

FREQUENCY ELECTRONICS INC
Form 10-K
July 30, 2018

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 April 30, 2018

OR

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

For the transition period from _____ to _____

Commission File No. 1-8061

FREQUENCY ELECTRONICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

11-1986657

(I.R.S. Employer Identification No.)

55 CHARLES LINDBERGH BLVD., MITCHEL FIELD, N.Y. 11553

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: **516-794-4500**

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

<u>Title of each class</u>	Name of each exchange on <u>which registered</u>
Common Stock (par value \$1.00 per share)	NASDAQ Global Market

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

None

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the 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 (para 232.405

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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. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller Reporting Company

Emerging growth company

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

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

The aggregate market value of voting stock held by non-affiliates of the registrant as of October 31, 2017 -
\$45,800,000

The number of shares outstanding of registrant's Common Stock, par value \$1.00 as of July 26, 2018 – 8,729,682

DOCUMENTS INCORPORATED BY REFERENCE: PART III incorporates information by reference from the definitive proxy statement to be filed for the Annual Meeting of Stockholders to be held on or about November 1, 2018.

FREQUENCY ELECTRONICS, INC. and SUBSIDIARIES

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PART I

Item 1. Business

GENERAL DISCUSSION

Frequency Electronics, Inc. (sometimes referred to as “Registrant”, “Frequency Electronics” or the “Company”) is a world leader in precision time and frequency generation technology, which is employed in commercial and Government Satellite Payload systems, Secure Communications, Command, Control, Communication, Computer, Intelligence, Security and Reconnaissance (“C4ISR”), and Electronic Warfare (“EW”) systems. Its technology is used for a wide range of space and non-space applications.

Unless the context indicates otherwise, references to the Registrant or the Company are to Frequency Electronics, Inc. and its subsidiaries. References to “FEI” are to the parent company alone and do not refer to any of the subsidiaries. Frequency Electronics, a Delaware corporation, has its principal executive office at 55 Charles Lindbergh Boulevard, Mitchel Field, New York 11553. Its telephone number is 516-794-4500 and its website is www.frequencyelectronics.com.

Frequency Electronics was founded in 1961 as a research and development firm generating proprietary precision time and frequency technology primarily under contracts for end-use by the United States (“U.S.”) Government. In the mid-1990’s, the Company evolved into a designer, developer and manufacturer of state-of-the-art products for both commercial and government end-use. The Company’s present mission is to be the world leader in providing precision time and low phase noise frequency generation systems, from 1 Hz to 46 GHz for space and other challenging environments. The Company’s technology is the key element in enhancing the functionality and performance of many electronic systems.

MARKETS

The Company’s dominant end markets are satellite payloads and precision time for terrestrial secure communications and command and control.

For the satellite market, the Company has a unique legacy of providing master timing systems, power converters, and frequency generation, synthesis and distribution systems. It is currently addressing new opportunities for

next-generation atomic clocks and low G-sensitive oscillators for both space and terrestrial applications representing a potential for a significant increase in revenue for FEI products. These products are applicable for both commercial and U.S. Government end-use. Currently, approximately one thousand satellites with varying remaining useful life are operating in High/Geostationary, Medium and Low Earth Orbits. The number of operational satellites with emphasis on high-throughput is expected to continue to grow over the next ten years as new satellites are added and older ones are replaced. Furthermore, the U.S. Government is expected to issue a contract for additional satellites for the GPS III Follow-on program, and the Company is well positioned to compete for the onboard clock ensemble with its high-precision digital atomic frequency standard.

For the terrestrial secure communications and command and control market, the Company's products support multiple C4ISR counter measures and EW applications for the U.S. Government on land, sea and air-borne platforms. Recently identified threats to the communication capabilities of U.S. Government facilities through jamming, multi-path or "spoofing" global positioning systems ("GPS") signals may be mitigated by the Company's technologies. In addition, similar types of threats to the public and enterprise networks have been identified by the Department of Homeland Security. The Company's high precision, ruggedized clocks combined with specialized software are essential for communication and operational security.

