

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 December 31, 2019

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number: 0-20852

ULTRALIFE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

16-1387013

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

2000 Technology Parkway Newark, New York 14513

(Address of principal executive offices) (Zip Code)

(315) 332-7100

(Registrant's telephone number, including area code:)

None

(Former name, former address and former fiscal year, if changed since last report)

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

Common Stock, \$0.10 par value per share

(Title of each class)

ULBI

(Trading Symbol)

NASDAQ

(Name of each exchange on which registered)

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

Indicate by check mark whether 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 every Interactive Data File required to be submitted 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 such files). Yes No

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

Large accelerated filer

Non-accelerated filer

Accelerated filer

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

On June 30, 2019, the aggregate market value of the common stock held by non-affiliates as defined in Rule 405 under the Securities Act of 1933) of the registrant was approximately \$78,106,659 (in whole dollars) based upon the closing price for such common stock as reported on the NASDAQ Global Market on June 30, 2019.

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

As of February 3, 2020, the registrant had 15,870,688 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the registrant's definitive proxy statement relating to the Annual Meeting of Shareholders are specifically incorporated by reference in Part III, Items 10, 11, 12, 13 and 14 of this Annual Report on Form 10-K, except for the equity plan information required by Item 12 as set forth herein.

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PART I

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward-looking statements. This report contains certain forward-looking statements and information that are based on the beliefs of management as well as assumptions made by and information currently available to management. The statements contained in this report relating to matters that are not historical facts are forward-looking statements that involve risks and uncertainties, including, but not limited to, our reliance on certain key customers; possible future declines in demand for the products that use our batteries or communications systems; the unique risks associated with our China operations; potential costs because of the warranties we supply with our products and services; potential disruptions in our supply of raw materials and components; our efforts to develop new commercial applications for our products; reduced U.S. and foreign military spending including the uncertainty associated with government budget approvals; possible breaches in security and other disruptions; variability in our quarterly and annual results and the price of our common stock; safety risks, including the risk of fire; our entrance into new end-markets which could lead to additional financial exposure; fluctuations in the price of oil and the resulting impact on the level of downhole drilling; our ability to retain top management and key personnel; our resources being overwhelmed by our growth prospects; our inability to comply with changes to the regulations for the shipment of our products; our customers' demand falling short of volume expectations in our supply agreements; possible impairments of our goodwill and other intangible assets; negative publicity of Lithium-ion batteries; our exposure to foreign currency fluctuations; the risk that we are unable to protect our proprietary and intellectual property; rules and procedures regarding contracting with the U.S. and foreign governments; our ability to utilize our net operating loss carryforwards; exposure to possible violations of the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act or other anti-corruption laws; our ability to comply with government regulations regarding the use of "conflict minerals"; possible audits of our contracts by the U.S. and foreign governments and their respective defense agencies; known and unknown environmental matters; technological innovations in the non-rechargeable and rechargeable battery industries; and other risks and uncertainties, certain of which are beyond our control.

Although we base these forward-looking statements on assumptions that we believe are reasonable when made, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity and developments in the industries in which we operate may differ materially from those made in or suggested by the forward-looking statements contained herein. In addition, even if our results of operations, financial condition and liquidity and the development of the industries in which we operate are consistent with the forward-looking statements contained in this document, those results or developments may not be indicative of results or developments in subsequent periods. Given these risks and uncertainties, you are cautioned not to place undue reliance on these forward-looking statements. Any forward-looking statements that we make herein speak only as of the date of those statements, and we undertake no obligation to update those statements or to publicly announce the results of any revisions to any of those statements to reflect future events or developments. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless expressed as such, and should only be viewed as historical data. When used in this report, the words "anticipate", "believe", "estimate", "plan", "intend", "foresee", "may", "could", "will", "likely" or "expect" or words of similar import are intended to identify some, but not all of, such forward-looking statements. For further discussion of certain of the matters described above and other risks and uncertainties, see "Risk Factors" in Item 1A of this Annual Report on Form 10-K.

As used in this Form 10-K Annual Report, unless otherwise indicated, the terms "the Company", "we", "our" and "us" refer to Ultralife Corporation ("Ultralife") and includes our wholly-owned subsidiaries, ABLE New Energy Co., Limited and its wholly-owned subsidiary ABLE New Energy Co., Ltd; Ultralife UK LTD and its wholly-owned subsidiary, Accutronics Ltd; Ultralife Batteries (UK) Ltd.; Southwest Electronic Energy Corporation and its wholly-owned subsidiary, CLB, INC.; and our majority-owned joint venture Ultralife Batteries India Private Limited.

Dollar amounts throughout this Form 10-K Annual Report are presented in thousands of dollars, except for per share amounts.

