenues from product sales are recorded as the products are shipped and title and risk of loss have passed to the customer, provided that no significant vendor or post-contract support obligations remain and the collection of the related receivable is probable. Billings in advance of the Company's performance of such work are reflected as customer deposits in the accompanying consolidated balance sheet.

Allowances for doubtful accounts are based on estimates of losses related to customer receivable balances. The establishment of reserves requires the use of judgment and assumptions regarding the potential for losses on receivable balances.

The Company's inventories are valued at the lower of cost or market. The Company uses certain estimates and judgments and considers several factors including product demand and changes in technology to provide for excess and obsolescence reserves to properly value inventory.

The Company established a warranty reserve which provides for the estimated cost of product returns based upon historical experience and any known conditions or circumstances. Our warranty obligation is affected by product that does not meet specifications and performance requirements and any related costs of addressing such matters.

The Company has deferred tax assets that are reviewed for recoverability and valued accordingly. These assets are evaluated by using estimates of future taxable income streams and the impact of tax planning strategies. Valuations related to tax accruals and assets can be impacted by changes to tax codes, changes in statutory tax rates and the Company's future taxable income levels. The Company has provided a full valuation allowance against its deferred tax assets.

SAFE HARBOR STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

In an effort to provide investors a balanced view of the Company's current condition and future growth opportunities, this Annual Report on Form 10-K may include comments by the Company's management about future performance. These statements which are not historical information are "forward-looking statements" pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These, and other forward-looking statements, are subject to business and economic risks and uncertainties that could cause actual results to differ materially from those discussed. These risks and uncertainties include, but are not limited to: risks associated with demand for and market acceptance of existing and newly developed products as to which the Company has made significant investments; general economic and industry conditions; slower than anticipated penetration into the satellite communications, mobile radio and commercial and defense electronics markets; competitive products and pricing pressures; increased pricing pressure from our customers; risks relating to governmental regulatory actions in broadcast, communications and defense programs; as well as other risks and uncertainties, including but not limited to those detailed from time to time in the Company's Securities and Exchange Commission filings. These forward-looking statements are made only as of the date hereof, and the Company undertakes no obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise. You are encouraged to review Microwave Filter Company's 2016 Annual Report and Form 10-K for the fiscal year ended September 30, 2016 and other Securities and Exchange Commission filings. Forward looking statements may be made directly in this document or "incorporated by reference" from other documents. You can find many of these statements by looking for words like "believes," "expects," "anticipates," "estimates," or similar expressions.

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

As a "smaller reporting company", we are not required to provide information required by this item.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The Financial Statements called for by this item are submitted as a separate section of this report.

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

None.

## ITEM 9A. CONTROLS AND PROCEDURES

### EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

Management's responsibility includes establishing and maintaining adequate internal control over financial reporting. The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this report. Based on such evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures were effective as of the end of the period covered by this report.

### CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There have been no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

### MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the exchange act.

Under the supervision and with the participation of the Company's management, including our principal executive officer and principal financial officer, the Company conducted an evaluation of its internal control over financial reporting using the criteria set forth in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Based on this evaluation, the Company's management concluded and certifies that its internal control over financial reporting was effective as of September 30, 2016.

This annual report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Our report was not subject to attestation by our registered public accounting firm pursuant to rules of the SEC that permit the Company to provide only management's report in this annual report.

## ITEM 9B. OTHER INFORMATION

None.

PART III

The information called for by “Item 10. Directors, Executive Officers, and Corporate Governance”, “Item 11. Executive Compensation”, “Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters”, “Item 13. Certain Relationships and Related Transactions, and Director Independence” and “Item 14. Principal Accountant Fees and Services”, is hereby incorporated by reference to the Company’s Proxy Statement for its Annual Meeting of Shareholders, to be filed with the SEC pursuant to Regulation 14a under the Securities Exchange Act of 1934, as amended.

PART IV

ITEM 15. FINANCIAL STATEMENT SCHEDULES AND EXHIBITS.