To address these markets, the Company has several corporate entities which operate under two reportable segments primarily based on the geographic locations of its subsidiaries. The two reportable segments are (1) FEI-NY, which includes the subsidiaries FEI Government Systems, Inc., FEI Communications, Inc., Frequency Electronics, Inc. Asia ("FEI-Asia") and FEI-Elcom Tech, Inc. ("FEI-Elcom") and (2) FEI-Zyfer, Inc. ("FEI-Zyfer").

Frequency Electronics has made a strategic decision to focus on, satellite payloads, C4ISR and electronic warfare market segments, because these business areas represent significant opportunities for revenue growth. Accordingly, the Company has divested its Gillam-FEI s.a. ("Gillam") Belgium subsidiary, and is in the process of evaluating its options regarding FEI-Asia.

The Company determined that the assets and liabilities of the Gillam reportable segment met the discontinued operations criteria set forth in accounting principles generally accepted in the United States ("U.S. GAAP") in the quarter ended April 30, 2017. As such Gillam's results have been classified as discontinued operations in the accompanying Consolidated Statements of Operations and Comprehensive Loss. On April 26, 2018, the Company sold Gillam to a European entity, in a stock purchase agreement, for \$1 million in cash and a note receivable payable in three years for \$1 million. The loss recorded due to the sale of Gillam was approximately \$359,000. For additional details see Note 2 to the Consolidated Financial Statements.

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1. **FEI-NY** - The Company's satellite payload products for U.S. Government and commercial satellite programs are designed, developed and manufactured at its Long Island, New York facility. At this location, the Company also applies its technology and know-how to products for the U.S. military and other U.S. Government agencies, as well as products for certain terrestrial commercial communications and other industrial applications.

FEI-Asia was established in fiscal year 2002 as a wholly-owned subsidiary of the Company, to be the Company's Asia-based low-cost manufacturer of certain commercial communications products used primarily in the wireless and wireline markets as well as power grids. FEI-Asia is located in the Free-Trade Zone in Tianjin, China.

FEI-Elcom designs and manufactures Radio Frequency ("RF") microwave modules, devices and subsystems up to 46 GHz including fast switching, ultra-low phase noise synthesizers, up-down converters, receivers, tuners, ceramic resonant oscillators and dielectric resonant oscillators. These instruments and components are mission critical for multiple applications in the EW market, including SATCOM communication, surveillance, signal intelligence (COMINT, MASINT and ELINT), threat simulation, electronic attack ("EA") and electronic prevention ("EP") systems. FEI-Elcom's RF microwave technology has also been utilized to develop new products for application in the Company's satellite payload end market. We have taken steps to right-size the FEI-NY segment in response to the end market weakness while at the same time best positioning FEI to capture the eventual recovery in business. These actions include headcount reductions; however, we are ensuring that these reductions will have no effect on the Company's ability to provide on time delivery for present contractual obligations and to fully achieve its internal research and development objectives. We are also implementing a variety of operational improvements that are expected to improve efficiency and result in improved margins, including faster inventory turns and better cash flow. We have consolidated FEI-Elcom's manufacturing capabilities with other FEI-NY operations in an effort to reduce costs and improve margin. This should have the collateral benefit of improving engineering efficiencies and more effective customer coverage.

2. **FEI-Zyfer** - Precision time references for terrestrial secure communications and command and control, and frequency products that incorporate GPS technology are manufactured by the Company's subsidiary, FEI-Zyfer. FEI-Zyfer's GPS capability complements the Company's existing technologies and permits the combined entities to provide a broader range of embedded systems for a variety of timing functions and anti-spoofing ("SAASM") applications.

For additional information about these reportable segments, see Item 1. Business – Reportable Segments and Products.

In addition to its subsidiaries, the Company made a strategic investment in and licensed certain technology to Morion, Inc. ("Morion"), a Russian crystal oscillator manufacturer located in St. Petersburg, Russia. The Company's relationship with Morion, which includes ownership of 4.6% of the outstanding shares of Morion's common stock, permits the Company to secure a cost-effective source for high precision quartz resonators and crystal oscillators. The Morion

investment is accounted for under the cost method. For more information regarding the Company's investment in Morion, see Note 10 to the Consolidated Financial Statements.