ITEM 1. BUSINESS

General

We offer products and services ranging from power solutions to communications and electronics systems to customers across the globe in the government, defense and commercial sectors. With an emphasis on strong engineering and a collaborative approach to problem solving, we design and manufacture power and communications systems including: rechargeable and non-rechargeable batteries, charging systems, communications and electronics systems and accessories, and custom engineered systems. We continually evaluate ways to grow, including the design, development and sale of new products, expansion of our sales force to penetrate new markets and geographies, as well as seeking opportunities to expand through acquisitions.

We sell our products worldwide through a variety of trade channels, including original equipment manufacturers (“OEMs”), industrial and defense supply distributors, and directly to U.S. and international defense departments. We enjoy strong name recognition in our markets under our Ultralife® Batteries, Lithium Power®, McDowell Research®, AMTI™, ABLE™, ACCUTRONICS™, ACCUPRO™, ENTELLION™, SWE Southwest Electronic Energy Group™, SWE DRILL-DATA™, and SWE SEASAFE™ brands. We have sales, operations and product development facilities in North America, Europe and Asia.

We report our results in two operating segments: Battery & Energy Products and Communications Systems. The Battery & Energy Products segment includes: Lithium 9-volt, cylindrical, thin cell and other non-rechargeable batteries, in addition to rechargeable batteries, uninterruptable power supplies, charging systems and accessories. The Communications Systems segment includes: RF amplifiers, power supplies, cable and connector assemblies, amplified speakers, equipment mounts, case equipment, man-portable systems, integrated communication systems for fixed or vehicle applications and communications and electronics systems design. We believe that reporting performance at the gross profit level is the best indicator of segment performance. As such, we report segment performance at the gross profit level and operating expenses as Corporate charges. (See Note 11 in the notes to consolidated financial statements.)

Our website address is www.ultralifecorporation.com. We make available free of charge via a hyperlink on our website (see Investor Relations link on the website) our annual reports on Form 10-K, proxy statements, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports and statements as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission (“SEC”). We will provide copies of these reports upon written request to the attention of Philip A. Fain, CFO, Treasurer and Secretary, Ultralife Corporation, 2000 Technology Parkway, Newark, New York, 14513. Our filings with the SEC are also available through the SEC website at www.sec.gov or at the SEC Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 or by calling 1-800-SEC-0330.

Battery & Energy Products

We manufacture and/or market a family of Lithium Manganese Dioxide (Li-MnO₂), Lithium Manganese Dioxide Carbon Monofluoride (Li-CFx/MnO₂) hybrid and Lithium Thionyl Chloride (Li-SOCl₂) non-rechargeable batteries including 9-volt, HiRate® cylindrical, ThinCell®, and other form factors. Applications for our 9-volt batteries include: smoke alarms, wireless security systems and intensive care monitors, among many other devices. Our HiRate® and ThinCell® Lithium non-rechargeable batteries are sold primarily to the military and to OEMs in industrial markets for use in a variety of applications including radios, emergency radio beacons, search and rescue transponders, pipeline inspection gauges, portable medical devices and other specialty instruments and applications. Military applications for our non-rechargeable HiRate® batteries include: manpack and survival radios, night vision devices, targeting devices, chemical agent monitors and thermal imaging equipment. Our Lithium Thionyl Chloride batteries, sold under our ABLE and Ultralife brands as well as a private label brand, are used in a variety of applications including utility meters, wireless security devices, electronic meters, automotive electronics and geothermal devices. We believe that the chemistry of Lithium batteries provides significant advantages over other currently available non-rechargeable battery technologies. These advantages include: higher energy density, lighter weight, longer operating time, longer shelf life and a wider operating temperature range. Our non-rechargeable batteries also have relatively flat voltage profiles, which provide stable power. Conventional non-rechargeable batteries, such as alkaline batteries, have sloping voltage profiles that result in decreasing power output during discharge. While the price of our Lithium batteries is generally higher than alkaline batteries, the increased energy per unit of weight and volume of our Lithium batteries allow for longer operating times and less frequent battery replacements for our targeted applications.

We believe that our ability to design and produce lightweight, high-energy Lithium ion and Nickel Metal Hydride (NiMH) rechargeable batteries and charging systems in a variety of custom sizes, shapes, and thicknesses offers substantial benefits to our customers. We market Lithium ion and NiMH rechargeable batteries comprising cells manufactured by qualified cell manufacturers. Our rechargeable products can be used in a wide variety of applications including communications, medical and other portable electronic devices.

Within this segment, we also seek to fund the development of new products that we hope will advance our technologies through contracts with both government agencies and private sector third parties.

We continue to be awarded development contracts resulting in intellectual property that we believe will enhance our efforts to commercialize new products that we develop. Revenues in this segment that pertain to product development may vary widely each year, depending upon the quantity and size of contracts awarded.

Revenues for this segment for the year ended December 31, 2019 were \$83,996 and segment contribution (gross profit) was \$22,813.