(a) 1. and 2. Financial Statements and Schedules:

Reference is made to the list of Financial Statements submitted as a separate section of this report.

(b) Exhibits:

Reference is made to the List of Exhibits submitted as a separate section of this report.

SIGNATURES

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

MICROWAVE FILTER COMPANY, INC.

*/s/ Paul W. Mears*

\_\_\_\_\_  
By: Paul W. Mears  
(Chief Executive Officer)

*/s/ Richard Jones*

\_\_\_\_\_  
By: Richard Jones  
(Vice President and Chief Financial Officer)

Dated: December 9, 2016

Pursuant to the requirements Of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated:

*/s/ Robert R. Andrews*

\_\_\_\_\_  
Robert R. Andrews  
(Director)

*/s/ Carl F. Fahrenkrug*

\_\_\_\_\_  
Carl F. Fahrenkrug  
(Director)

*/s/ Frank Markovich*

\_\_\_\_\_  
Frank Markovich  
(Director)

*/s/ Paul W. Mears*

\_\_\_\_\_  
Paul W. Mears  
(Director)

*/s/ Sidney Chong*

\_\_\_\_\_  
Sidney Chong  
(Director)

Dated: December 9, 2016

ANNUAL REPORT ON FORM 10-K  
MICROWAVE FILTER COMPANY, INC.  
AND SUBSIDIARIES

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

ITEM 8, ITEM 15(a)(1) and (2)

CONSOLIDATED FINANCIAL STATEMENTS:

	<u>Page</u>
<a href="#">Report of Independent Registered Public Accounting Firm</a>	21
<a href="#">Consolidated Balance Sheets as of September 30, 2016 and 2015</a>	22
<a href="#">Consolidated Statements of Operations for the Years Ended September 30, 2016 and 2015</a>	23
<a href="#">Consolidated Statements of Stockholders' Equity for the Years Ended September 30, 2016 and 2015</a>	24
<a href="#">Consolidated Statements of Cash Flows for the Years Ended September 30, 2016 and 2015</a>	25
<a href="#">Notes to Consolidated Financial Statements</a>	26-33

All other schedules for which provision is made in the applicable accounting regulation of the Securities and Exchange Commission are not required under the related instructions or are inapplicable and therefore have been omitted.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders  
of Microwave Filter Company, Inc.

We have audited the accompanying consolidated balance sheets of Microwave Filter Company, Inc. as of September 30, 2016 and 2015, and the related consolidated statements of operations, stockholders' equity, and cash flows for the years then ended. These consolidated financial statements are the responsibility of the entity's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Microwave Filter Company, Inc. as of September 30, 2016 and 2015, and the results of its operations and its cash flows for each of the years in the two-year period ended September 30, 2016, in conformity with accounting principles generally accepted in the United States of America.

*/s/ Dannible & McKee, LLP*

Dannible & McKee, LLP  
Syracuse, New York  
December 7, 2016

Microwave Filter Company and Subsidiaries  
Consolidated Balance Sheets

	September 30,	
	2016	2015
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 923,117	\$ 896,667
Accounts receivable-trade, net of allowance for doubtful accounts of 4,000 and \$4,000	346,633	392,888
Inventories, net of obsolete inventory reserve of \$435,528 and \$429,255	448,747	447,507
Prepaid expenses and other current assets	61,673	44,099
Total current assets	1,780,170	1,781,161
Property, plant and equipment, net	351,931	435,075
Total Assets	\$ 2,132,101	\$ 2,216,236
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 61,770	\$ 74,610
Customer deposits	28,818	7,391
Accrued payroll and related expenses	43,646	56,371
Accrued compensated absences	144,942	139,315
Notes Payable - Short Term	46,652	44,528
Other current liabilities	16,274	24,541
Total current liabilities	342,102	346,756
Notes Payable - Long Term	318,998	365,650
Total other liabilities	318,998	365,650
Total liabilities	661,100	712,406
Stockholders' equity:		
Common stock, \$.10 par value. Authorized 5,000,000 shares Issued 4,324,140 in 2016 and 2015, Outstanding 2,581,007 in 2016 and 2,581,466 in 2015	432,414	432,414
Additional paid-in capital	3,248,706	3,248,706
Accumulated deficit	(516,169)	(483,575)
Common stock in treasury, at cost, 1,743,133 shares in 2016 and 1,742,674 shares in 2015	(1,693,950)	(1,693,715)
Total stockholders' equity	1,471,001	1,503,830
Total Liabilities and Stockholders' Equity	\$ 2,132,101	\$ 2,216,236