REPORTABLE SEGMENTS AND PRODUCTS

The Company operates under two reportable segments, primarily aligned with the geographical locations of its subsidiaries: (1) FEI-NY and (2) FEI-Zyfer. Within each segment the Company designs, develops, manufactures and markets precision time and frequency control products for different markets as described below. The Company's Chief Executive Officer measures segment performance based on total revenues and profits generated by each geographic center rather than on the specific types of customers or end-users. Consequently, the Company determined that the segments indicated above appropriately reflect the way the Company's management views the business. The FEI-NY segment, which operates out of the Company's Long Island, New York headquarters facility, also includes the operations of the Company's wholly-owned subsidiaries, FEI-Asia and FEI-Elcom. FEI-Asia functions as a manufacturing facility for FEI-NY and FEI-Zyfer with historically minimal sales to outside customers. FEI-Elcom, in addition to its own product line, provides design and technical support for the FEI-NY segment's business. The products manufactured by the FEI-NY segment are principally marketed to the commercial and U.S. Government satellite markets, to other U.S. Department of Defense ("DOD") programs and to wireless communications networks. The FEI-Zyfer segment, which operates out of California, designs and manufactures products which incorporate GPS technologies and rugged high-precision-clocks designed and manufactured at FEI-NY. FEI-Zyfer sells its products to both commercial and U.S. Government customers and collaborates with FEI-NY on joint product development activities.

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During fiscal years 2018 and 2017, approximately 68% and 78%, respectively, of the Company's consolidated revenues were from products sold by the FEI-NY segment. In fiscal years 2018 and 2017, sales for the FEI-Zyfer segment were 39% and 30% of consolidated revenues, respectively. (The sum of annual sales percentages exceeds 100% due to intersegment sales.)

Consolidated revenues include sales to end-users in countries located outside of the U.S., primarily in Europe and China. During fiscal years 2018 and 2017, foreign sales comprised 6% and 9%, respectively, of consolidated revenues. For segment information, see Note 14 to the Consolidated Financial Statements.

FEI-NY segment:

The Company provides precision time, frequency generation and synchronization products and subsystems that are found on-board satellites, in ground-based communication systems and imbedded in mobile platforms operated by the U.S. military. The Company has made a substantial investment in research and development ("R&D") to apply its core technologies to satellite payloads, non-space DOD programs and commercial and industrial markets. Revenues from satellite payloads, both for commercial and U.S. Government applications, have become the Company's largest business area while the portion of network infrastructure sales has declined relatively. The Company expects to continue to generate substantial revenues from deployment of new and replacement satellites and other U.S. Government/DOD applications including sales of ruggedized subsystems for moving platforms of the U.S. military.

Satellite Payloads

The use of satellites launched for communications, navigation, weather forecasting, video and data transmissions and Internet access has expanded the need to transmit increasing amounts of voice, video, and data to earth-based receivers. This requires more precise timing and frequency control at the satellite. The Company manufactures the master timing systems (quartz, rubidium) and other significant timing and frequency generation products for communication satellites, and many of the Company's other space assemblies are used onboard spacecraft for command, control and power distribution. Efficient and reliable DC-DC power converters are also manufactured for the Company's own assemblies and as stand-alone products for space applications. The Company's oven-controlled quartz crystal oscillators are cost-effective precision frequency sources suited for high-end performance required in satellite transmissions, airborne telephony and geophysical survey positioning systems. Newly developed and upgraded frequency generators, synthesizers, and up/down converters and receivers have augmented the Company's product offerings and positioned the Company to provide a greater share of a typical satellite's payload. Commercial satellite programs which utilize the Company's space-qualified products include Iridium NEXT Constellation, Intelsat EPIC, O3B, WAAS, MexSat, MSV, ICO, TerreStar, EchoStar, Inmarsat and others. The Company is also positioned to potentially provide products for the large satellite constellations being planned for the very near future that will operate in low- or mid-earth orbits.