Communications Systems

Under our McDowell Research and AMTI brands, we design and manufacture a line of communications systems and accessories to support military communications requirements. These systems include RF amplifiers, power supplies, power cables, connector assemblies, amplified speakers, equipment mounts, case equipment, man-portable systems and integrated communication systems for fixed or vehicle applications such as vehicle amplifier-adaptors (“VAA”) for multiple programs. These programs include Vehicle Installed Power Enhanced Rifleman Appliqué (“VIPER”) systems, U.S. Army Leader Radio Program, U.S. Army’s Security Force Assistance Brigades (SFABs) and SATCOM systems. All systems are packaged to meet specific customer needs in rugged enclosures to allow for their use in extreme environments. We market these products to all branches of the U.S. military and foreign defense organizations that we are permitted to sell our products to, as well as, U.S. and international prime defense contractors.

Revenues for this segment for the year ended December 31, 2019 were \$22,799 and segment contribution (gross profit) was \$8,352.

Corporate

We allocate revenues and cost of sales between the above operating segments. The balance of income and expense, including but not limited to research and development expenses, and selling, general and administrative expenses, are reported as Corporate operating expenses.

Corporate had no revenues for the year ended December 31, 2019 and our Corporate operating expenses for the year ended December 31, 2019 were \$23,797.

See Management’s Discussion and Analysis of Financial Condition and Results of Operations and the 2019 Consolidated Financial Statements and Notes thereto contained in this Annual Report on Form 10-K for additional information on the expenses referred to above. For information relating to total assets by segment, revenues for the last two years by segment, and contribution by segment for the last two years, see Note 11 in the notes to consolidated financial statements.

History

Ultralife was formed as a Delaware corporation in December 1990. In March 1991, we acquired certain technology and assets from Eastman Kodak Company (“Kodak”) relating to its 9-volt Lithium Manganese Dioxide non-rechargeable battery. In December 1992, we completed our initial public offering and became listed on NASDAQ.

In May 2006, we acquired ABLE New Energy Co., Ltd. (“ABLE”), an established manufacturer of Lithium batteries located in Shenzhen, China, which broadened our product offering, including a wide range of Lithium Thionyl Chloride and Lithium Manganese batteries, and provided additional exposure to new consumer markets.

In July 2006, we finalized the acquisition of substantially all the assets of McDowell Research, Ltd. (“McDowell”), a manufacturer of military communications accessories located originally in Waco, Texas. This acquisition expanded our channels into the military communications area and strengthened our presence in global defense markets. During the second half of 2007, the operations of the Waco, Texas facility were relocated to our Newark, New York facility. In January 2012, we relocated these operations to our Virginia Beach, Virginia facility in order to gain operational efficiencies.

In March 2008, we formed a joint venture, named Ultralife Batteries India Private Limited (“India JV”), with our distributor partner in India. The India JV assembles Ultralife power solution products and manages local sales and marketing activities, serving commercial, government and defense customers throughout India. We have invested cash into the India JV, as consideration for our 51% ownership stake in the India JV.

In March 2009, we acquired the tactical communications products business of Science Applications International Corporation. The tactical communications products business (“AMTI”) designs, develops and manufactures tactical communications products including: amplifiers, man-portable systems, cables, power solutions and ancillary communications equipment, which are sold by Ultralife under the brand name AMTI. The acquisition strengthened our communications systems business and provided us with direct entry into the handheld radio/amplifier market, complementing Ultralife’s communications systems offerings.

In January 2016, we acquired Accutronics Limited (“Accutronics”), a U.K. corporation based in Newcastle-under-Lyme, U.K., a leading independent designer and manufacturer of smart batteries and charger systems for high-performance, feature-laden portable and handheld electronic devices. With a portfolio encompassing custom battery design, development and manufacturing for OEM’s; standard smart batteries, chargers and accessories; and pre-engineered batteries and power solutions for specific applications, Accutronics primarily serves the portable medical device market throughout Europe. Medical applications include digital imaging, ventilators, anesthesia, endoscopy, patient monitoring, cardio pulmonary care, oxygen concentration and aspiration. We acquired Accutronics to advance our strategy of commercial revenue diversification, to expand our geographical penetration, and to achieve revenue growth from new product development. We are experiencing sales synergies between Accutronics and our existing commercial battery business as we cross-sell our existing products and the acquired Accutronics’ products to our respective customer bases.

On May 1, 2019, we acquired Southwest Electronic Energy Corporation, a Texas corporation (“SWE”), and a leading designer and manufacturer of high-performance smart battery systems and battery packs to customer specifications using lithium cells. SWE serves a variety of industrial markets, including oil & gas, remote monitoring, process control and marine, which demand uncompromised safety, service, reliability and quality. We acquired SWE as a bolt-on acquisition to further support our strategy of commercial revenue diversification by providing entry to the oil and gas exploration and production, and subsea electrification markets, which are currently unserved by us. Another key benefit includes obtaining a highly valuable technical team of battery pack and charger system engineers and technicians to add to our new product development-based revenue growth initiatives in our commercial end-markets particularly asset tracking, smart metering and other industrial applications.