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

Microwave Filter Company and Subsidiaries  
Consolidated Statements of Operations

	For the Years Ended September 30	
	2016	2015
Net sales	\$ 3,545,330	\$ 3,541,053
Cost of goods sold	2,245,183	2,223,937
Gross profit	1,300,147	1,317,116
Selling, general and administrative expenses	1,329,451	1,516,727
Loss from operations	(29,304)	(199,611)
Non-operating Income (Expense)		
Interest income	2,396	2,443
Interest expense	(17,680)	(19,622)
Miscellaneous	8,994	12,040
Loss before income taxes	(35,594)	(204,750)
Benefit from income taxes	(3,000)	(2,068)
NET LOSS	\$ (32,594)	\$ (202,682)
Per share data:		
Basic and Diluted Earnings (Loss)		
Per Common Share	\$ (0.01)	\$ (0.08)
Shares used in computing net earnings (loss) per common share:		
Basic and diluted	2,581,168	2,581,864

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

Microwave Filter Company and Subsidiaries  
Consolidated Statements of Stockholders' Equity  
For the Years Ended September 30, 2016 and 2015

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Deficit</u>	<u>Treasury Stock</u>		<u>Total Stockholders' Equity</u>
	<u>Shares</u>	<u>Amt</u>			<u>Shares</u>	<u>Amt</u>	
<b>Balance</b>							
September 30, 2014	4,324,140	\$432,414	\$3,248,706	\$ (280,893)	1,740,633	\$(1,692,519)	\$ 1,707,708
Net loss				(202,682)			(202,682)
Purchase of treasury stock					2,041	(1,196)	(1,196)
<b>Balance</b>							
September 30, 2015	4,324,140	432,414	3,248,706	(483,575)	1,742,674	(1,693,715)	1,503,830
Net loss				(32,594)			(32,594)
Purchase of treasury stock					459	(235)	(235)
<b>Balance</b>							
September 30, 2016	<u>4,324,140</u>	<u>\$432,414</u>	<u>\$3,248,706</u>	<u>\$ (516,169)</u>	<u>1,743,133</u>	<u>\$(1,693,950)</u>	<u>\$ 1,471,001</u>

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

Microwave Filter Company and Subsidiaries  
Consolidated Statements of Cash Flows

	For the Years Ended September 30	
	2016	2015
<b>Cash flows from operating activities:</b>		
Net loss	\$ (32,594)	\$ (202,682)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation	94,848	110,150
Inventory obsolescence provision	6,272	15,808
Changes in assets and liabilities:		
Accounts receivable-trade	46,255	(15,415)
Inventories	(7,512)	10,524
Prepaid and other current assets	(17,574)	45,622
Accounts payable and customer deposits	8,587	(23,723)
Accrued payroll, compensated absences and related expenses	(7,098)	(3,451)
Other current liabilities	(8,267)	(7,413)
Net cash provided by (used in) operating activities	82,917	(70,580)
<b>Cash flows from investing activities:</b>		
Capital expenditures	(11,704)	(70,531)
Net cash used in investing activities	(11,704)	(70,531)
<b>Cash flows from financing activities:</b>		
Repayment of note payable	(44,528)	(42,593)
Purchase of treasury stock	(235)	(1,196)
Net cash used in financing activities	(44,763)	(43,789)
Net increase (decrease) in cash and cash equivalents	26,450	(184,900)
Cash and cash equivalents at beginning of year	896,667	1,081,567
Cash and cash equivalents at end of year	\$ 923,117	\$ 896,667
<b>Supplemental disclosures of cash flows:</b>		
Cash paid during the year for :		
Interest	\$ 17,836	\$ 19,771