In the years ahead, the Company expects that the DOD will require more secure communication capabilities, more assets in space and greater bandwidth. The Global Positioning Satellite System (GPS), the MILSTAR Satellite System and the AEHF Satellite System are examples of the programs in which the Company has participated or will participate - programs which management believes are important to the success of the U.S. Government's communication, intelligence and Precision Navigation and Timing (PNT) needs. The Company previously manufactured the master clock for the Trident missile, the basic timing system for the Voyager I and Voyager II deep space exploratory missions and the quartz timing system for the Space Shuttle. The Company's product offerings for U.S. Government satellite programs are similar in design and function to those used on commercial satellites, as described above. In April 2018, the Company was selected by the Air Force Research Laboratory to develop an Advanced Rubidium Atomic Frequency Standard. FEI believes this technology will become the next generation atomic clock for space and terrestrial applications.

U.S. Government- Non-space:

In addition to space-based programs, the Company's proprietary products have been used in airborne and ground-based guidance, navigation, communications, radar, sonar and electronic countermeasures and timing systems. The Company has developed and patented a low g-sensitivity (gravity) technology which offers a 100 times improvement in performance under shock, vibration and other environmental effects. Products are built in accordance with DOD standards and are in use on many of the U.S. Government's important military applications. The Company anticipates that adequate funds will be provided by the U.S. Government to ensure that these programs are sustained.

FEI-Elcom addresses RF microwave modules and subsystems up to 46 GHz including fast switching, ultra-low phase noise synthesizers, up-down converters, receivers, tuners, ceramic resonant oscillators and dielectric resonant oscillators. These instruments and components are mission critical for many applications in the EW market, including SATCOM communication, surveillance, intelligence collection (SIGINT, COMINT, MASINT, and ELINT), threat simulation, EA and EP systems.

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The Company's sales on U.S. Government programs for both space and non-space applications are generally made under fixed price or cost-plus contracts either directly with U.S. Government agencies or indirectly through subcontracts intended for government end-use. For fixed-price contracts, the price paid to the Company is not subject to adjustment by reason of costs incurred by the Company in the performance of the contract, except for costs incurred due to contract changes ordered by the customer. These contracts are negotiated on terms under which the Company bears the risk of cost overruns and derives the benefit from cost savings. Cost-plus contracts reimburse the Company for the actual costs incurred in performance of the contract requirements.

As indicated above, many of the programs and platforms for which the Company supplies products and systems, are used by the U.S. Government for maintaining secure communications world-wide, for obtaining vital intelligence and for enabling precision targeting capabilities. It is the belief of management that the future success of the mission of the U.S. military and intelligence community is dependent on successful and timely deployment of these systems. Thus, the Company anticipates that adequate funds will be provided by the U.S. Government to ensure that the programs are completed. However, the Company's experience indicates that programs and/or product sales can be delayed due to periodic U.S. Government appropriations cycles.

The Air Force Research Laboratory contract awarded in April of 2018 is a cost-plus-fixed-fee contract ("CPFF"). The Company also has other CPFF contracts. Under these contracts, the Company is able to recover all of its direct and indirect costs related to the programs plus a pre-determined fee.

Negotiations on U.S. Government contracts are sometimes based in part on Certificates of Current Costs. An inaccuracy in such certificates may entitle the government to an appropriate recovery. The Company's accounts with respect to these contracts are subject to audit by the Defense Contracts Audit Agency ("DCAA"). Frequency's last full incurred cost audit was performed in 2008. The Company is required to submit for subsequent review an incurred cost report by October 31, for each year then ended. All such required reports have been filed with no adverse comment to date.

In connection with a large CPFF contract, the DCAA initiated an Accounting System Audit which was successfully completed, allowing Frequency to enter into contracts directly with U.S. Government agencies that require government certified accounting systems, which further enables the Company to take advantage of future opportunities.

Government end-use contracts are subject to termination by the purchaser for convenience or default, as well as various other Federal Acquisition Regulations ("FAR") provisions. In the event of a termination, the Company is entitled to receive compensation as provided under the specific terms of such contracts. There were no end-use contracts terminated for the year ended April 30, 2018.