Products, Services and Technology

Battery & Energy Products

A non-rechargeable battery is used until discharged and then replaced. The principal competing non-rechargeable battery technologies are Carbon zinc, alkaline and Lithium. We manufacture a range of non-rechargeable battery products based on Lithium Manganese Dioxide, Lithium Manganese Dioxide Carbon Monofluoride hybrid, and Lithium Thionyl Chloride technologies.

Non-Rechargeable Batteries

We believe that the chemistry of Lithium batteries provides significant advantages over currently available non-rechargeable battery technologies, which include: lighter weight, longer operating time, longer shelf life, and a wider operating temperature range. Our non-rechargeable batteries also have relatively flat voltage profiles, which provide stable power. Conventional non-rechargeable batteries, such as alkaline batteries, have sloping voltage profiles that result in decreasing power during discharge. While the prices for our Lithium batteries are generally higher than commercially available alkaline batteries produced by others, we believe that the increased energy per unit of weight and volume of our batteries will allow longer operating time and less frequent battery replacements for our targeted applications. As a result, we believe that our non-rechargeable batteries are priced competitively with other battery technologies on a price per unit of energy or volume basis.

Our non-rechargeable products include the following product configurations:

9-Volt Lithium Battery. Our 9-volt Lithium battery delivers a unique combination of the highest available energy density and stable voltage, which results in a longer operating life for the battery and, accordingly, fewer battery replacements. While our 9-volt battery price is generally higher than conventional 9-volt Carbon zinc and alkaline batteries, we believe the enhanced operating performance and decreased costs associated with battery replacement make our 9-volt battery more cost effective than conventional batteries on a cost per unit of energy or volume basis when used in a variety of applications.

We market our 9-volt Lithium batteries to OEM, distributor and retail markets including industrial electronics, safety and security, and medical. Typical applications include: smoke alarms, wireless alarm systems, bone growth stimulators, telemetry devices, blood analyzers, ambulatory infusion pumps and parking meters. A significant portion of the sales of our 9-volt battery is to major smoke alarm OEMs for use in their long-life smoke alarms. We also manufacture our 9-volt Lithium battery under private labels for a variety of companies. Additionally, we sell our 9-volt battery to the broader consumer market through national and regional retail chains and Internet retailers.

Our current 9-volt battery manufacturing capacity is adequate to meet forecasted customer demand over the next three years.

Cylindrical Batteries. Featuring high energy, wide temperature range, long shelf life and operating life, our cylindrical cells and batteries, based on Lithium Manganese Dioxide, Lithium Manganese Dioxide Carbon Monofluoride hybrid and Lithium Thionyl Chloride technologies, represent some of the most advanced Lithium power sources currently available. We market a wide range of cylindrical non-rechargeable Lithium cells and batteries in various sizes under both the Ultralife HiRate and ABLE brands. These include: D, C, 5/4 C, 1/2 AA, 2/3 A, CR123A and other sizes, which are sold individually as well as packaged into multi-cell battery packs, including our leading BA-5390 military battery, an alternative to the competing Li-SO₂ BA-5590 battery, and one of the most widely used battery types in the U.S. armed forces for portable applications. Our BA-5390 battery provides 50% to 100% more energy (mission time) than the BA-5590, and it is used in approximately 60 military applications. With the introduction of our Lithium Carbon Monofluoride hybrid chemistry, we now offer a D-cell that has 100% more energy than the competing Li-SO₂ D-cell.

We market our line of Lithium cells and batteries to the OEM market for commercial, defense, medical, asset tracking and search and rescue applications, among others. Significant commercial applications include oil & gas, pipeline inspection equipment, automatic re-closers and oceanographic and subsea devices. Asset tracking applications include RFID (Radio Frequency Identification) systems. Among the defense uses are manpack radios, night vision goggles, chemical agent monitors and thermal imaging equipment. Medical applications include: AED's (Automated External Defibrillators), infusion pumps and telemetry systems. Search and rescue applications include ELT's (Emergency Locator Transmitters) for aircraft and EPIRB's (Emergency Position Indicating Radio Beacons) for ships. Oil & gas applications include battery packs for downhole drilling applications such as Measurement While Drilling ("MWD") and Logging While Drilling ("LWD") and pipeline inspection.

Thin Cell Batteries. We manufacture a range of thin Lithium Manganese Dioxide batteries under the Thin Cell[®] brand. Thin Cell batteries are flat, lightweight batteries providing a unique combination of high energy, long shelf life, wide operating temperature range and very low profile. We are currently marketing these batteries to OEMs for applications such as displays, wearable medical devices, toll passes, theft detection systems, and RFID devices.