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

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### a. Nature of Business

Microwave Filter Company, Inc. operates primarily in the United States and principally in one industry. The Company extends credit to business customers based upon ongoing credit evaluations. Microwave Filter Company, Inc. (MFC) designs, develops, manufactures and sells electronic filters, both for radio and microwave frequencies, to help process signal distribution and to prevent unwanted signals from disrupting transmit or receive operations. Markets served include cable television, television and radio broadcast, satellite broadcast, mobile radio, commercial communications and defense electronics. Niagara Scientific, Inc. (NSI), a wholly owned subsidiary, custom designs case packing machines to automatically pack products into shipping cases. Customers are processors of food and other commodity products with a need to reduce labor cost with a modest investment and quick payback. For the last two years, NSI's sales have consisted of spare parts orders and are insignificant during the year.

### b. Basis of Consolidation

The consolidated financial statements include the accounts of Microwave Filter Company, Inc. (MFC) and its wholly-owned subsidiaries, Niagara Scientific, Inc. (NSI) and Microwave Filter International, LTD. (MFI) (dormant); located in Syracuse, New York. All significant intercompany balances and transactions have been eliminated in consolidation.

### c. Revenue Recognition

The Company recognizes revenue at the time products are shipped to customers and title and risk of loss have passed to the customer. The Company is not required to install any of its products. Payments received from customers in advance of products shipped are recorded as customer deposits until earned.

### d. Cash and Cash Equivalents

The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and accounts receivable. Cash and cash equivalents consist of cash in banks and money market funds. The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents. The Company's cash is held at federally insured institutions and balances may periodically exceed insured limits. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk with respect to cash. The Company also routinely assesses the financial strength of its customers and, as a consequence, believes that its trade accounts receivable credit risk exposure is limited.

### e. Trade Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable. The Company reviews its allowance for doubtful accounts monthly. Past due balances are reviewed individually for collectibility. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company does not have any off-balance-sheet credit exposure related to its customers.

### f. Inventories and Reserve for Obsolescence

Inventories are stated at the lower of cost determined on the first-in, first-out method or market.

The Company records a reserve for obsolete or excess inventory. The Company considers inventory quantities greater than a three year supply based on current year activity as well as any additional specifically identified inventory to be excess. The Company also provides for the total value of inventories that are determined to be obsolete based on criteria such as customer demand and changing technologies.

g. Research and Development

Costs in connection with research and development, which amount to \$360,437 and \$350,651 for the fiscal years 2016 and 2015, respectively, are charged to operations as incurred.

h. Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is provided using the straight-line method over the estimated useful lives of the respective assets. Buildings and building improvements are depreciated over an estimated service life of 10 to 30 years. Machinery and equipment are depreciated over an estimated useful life of 3 to 10 years. Office equipment and fixtures are depreciated over an estimated useful life of 3 to 10 years. At the time of sale or retirement, the cost and accumulated depreciation are removed from the respective accounts and the resulting gain or loss is recognized in income.

i. Income Taxes

The Company accounts for income taxes under FASB ASC 740-10. Deferred tax assets and liabilities are based on the difference between the financial statement and tax basis of assets and liabilities as measured by the enacted tax rates which are anticipated to be in effect when these differences reverse. The deferred tax provision is the result of the net change in the deferred tax assets and liabilities. A valuation allowance is established when it is necessary to reduce deferred tax assets to amounts expected to be realized. The Company has provided a full valuation allowance against its deferred tax assets.