FEI-Zyfer segment:

FEI-Zyfer designs, develops and manufactures products for precision time and frequency generation and synchronization, primarily incorporating GPS technology. FEI-Zyfer's products make use of both "in-the-clear" civil and "crypto-secured" military signals from GPS. In most cases, FEI-Zyfer's products are integrated into communications systems, computer networks, test equipment and military command and control terminals for ground and satellite link applications. More than 85% of FEI-Zyfer's revenues are derived from sales where the end user is the U.S. Government. FEI-Zyfer's products are an important extension of FEI's core product line, specifically in the area of GPS capabilities and precision time for terrestrial secure communications and command and control. Recently identified threats to the communication capabilities of U.S. Government facilities and to the public and enterprise networks through jamming, multi-path or "spoofing" GPS signals may be mitigated by FEI-Zyfer's technologies and products. High precision, ruggedized clocks combined with specialized software are essential for communication and operational security.

BACKLOG

As of April 30, 2018, the Company's consolidated backlog amounted to approximately \$30 million compared to approximately \$28 million at the end of the prior fiscal year. Approximately 37% of the current backlog is expected to be filled during the Company's fiscal year ending April 30, 2019. As of April 30, 2018, there are no amounts included in backlog under CPFF contracts that have not been funded. The Company excludes from backlog those contracts or awards for which it has not received authorization to proceed. On fixed price contracts, the Company excludes any unfunded portion. The Company expects any partially funded contracts to become fully funded over time and will add the additional funding to its backlog at that time. The backlog is subject to change for various reasons, including possible cancellation of orders, change orders, terms of the contracts and other factors beyond the Company's control. Accordingly, the backlog is not necessarily indicative of the revenues or profits (losses) which may be realized when the results of such contracts are reported.

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CUSTOMERS AND SUPPLIERS

The Company markets its products both directly and through independent sales representative organizations located in the U.S., Europe and Asia. Sales to non-U.S. end-users, totaled approximately 6% and 9% of net revenues in fiscal years 2018 and 2017, respectively.

The Company's products are sold to both commercial and governmental customers. For the years ended April 30, 2018 and 2017, approximately 74% and 59%, respectively, of the Company's sales were made under contracts to the U.S. Government or subcontracts for U.S. Government end-use.

During fiscal year 2018, Lockheed Martin Corporation ("Lockheed Martin"), Northrop Grumman Corporation ("Northrop Grumman"), and Thales Alenia Space ("Thales"), each accounted for more than 10% of FEI-NY segment revenues; additionally, Lockheed Martin accounted for more than 10% of the Company's consolidated revenues. During fiscal year 2017, Lockheed Martin, Northrop Grumman and Thales each accounted for more than 10% of FEI-NY segment revenues; additionally, Lockheed Martin and Northrop Grumman also each accounted for more than 10% of the Company's consolidated revenues.

During fiscal year 2018, Raytheon Company ("Raytheon") and Naval Supply Systems Command Fleet Logistics Center Norfolk Contracting Philadelphia Office ("NAVSUP") each accounted for more than 10% of FEI-Zyfer segment revenues; additionally, Raytheon also accounted for more than 10% of the Company's consolidated revenues. During fiscal year 2017, Raytheon accounted for more than 10% of FEI-Zyfer's revenues; additionally, Raytheon also accounted for more than 10% of the Company's consolidated revenues.

The loss by the Company of any one of these customers could have a material adverse effect on the Company's business. The Company believes its relationship with these companies to be mutually satisfactory and is not aware of any prospect for the cancellation or significant reduction of any of its commercial or existing U.S. Government contracts.

The Company purchases a variety of components such as transistors, resistors, capacitors, connectors and diodes for use in the manufacture of its products. The Company is not dependent upon any one supplier or source of supply for any of its component part purchases and maintains alternative sources of supply for all of its purchased components. The Company has found its suppliers generally to be reliable and price-competitive.

RESEARCH AND DEVELOPMENT

The Company's technological leadership continues to be an essential factor to support future growth in revenues and earnings. The Company has focused its internal R&D efforts on improving the core physics and electronic packages in its time and frequency products, conducting research to develop new time and frequency technologies and capabilities, improving product manufacturability by seeking to reduce its production costs through product redesign and process improvements and other measures to take advantage of lower cost components.