Rechargeable Batteries

In contrast to non-rechargeable batteries, after a rechargeable battery is discharged, it can be recharged and reused many times. Generally, discharge and recharge cycles can be repeated hundreds or thousands of times in rechargeable batteries depending on the technology of the battery. The achievable number of cycles (cycle life) varies among technologies and is an important competitive factor. All rechargeable batteries experience a small, but measurable, loss in energy with each cycle. The industry commonly reports cycle life in the number of cycles a battery can achieve until 80% of the battery's initial energy capacity remains. In the rechargeable battery market, the principal competing technologies are Nickel Cadmium, Nickel Metal Hydride and Lithium ion (including Lithium polymer) batteries. Rechargeable batteries are used in many applications, such as military radios, laptop computers, mobile telephones, portable medical devices, wearable devices and many other commercial, defense and consumer products.

Three important performance characteristics of a rechargeable battery are design flexibility, energy density and cycle life. Design flexibility refers to the ability of rechargeable batteries to be designed to fit a variety of shapes and sizes of battery compartments. Thin profile batteries with prismatic geometry provide the design flexibility to fit the battery compartments of today's electronic devices. Energy density refers to the total amount of electrical energy stored in a battery divided by the battery's weight and volume as measured in watt-hours per kilogram and watt-hours per liter, respectively. High energy density batteries generally are longer lasting power sources providing longer operating time and necessitating fewer battery recharges. High energy density and long achievable cycle life are important characteristics for comparing rechargeable battery technologies. Greater energy density will permit the use of batteries of a given weight or volume for a longer time period. Accordingly, greater energy density will enable the use of smaller and lighter batteries with energy comparable to those currently marketed. Lithium ion batteries, by the nature of their electrochemical properties, are capable of providing higher energy density than comparably sized batteries that utilize other chemistries and, therefore, tend to consume less volume and weight for a given energy content. Long achievable cycle life, particularly in combination with high energy density, is suitable for applications requiring frequent battery recharges, such as cellular telephones and laptop computers, and allows the user to charge and recharge many times before noticing a difference in performance. We believe that our lithium ion batteries generally have some of the highest energy density and longest cycle life available.

Lithium Ion Cells and Batteries. We market a variety of Lithium ion cells and rechargeable batteries comprising cells manufactured by qualified cell manufacturers. These products are used in a wide variety of applications including communications, medical and other portable electronic devices.

Battery Charging Systems and Accessories. To provide our customers with complete power system solutions, we offer a wide range of rugged military and commercial battery charging systems and accessories including smart chargers, multi-bay charging systems and a variety of cables.

Multi-Kilowatt Module. Our Multi-Kilowatt Module lithium ion battery system is a large format battery utilizable for energy storage, battery back-up, and remote power applications. This product is a direct replacement of 1.25 kWh and greater lead acid batteries in 24V or 48V applications. It can be connected in multiples to obtain higher-voltages and is capable of over 3,000 cycles while maintaining 80% of its capacity.

Technology Contracts. Our technology contract activities involve the development of new products or the enhancement of existing products through contracts with both government agencies and other private sector third parties.

Communications Systems

Under our McDowell Research and AMTI brands, we design and manufacture a line of communications systems and accessories to support military communications systems, including RF amplifiers, power supplies, power cables, connector assemblies, amplified speakers, equipment mounts, case equipment, man-portable systems and integrated communication systems for fixed or vehicle applications such as vehicle amplifier-adaptors and SATCOM systems. We package all systems to meet specific customer needs in rugged enclosures to allow their use in extreme environments.

We offer a wide range of military communications systems and accessories designed to enhance and extend the operation of communications equipment such as vehicle-mounted, manpack and handheld transceivers. Our communications products include the following product configurations:

RF Amplifiers. Our RF amplifiers include: 20, 50 and 75-watt amplifiers and 20-watt accessories and kits. These amplifiers are used to extend the range of manpack and handheld tactical transceivers and can be used on mobile or fixed site applications.

Integrated Systems. Our integrated systems include: vehicle mounted systems; SATCOM systems; rugged, deployable case systems; multiband transceiver kits; enroute communications cases; and radio cases. These systems give communications operators everything that is needed to provide reliable links to support C4ISR (Command, Control, Communications, Computers and Information, Surveillance and Reconnaissance).

Power Systems. Our power systems include: universal AC/DC power supplies with battery backup for tactical manpack and handheld transceivers; ROVER™ power supplies; interoperable power adaptors and chargers; portable power systems and AC to DC power supplies, among many others. We can provide power supplies for virtually all tactical communications devices.

Communications and Electronics. Our communications and electronics services include the design, integration, and fielding of portable, mobile and fixed-site communications systems.