The Company follows FASB ASC 740 10. FASB ASC 740-10 clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements and prescribes a recognition threshold and measurement attributes for financial statement disclosure of tax position taken or expected to be taken on a tax return. Additionally, it provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Company determined it has no uncertain tax positions and therefore no amounts are recorded.

j. Earnings Per Share

The Company presents basic earnings per share ("EPS"), computed based on the weighted average number of common shares outstanding for the period, and when applicable diluted EPS, which gives the effect to all dilutive potential shares outstanding (i.e. options) during the period after restatement for any stock dividends. Income (loss) used in the EPS calculation is net income (loss) for each year. There were no dilutive potential shares outstanding for the years ended September 30, 2016 and 2015.

k. Fair Value of Financial Instruments

The carrying values of the Company cash and cash equivalents, accounts receivable and accounts payable approximate fair value because of the short maturity of those instruments. The carrying value of the Company's note payable approximates its fair value.

The Company currently does not trade in or utilize derivative financial instruments.

l. Miscellaneous Non-operating Income

Miscellaneous non-operating income generally consists of sales of scrap material and the forfeiture of non-refundable deposits and other incidental items.

m. Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

n. Warranty Costs

The Company established a warranty reserve which provides for the estimated cost of product returns based upon historical experience and any known conditions or circumstances. Our warranty obligation is affected by product that does not meet specifications and performance requirements and any related costs of addressing such matters. Warranty costs were approximately \$6,000 and \$8,500 for the fiscal years ended September 30, 2016 and 2015, respectively.

o. Impairment of Long-Lived Assets

The carrying values of long-lived assets other than goodwill are generally evaluated for impairment only if events or changes in facts and circumstances indicate that carrying values may not be recoverable. Any impairment determined would be recorded in the current period and would be measured by comparing the fair value of the related asset to its carrying value. Fair value is generally determined by identifying estimated undiscounted cash flows to be generated by those assets. No impairments have been recorded for the fiscal years ended September 30, 2016 and 2015.

p. New Accounting Pronouncements

Update 2015-11- *Inventory (Topic 330): Simplifying the Measurement of Inventory*, is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Under the new standard, businesses that use the first-in, first-out (FIFO) or average cost method are required to measure inventory at the lower of cost or net realizable value (“NRV”), as defined, instead of at the lower of cost or market value. Management feels the updated standard, to be adopted on a prospective basis, would not represent a material impact to the Company’s financial statements.

Update 2015-14- *Revenue from Contracts with Customers (Topic 606)*: affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets unless those contracts are within the scope of other standards (for example, insurance contracts or lease contracts). The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The guidance is applicable to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. Earlier application is permitted only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period.

Update 2015-17 - *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* addresses the requirement to reclassify all current deferred income tax assets and liabilities on the balance sheet as non-current assets and liabilities, and is effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods, with early adoption permitted. As explained in Note 7, the Company has provided a full valuation allowance against its deferred tax assets, and thus there will be no impact from the adoption of this updated standard in the current year or on the balance sheet of any of the periods presented.

In February 2016, the FASB issued FASB ASU No. 2016-02, *Leases (Topic 842)*. The core principle of Topic 842 is that a lessee should recognize the assets and liabilities that arise from leases. For operating leases, a lessee is required to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in the statement of financial position. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. The accounting applied by a lessor is largely unchanged from that applied under previous GAAP. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Earlier application is permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The Company is currently evaluating the effect that the adoption of this ASU will have on its financial statements.

## 2. INVENTORIES

Inventories net of provision for obsolescence consisted of the following:

	September 30	
	2016	2015
Raw materials and stock parts	\$ 324,749	\$ 367,344
Work-in-process	54,716	19,884
Finished goods	69,282	60,279
	<u>\$ 448,747</u>	<u>\$ 447,507</u>

The Company's reserve for obsolescence equaled \$435,528 at September 30, 2016 and \$429,255 at September 30, 2015.