The Company continues to focus a significant portion of its own resources and efforts on developing hardware for satellite (commercial and U.S. Government) and terrestrial commercial communications systems, including wireless and GPS-related systems. During fiscal years 2018 and 2017, the Company expended \$7.0 million and \$6.9 million of its own funds, respectively, on such R&D activity. See Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. Additionally, the Company receives customer funding for specific R&D projects and anticipates additional funding from customers for future R&D initiatives. During fiscal years 2018 and 2017, some of the Company's development resources were applied to certain CPFF contracts and the design-stage of fixed-price satellite payload programs. For fiscal year 2019 the resources to be allocated to R&D will depend on market conditions and identification of new opportunities, as was the case in fiscal 2018.

PATENTS AND LICENSES

The Company believes that its business is generally not dependent on patent or license protection. Rather, it is primarily dependent upon the Company's technical competence, the quality of its products and its prompt and responsible contract performance. However, employees working for the Company assign all rights to inventions to the Company and the Company presently holds such patents and licenses. In certain limited circumstances, the U.S. Government may use or permit the use by the Company's competitors of certain patents or licenses the government has funded. During fiscal year 2003, the Company received a broad and significant patent for proprietary quartz oscillator technology which the Company intends to exploit in both legacy and new applications. In 2006, the Company obtained a basic patent for its low g-sensitivity technology which management believes will permit greatly enhanced performance of devices on moving platforms and under externally imposed shock or vibration.

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COMPETITION

The Company experiences competition in all areas of its business. Many of the Company's competitors are larger, have greater financial resources and have larger research and development and marketing staffs. The Company has a strong history of competing successfully in this environment due to the quality, reliability and outstanding record of performance its products have achieved. The Company competes primarily on the basis of the accuracy, performance and reliability of its products, the ability of its products to function under severe conditions, such as in space or in other extremely hostile environments, and the Company's track record of prompt and responsive contract performance and technical competence. The Company has unique and broad capabilities which include quartz, rubidium and cesium-based timing references and specialized RF microwave technology. With respect to very high precision products, the Company encounters fewer competitors than it does for lower precision products for which there are a significant number of suppliers.

The Company's principal competition for space products is the in-house capability of its major customers such as Boeing, Northrop Grumman and Lockheed Martin as well as a number of other firms capable of providing high-reliability microwave frequency generators. With respect to non-space products, such as systems for precision time for terrestrial secure communication and command and control, and products for multiple applications in the EW market, the Company competes with larger domestic companies such as the previous Microsemi Corporation (now a part of Microchip Technology Inc.) and Mercury Systems.

The Company has previously outsourced certain manufacturing processes to third parties and to its wholly-owned subsidiary, FEI-Asia in Tianjin, China and to Russia-based Morion, in which the Company is a minority shareholder. The Company believes its ability to obtain raw materials, manufacture finished products, integrate them into systems and sub-systems and interface these systems with highly sophisticated end-user applications provides a strong competitive edge.

EMPLOYEES

The Company employs approximately 300 full-time persons worldwide. No employees are represented by labor unions.

OTHER ASPECTS

The Company's business is not seasonal although it expects to experience some fluctuation in revenues during the second fiscal quarter as a result of summer holiday periods. No unusual working capital requirements exist. Our U.S.

Government contracts are subject to Federal Acquisition Regulations (“FARS”). The FARS impose various requirements and failure to comply could potentially have consequences.

EXECUTIVE OFFICERS OF THE COMPANY

The executive officers hold office until the annual meeting of the Board of Directors following the annual meeting of stockholders, subject to earlier removal by the Board of Directors.