Sales and Marketing

We employ a staff of sales and marketing personnel in North America, Europe and Asia. We sell our products and services directly to commercial customers, including OEMs, as well as government and defense agencies in the U.S. and abroad and have contractual arrangements with sales agents who market our products on a commission basis in defined territories. Every effort is made to adjust future prices when and if possible, but the ability to adjust prices is generally based on market conditions.

We also distribute some of our products through domestic and international distributors and retailers. These sales are generated primarily from customer purchase orders. We have several long-term contracts with the U.S. government and other customers. These contracts do not commit the customers to specific purchase volumes, nor to specific timing of purchase order releases, and they include fixed price agreements over various periods of time. In general, we do not believe our sales are seasonal, although we may sometimes experience seasonality for some of our military products based on the timing of government fiscal budget expenditures.

A significant portion of our business comes from sales of products and services to the U.S. and foreign governments through various contracts. These contracts are subject to procurement laws and regulations that specify policies and procedures for acquiring goods and services. The regulations also contain guidelines for managing contracts after they are awarded, including conditions under which contracts may be terminated, in whole or in part, at the government's convenience or for default. Failure to comply with applicable procurement laws or regulations can result in civil, criminal or administrative proceedings involving fines, penalties, suspension of payments, or suspension or debarment from government contracting or subcontracting for a period of time. Even if a contract is awarded there is no guarantee that the government will order product under the contract.

We have two major customers, both large defense primary contractors, which comprised 14% and 12% of our total revenues in 2019, respectively, and 7% and 16% of our total revenues in 2018, respectively. There were no other customers that comprised greater than 10% of our total revenues during these years.

In 2019, sales to U.S. and non-U.S. customers were approximately \$63,375 and \$43,420, respectively. In 2018, sales to U.S. and non-U.S. customers were approximately \$53,054 and \$34,136, respectively.

Battery & Energy Products

We target sales of our non-rechargeable products to manufacturers of security and safety equipment, medical devices, search and rescue equipment, specialty instruments, oil & gas downhole drilling and pipe inspection equipment, point of sale equipment and metering applications, as well as users of military equipment. Our strategy is to develop sales and marketing alliances with OEMs and governmental agencies that utilize our batteries in their products, commit to cooperative research and development or marketing programs, and recommend our products for design-in or replacement use in their products. We are addressing these markets through direct contact by our sales and technical personnel, use of sales agents and stocking distributors, manufacturing under private label, and promotional activities.

We seek to capture a significant market share for our products within our targeted OEM markets, which we believe, if successful will result in increased product awareness and sales at the end-user or consumer level. We are also selling our 9-volt battery to the consumer market through retail distribution channels. Most military procurements are done directly by the specific government organizations requiring products, based on a competitive bidding process. Additionally, we are typically required to successfully meet contractual specifications and to pass various qualifications testing for the products under contract by the military. An inability by us to pass these tests for our new products in a timely fashion could have a material adverse effect on future growth prospects. When a government contract is awarded, there is a government procedure that permits unsuccessful companies to formally protest the award if they believe they were unjustly treated in the government's bid evaluation process. A prolonged delay in the resolution of a protest, or a reversal of an award resulting from such a protest, could have a material adverse effect on our business, financial condition and results of operations.

We market our products to defense organizations in the U.S. and other countries, which has resulted in awards of significant contracts. In March 2017, we were awarded a production contract by the U. S. Government's Defense Logistics Agency for up to five years, with a maximum total potential of \$21,400, to provide an updated BA-5390 non-rechargeable Lithium Manganese Dioxide batteries to the U.S. military. While production deliveries are expected to begin in 2020, we continue to receive orders for our legacy BA-5390 batteries from the Defense Logistics Agency. In December 2019, we received a \$4,869 contract from the Defense Logistics Agency to ship our legacy BA-5390 batteries in 2020. In September 2019, we were awarded a production contract from the Defense Logistics Agency for up to five years, with a maximum value of \$14,422, to provide our BA-5368 batteries. In January 2018, we received a \$3,348 contract from the Defense Logistics Agency to ship our legacy BA-5390 batteries within one hundred ninety days of the contract date. In October 2017, we were awarded a production contract by the Defense Logistics Agency for five years, with a maximum potential of \$49,800, to provide our hybrid lithium manganese dioxide/carbon monofluoride (CFx) non-rechargeable BA-5790 and BA-5795 batteries. Manufacturing and production deliveries under this award are expected to begin in 2020.

We target sales of our Lithium ion rechargeable batteries and charging systems to OEM customers, as well as distributors and resellers focused on our target markets. We respond to RFPs to design products for OEMs, and believe that our design capabilities, product characteristics and solution integration will drive OEMs to incorporate our batteries into their product offerings, resulting in revenue growth opportunities for us.