## 3. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following:

	September 30	
	2016	2015
Land	\$ 143,000	\$ 143,000
Building and improvements	1,928,599	1,928,599
Machinery and equipment	3,485,413	3,474,938
Office equipment and fixtures	1,872,007	1,870,778
	7,429,019	7,417,315
Less: Accumulated depreciation	<u>7,077,088</u>	<u>6,982,240</u>
Property, plant and equipment, net	<u>\$ 351,931</u>	<u>\$ 435,075</u>
Depreciation expense	<u>\$ 94,848</u>	<u>\$ 110,150</u>

#### 4. NOTES PAYABLE

On July 2, 2013, Microwave Filter Company, Inc. (the "Company") entered into a Ten Year Term Loan with KeyBank National Association in the amount of Five Hundred Thousand and No/100 Dollars (\$500,000.00). The amount of all advances outstanding together with accrued interest thereon shall be due and payable on July 2, 2023 ("Maturity"). The Company shall pay interest on the outstanding principal balance of this Note at the rate per annum equal to 4.5%. The net proceeds from the Term Loan will be available to provide working capital as needed. The total amount outstanding as of September 30, 2016 and 2015 was \$365,650 and \$410,178 respectively. Interest accrued as of September 30, 2016 and 2015 was \$1,280 and \$1,436 respectively.

The Company has secured this Note by: (a) a Mortgage, Assignment of Rents, Security Agreement and Fixture Filing which creates a 1<sup>st</sup> lien on real property situated in the Town of Dewitt, County of Onondaga, and State of New York and known as 6743 Kinne Street, East Syracuse, New York; (b) a General Assignment of Rents and Leases; (c) an Environmental Compliance and Indemnification; and (d) such other security as may now or hereafter be given to Lender as collateral for the loan. The future obligations of the loan are as follows:

Year Ended September 30,	Principal Payments	Interest Payments	Total Payments
2017	\$ 46,652	\$ 15,712	\$ 62,364
2018	48,826	13,538	62,364
2019	51,101	11,263	62,364
2020	53,456	8,908	62,364
2021	55,972	6,392	62,364
Thereafter	109,643	4,857	114,500
	<u>\$ 365,650</u>	<u>\$ 60,670</u>	<u>\$ 426,320</u>

#### 5. PROFIT SHARING AND 401-K PLANS

The Company maintains both a non-contributory profit sharing plan and a contributory 401-K plan for all employees over the age of 21 with one year of service. Annual contributions to the profit sharing plan are determined by the Board of Directors and are made from current or accumulated earnings, while contributions to the 401-K plan were matched at a rate of 100% of an employee's first 6% of contributions during fiscal 2016. The maximum corporate match was 6% of an employee's compensation during fiscal 2016.

The Company's matching contributions to the 401-K plan for the years ended September 30, 2016 and 2015 were \$84,508 and \$62,326, respectively. Additionally, the Company may make discretionary contributions to the non-contributory profit sharing plan. These contributions were \$0 in 2016 and 2015.

#### 6. OBLIGATIONS UNDER OPERATING LEASES

The Company leases equipment under an operating lease agreement expiring on December 31, 2018. Rental expense under this lease for the year ended September 30, 2016 was \$9,173.

Minimum rental commitments at September 30, 2016 for this lease are:

Year Ended September 30	Lease Payments
2017	\$ 9,173
2018	9,173
2019	2,293
	<u>\$ 20,639</u>

## 7. INCOME TAXES

The components of the benefit from income taxes in the accompanying consolidated statements of operations are as follows:

	Year Ended September 30,	
	2016	2015
Currently payable:		
Federal	\$ (3,000)	\$ (2,068)
State	0	0
Deferred (credit)	0	0
	<u>\$ (3,000)</u>	<u>\$ (2,068)</u>

The provision for income taxes differs from the amount that would result from applying the federal statutory rate for the periods ended September 30, 2016 and 2015 as follows:

	Year ended September 30,			
	2016		2015	
	Amount	%	Amount	%
Statutory tax rate	\$ (12,102)	(34.0)%	\$ (69,615)	(34.0)%
State income tax net of:				
Federal benefit	0	0%	0	0%
Research and development tax credits	(15,347)	(43.1)%	(15,899)	(7.7)%
Prior years federal refund	(3,000)	(8.4)%	(2,068)	(1.0)%
NOL carryforward true up	0	%	0	%
Valuation allowance change	27,412	77.0%	85,455	41.7%
Permanent differences	37	0.1%	59	0%
	<u>\$ (3,000)</u>	<u>(8.4)%</u>	<u>\$ (2,068)</u>	<u>(1.0)%</u>