The names of all executive officers of the Company and all positions and offices with the Company which they presently hold are as follows:

Stanton D. Sloane - President and Chief Executive Officer
Chief Scientist and Executive Chairman of the Board

Martin B. Bloch -
Executive Vice President, President of FEI Government Systems, Inc. and Secretary and

Markus Hechler - Treasurer

Oleandro Mancini - Senior Vice President, Business Development

Steven Strang - President, FEI-Zyfer

James Davis - President, FEI-Elcom
Vice President, Advanced Development

Thomas McClelland - Vice President, RF & Microwave Systems

Adrian Lalicata -

Steven L. Bernstein - Chief Financial Officer

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Stanton D. Sloane, age 67, was elected President and Chief Executive Officer effective, May 1, 2018. Since September 2017, Dr. Sloane has served as the Chief Operating Officer of the Company and as a Director of the Company since August 2016. Dr. Sloane was President and Chief Executive Officer of Comtech Telecommunications Corp. (Nasdaq: CMTL) from January 2015 until September 2016 and a director of Comtech from January 2012 until September 2016. Prior to joining Comtech, Dr. Sloane was President and CEO and a Director of Decision Sciences International Corporation, a privately-held advanced security and detection systems company, from August 2011 through January 2015. Prior to that, he served as President and CEO and a Director of SRA International, Inc. (“SRA”), a publicly traded information solutions company. He served as President and CEO of SRA from April 2007 through July 2011, during which time he helped lead the sale of SRA to a private equity firm. Prior to joining SRA, he was Executive Vice President of Lockheed Martin’s Integrated Systems & Solutions from June 2004 until April 2007. He began his business career with General Electric Aerospace in 1984 and progressed through engineering, program management, and business development assignments in a variety of General Electric Aerospace and subsequently Lockheed Martin businesses. He also served as an officer in the U.S. Navy from 1976 until 1981. Dr. Sloane holds a bachelor’s degree in Professional Studies (Aeronautics) from Barry University, a master’s degree in Human Resources Management from Pepperdine University, and a Doctor of Management degree from the Weatherhead Business School at Case Western Reserve University.

Martin B. Bloch, age 82, has been a Director of the Company and of its predecessor since 1961. Effective May 1, 2018, Mr. Bloch was elected Executive Chairman of the Board of Directors and will continue to serve the Company in his position of Chief Scientist. Mr. Bloch previously held the positions of President and Chief Executive Officer and has held such positions since inception of the Company, except for the period from December 1993 through October 1998 when General Joseph Franklin (ret) held the CEO position. Previous to forming the Company, Mr. Bloch served as chief electronics engineer of the Electronics Division of Bulova Watch Company.

Markus Hechler, age 72, joined the Company in 1967. He was elected to the position of Executive Vice President in February 1999, prior to which he served as Vice President, Manufacturing since 1982. In October 2001, he was named President of the Company’s subsidiary, FEI Government Systems, Inc. He has served as Assistant Secretary since 1978, and in April 2016 was appointed Secretary and Treasurer.

Oleandro Mancini, age 69, joined the Company in August 2000 as Vice President, Business Development and was promoted to Senior Vice President in 2010. Prior to joining the Company, Mr. Mancini served from 1998 as Vice President, Sales and Marketing at Satellite Transmission Systems, Inc. and from 1995 to 1998 as Vice President, Business Development at Cardion, Inc., a Siemens A.G. company. From 1987 to 1995, he held the position of Vice President, Engineering at Cardion, Inc.

Steven Strang, age 54, was named President of FEI-Zyfer, Inc., effective May 1, 2005. Previously, Mr. Strang was Executive Vice President of this subsidiary and its predecessor companies where he has served for 20 years in various technical and management positions.

James Davis, age 65, is the President of FEI-Elcom Tech, Inc. which the Company acquired in February 2012. Mr. Davis was named an officer of the Company in October 2013. Mr. Davis became the president of Elcom Technologies, Inc., the pre-acquisition company, on September 20, 2007. Prior to joining FEI-Elcom, Mr. Davis held leadership positions at other technology companies including General Manager of Hewlett Packard's (Agilent) Semiconductor Systems Center, Vice President and General Manager of Schlumberger Technologies N.A. and Vice President and General Manager of Gretag Macbeth LLC. Mr. Davis also held the rank of Captain as a U.S. Army Special Forces Team Commander.

Thomas McClelland, age 63, joined the Company as an engineer in 1984 and was elected Vice President, Commercial Products in March 1999. In fiscal year 2011, Mr. McClelland's title was modified to Vice President Advanced Development to describe his expanded role in the Company.