We continue to expand our marketing activities as part of our strategic plan, a comprehensive forward-looking document which sets forth our strategic growth plans, tactical actions and financial projections over a rolling three-year period, to increase sales of our rechargeable products for commercial, standby, defense and communications applications, as well as hand-held devices, wearable devices and other electronic portable equipment. A key part of this expansion includes increasing our design and assembly capabilities as well as building our network of distributors and value-added distributors throughout the world.

At December 31, 2019 and 2018, our backlog related to Battery & Energy Products was approximately \$35,700 and \$29,300 respectively. The 22% year-over-year increase in our Battery & Energy Products backlog at December 31, 2019 primarily resulted from the December 2019 legacy BA-5390 delivery contract received from the Defense Logistics Agency and the inclusion of SWE which was acquired on May 1, 2019. The 2019 year-end backlog is related to orders that are expected to ship throughout 2020 and does not include future shipments under the indefinite delivery/indefinite quantity Defense Logistic Awards for our BA-5390 batteries (\$21,400) and BA-5790/BA-5795 batteries (\$49,800).

We target sales of our communications systems, which include power solutions and accessories to support communications systems such as RF amplifiers, power supplies, power cables, connector assemblies, amplified speakers, equipment mounts, case equipment and integrated communication systems, to military OEMs and U.S. and allied foreign militaries. We sell our products directly and through authorized distributors to OEMs and to defense contractors and U.S. and foreign militaries in the U.S. and internationally. We market our products to defense organizations and OEMs in the U.S. and internationally.

At December 31, 2019 and 2018, our backlog related to Communications Systems orders was approximately \$6,800 and \$21,700, respectively. The 69% decrease in our Communications Systems backlog at December 31, 2019 is primarily a result of 2019 shipments under two October 2018 contract awards totaling \$19,200 to supply our Vehicle Amplifier-Adaptors (“VAA”) and Mounted Power Amplifiers to a large global defense contractor to support the U.S. Army’s Network Modernization initiatives, Leader Radio Program and other opportunities. The 2019 backlog includes the remainder of the shipments under these contracts as well as a purchase order received on an October 2018 indefinite-delivery/indefinite quantity contract for vehicle communication kits for use by the U.S. Department of Defense. The 2019 year-end backlog is related to orders that are expected to ship throughout 2020.

Patents, Trade Secrets and Trademarks

We use our patented and unpatented proprietary information, know-how and trade secrets to maintain and develop our competitive position. Despite our efforts to protect our proprietary information, there can be no assurance that others will neither develop the same or similar information independently nor obtain access to our proprietary information, know-how and trade secrets. In addition, there can be no assurance that we would prevail if we asserted our intellectual property rights against third parties, or that third parties will not successfully assert infringement claims against us in the future. We believe, however, that our success depends more on the knowledge, ability, experience and technological expertise of our employees, than on the legal protection that our patents and other proprietary rights may or will afford.

We hold thirty-five patents issued in the U.S., four patents issued in South Korea, three patents issued in Canada, three patents issued in the European Union member states, two patents issued in the European Union, two patent issued in the United Kingdom, one patent issued in Australia, one patent issued in China, one patent issued in Hong Kong, one patent issued in India, one patent issued in Japan and one patent issued in Taiwan. We believe our patents protect technology that makes automated production more cost-effective and protects important competitive features of our products. However, we do not consider our business to be dependent on patent protection.

As part of our employment commencement process, our employees are required to enter into agreements providing for confidentiality of certain information and the assignment of rights to inventions made by them while employed by us. These agreements also contain certain noncompetition and non-solicitation provisions effective during the employment term and for varying periods thereafter depending on position and location. There can be no assurance that we will be able to enforce these agreements. All of our employees agree to abide by the terms of a Code of Ethics policy that provides for the confidentiality of certain information received during the course of their employment. Nevertheless, the enforceability of such agreements is subject to public policy limitations that vary from state to state and country by country so we cannot assure that they will be enforceable in accordance with their terms, if at all.

Trademarks are an important aspect of our business. We sell our products under a number of trademarks, which we own. The following are registered trademarks of ours: Ultralife®, Ultralife Thin Cell®, Ultralife HiRate®, Ultralife & design®, Ultra®, LithiumPower™, LithiumPower & Design™, SmartCircuit™, Smart Circuit®, Smart Circuit & design®, We Are Power™, AMTI™, ABLEÔ, ACCUTRONICS®, ACCUPRO®, ENTELLION®, Intelligent Power Vault®, McDowell Research®, RPS™, SWE Southwest Electronic Energy Group®, SWE DRILL-DATA®, and SWE SEASAFE®.