The temporary differences which give rise to deferred tax assets and (liabilities) at September 30 are as follows:

	<u>2016</u>	<u>2015</u>
Inventory	\$ 154,364	\$ 151,909
Accrued warranty	4,250	4,250
Accrued vacation	42,820	40,907
Accounts receivable	1,432	1,432
Valuation allowance	<u>(202,866)</u>	<u>(198,498)</u>
Net deferred tax assets (liabilities) - current	<u>\$ 0</u>	<u>\$ 0</u>
Accelerated depreciation	\$ 17,111	\$ 4,163
Research and development tax credit carry forward	274,486	259,139
AMT credit carry forward	37,521	37,521
NOL carry forward	175,789	181,040
Valuation allowance	<u>(504,907)</u>	<u>(481,863)</u>
Net deferred tax assets (liabilities) – noncurrent	<u>\$ 0</u>	<u>\$ 0</u>
Net deferred tax assets	<u><u>\$ 0</u></u>	<u><u>\$ 0</u></u>

As required by FASB ASC 740 the Company has evaluated the positive and negative evidence bearing upon the realization of its deferred tax assets. The Company has determined that, at this time, it is more likely than not that the Company will not realize all of the benefits of federal and state deferred tax assets, and, as a result, a valuation allowance was established. The research and development tax credit carry forwards and NOL carry forwards expire in 2035. At September 30, 2016, the Company's federal AMT credit can be carried forward indefinitely. The Company is currently open to audit under the statute of limitations by the Internal Revenue Service for the fiscal years September 30, 2014 through September 30, 2016. The Company has no uncertain tax positions. As of September 30, 2016 and 2015 there is no accrual for interest or penalties related to uncertain tax positions.

#### 8. INDUSTRY SEGMENT DATA

The Company's primary business segment involves the operations of Microwave Filter Company, Inc. (MFC) which designs, develops, manufactures and sells electronic filters, both for radio and microwave frequencies, to help process signal distribution and to prevent unwanted signals from disrupting transmit or receive operations.

#### 9. SIGNIFICANT CUSTOMERS

Sales to one customer represented approximately 28% of total sales for the fiscal year ended September 30, 2016 compared to approximately 33% of total sales for the fiscal year ended September 30, 2015. A loss of this customer or programs related to this customer could materially impact the Company.

#### 10. LEGAL MATTERS

None.

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>	<u>Page Number</u>
3.1	“MFC Certificate of Corporation, as amended.”	*
3.2	MFC Amended and Restated Bylaws.	*
31.1	Section 13a-14(a)/15d-14(a) Certification of Paul W. Mears	
31.2	Section 13a-14(a)/15d-14(a) Certification of Richard L. Jones	
32.1	Section 1350 Certification of Paul W. Mears and Richard L. Jones	

\* Previously filed

Exhibit 31.1

## RULE 13a-14(a) CERTIFICATION

I, Paul W. Mears, certify that:

1. I have reviewed this Annual Report on Form 10-K of Microwave Filter Company, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we 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: December 9, 2016

*/s/ Paul W. Mears*

\_\_\_\_\_  
Paul W. Mears  
Chief Executive Officer

---

Exhibit 31.2

## RULE 13a-14(a) CERTIFICATION

I, Richard L. Jones, certify that:

1. I have reviewed this Annual Report on Form 10-K of Microwave Filter Company, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we 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: December 9, 2016

*/s/ Richard L. Jones*

Richard L. Jones  
Chief Financial Officer

---

## Exhibit 32.1

## 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 this Annual Report of Microwave Filter Company, Inc. (the "Company") on Form 10-K for the period ended September 30, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Paul W. Mears, Chief Executive Officer, and Richard L. Jones, 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; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: December 9, 2016

*/s/ Paul W. Mears*  
Paul W. Mears  
Chief Executive Officer

Dated: December 9, 2016

*/s/ Richard L. Jones*  
Richard L. Jones  
Chief Financial Officer

---