Adrian Lalicata, age 71, joined the Company in 2006 as Vice President, RF & Microwave Systems. Prior to joining the Company, Mr. Lalicata served as Vice President of Engineering at Herley-CTI and Communication Techniques, a Dover Company. Mr. Lalicata has served as Director of Engineering at Microphase Corp. and Adcomm, Inc. He also held leading engineering positions at Loral Electronic Systems, Cardion Electronics, and Airborne Instruments Laboratories.

Steven L. Bernstein, age 53, joined the Company in April 2010 as its Controller and was appointed to the position of Chief Financial Officer in April 2016. Prior to joining the Company, Mr. Bernstein worked in the North America accounting group of Arrow Electronics, a Fortune 500 electronics distributor.

Item 1A. Risk Factors

This item is not required for smaller reporting companies.

Table of ContentsItem 1B. Unresolved Staff Comments

Not Applicable.

Item 2. Properties

The Company operates out of several facilities located around the world. Each facility is used for manufacturing its products and for administrative activities. The following table presents the location, size and terms of ownership/occupation:

Location	Size (sq. ft.)	Own or Lease
Long Island, NY	93,000	Lease
Garden Grove, CA	27,850	Lease
Tianjin, China	28,000	Lease
Northvale, NJ	9,000	Lease

The Company's facility located in Mitchel Field, Long Island, New York, is part of the building that the Company constructed in 1981 and expanded in 1988 on land leased from Nassau County. In January 1998, the Company sold this building and the related land lease to Reckson Associates Realty Corp. ("Reckson"), leasing back the space that it presently occupies.

The Company leased its manufacturing and office space from Reckson under an initial 11-year lease followed by two five-year renewal periods. The Company is currently in the second 5-year renewal period paying annual rent of \$800,000 per year plus its pro rata share of real estate taxes and the costs of utilities and insurance. The lease was scheduled to end in January 2019. On July 25, 2018, the Company signed an amendment to the lease with RA 55 CLB LLC (as successor-in-interest to Reckson) which extends the current lease terms ten years and eight months through September 30, 2029. Pursuant to the amendment to the lease agreement, the Company shall pay a gradually increasing annual rent of \$1,046,810 in 2019 to \$1,276,056 in 2029. The leased space is adequate to meet the Company's domestic operational needs which encompass the principal operations of the FEI-NY segment and also serves as the Company's world-wide corporate headquarters.

The Garden Grove, California facility is leased by the Company's subsidiary, FEI-Zyfer. The facility consists of a combination office and manufacturing space. The Company has signed a second amendment to the lease, which extends the lease an additional 88 months, beginning October 1, 2017 and expiring January 31, 2025. The average annual rent over the period of the amendment is approximately \$312,000.

The Tianjin, China facility is the location of the Company's wholly-owned subsidiary, FEI-Asia. The subsidiary's office and manufacturing facility is located in the Tianjin Free-Trade Zone. The lease is renewable bi-annually with monthly rent of \$1,000 through August 2018. The facility is adequate for the near-term manufacturing expectations for the Company.

FEI-Elcom entered into a new lease agreement on February 1, 2018 in Northvale, New Jersey. The facility consists of a combination office and manufacturing space. The lease, which expires in January 31, 2021, requires monthly payments of \$9,673.

Item 3. Legal Proceedings

From time to time, the Company may become a defendant in litigation arising out of the ordinary course of business. As of July 30, 2018, the Company is not a party to any material legal proceeding.

Item 4. Mine Safety Disclosures

Not applicable.

Table of ContentsPART IIItem 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

The common stock of the Company is listed on The Nasdaq Global Market (“NASDAQ”) under the ticker symbol “FEIM.” The following table shows the high and low sale price for the Company’s common stock for the quarters indicated, as reported on the NASDAQ.

FISCAL QUARTER	HIGH SALE	LOW SALE
2018–		
FIRST QUARTER	\$ 10.76	\$ 7.91
SECOND QUARTER	10.00	7.53
THIRD QUARTER	9.94	8.66
FOURTH QUARTER	10.59	8.55
2017 –		
FIRST QUARTER		