Manufacturing and Raw Materials

We manufacture our products from raw materials and component parts that we purchase. Our manufacturing facilities in Newark, New York are ISO 9001 and ISO 13485 certified. Our manufacturing facilities in Shenzhen, China are ISO 9001, ISO 1401 and ISO 13485 certified. Our manufacturing facility in Missouri City, Texas is ISO 9001 certified. Our manufacturing facilities in Virginia Beach, Virginia are ISO 9001 certified. Our manufacturing facilities in the United Kingdom are ISO 9001 and ISO 13485 certified.

We expect our future raw material purchases to fluctuate based on global demand of our products, our knowledge regarding the timing of customer orders, the related need to build inventory in anticipation of orders and actual shipment dates.

Battery & Energy Products

Our Newark, New York and Shenzhen, China facilities have the capacity to produce cylindrical cells, 9-volt batteries, and thin cells. Capacity, however, is also affected by demand for particular products, and product mix changes can produce bottlenecks in an individual operation, constraining overall capacity. We have acquired new machinery and equipment in areas where production bottlenecks have resulted in the past and we believe that we have sufficient capacity in these areas. We continually evaluate our requirements for additional capital equipment, and we believe that planned increases will be adequate to meet foreseeable customer demand.

Certain materials used in our products, other than rechargeable batteries, are available only from a single source or a limited number of sources. Additionally, we may elect to develop relationships with a single or limited number of sources for materials that are otherwise generally available. Although we believe that alternative sources are available to supply materials that could replace materials we use and that, if necessary, we would be able to redesign our products to make use of an alternative material, any interruption in our supply from any supplier that serves currently as our sole source could delay product shipments and adversely affect our financial performance and relationships with our customers. Although we have experienced interruptions of product deliveries by sole source suppliers, which have not had a material adverse effect on us, we cannot assure that they would not have an adverse effect on us in the future.

We believe that the raw materials and components utilized for our rechargeable batteries are readily available from many sources. Although we believe that alternative sources are available to supply materials and components that could replace materials or components we use, any interruption in our supply from any supplier that serves currently as our sole source could delay product shipments and adversely affect our financial performance and relationships with our customers.

Our Newark, New York facility has the capacity to produce significant volumes of rechargeable batteries. This operation generally assembles battery packs and chargers and is limited only by physical space and is not constrained by manufacturing equipment capacity which can accommodate significant additional volumes of product. Similarly, our China and United Kingdom facilities also have capacity to produce significant quantities of primary (non-rechargeable) and rechargeable batteries beyond current volumes and are not constrained by manufacturing equipment capacity. Our Missouri City, Texas facility has the capacity to produce significant quantities of primary battery packs and is not constrained by manufacturing equipment capacity.

The total carrying value of our Battery & Energy Products inventory, including raw materials, work in process and finished goods, amounted to approximately \$19,990 and \$14,007 as of December 31, 2019 and 2018, respectively. The year-over-year 43% increase primarily reflects our acquisition of SWE in May 2019 and the purchase of battery cells to service our backlog going into 2020. Management continuously monitors inventory levels in an effort to optimize such levels.

Communications Systems

In general, we believe that the raw materials and components utilized by us for our communications accessories and systems, including RF amplifiers, power supplies, cables, repeaters and integration kits, are available from many sources. Although we believe that alternative sources are available to supply materials and components that could replace materials or components we use, any interruption in our supply from any supplier that serves currently as our sole source could delay product shipments and adversely affect our financial performance and relationships with our customers.

Our Virginia Beach, Virginia facility has the capacity to produce communications products and systems. This operation generally assembles products and is limited only by physical space and is not constrained by manufacturing equipment capacity.

The total carrying value of our Communications Systems inventory, including raw materials, work in process and finished goods, amounted to approximately \$9,769 and \$8,836 as of December 31, 2019 and 2018, respectively. The year-over-year 11% increase primarily reflects components received in 2019 which will service our backlog going into 2020. Management continuously monitors inventory levels in an effort to optimize such levels.

Research and Development

We devote significant resources to research and development activities to improve the technological capabilities of our products and to design new products for customers' applications. We conduct our research and development in Newark, New York; Virginia Beach, Virginia; Tallahassee, Florida; Missouri City, Texas; Newcastle-under-Lyme, United Kingdom and Shenzhen, China. During 2019 and 2018, we expended \$8,025 and \$5,230, respectively, on research and development, including \$1,220 and \$722, respectively, on customer sponsored research and development activities, which are included in cost of goods sold. The year-over-year increase primarily reflects our acquisition of SWE in May 2019 and the timing of development and testing costs associated with our new products, including Vehicle Amplifier-Adaptor and power amplifier products for our Communications Systems business and new products for our Battery & Energy Products business. We expect that research and development expenditures in the future could increase by 10% or more over 2019 levels, based on current initiatives underway. These current initiatives include completing the development and testing of new battery and power solutions in our facilities in Newark, New York, Missouri City, Texas and Newcastle-under-Lyme, UK facilities; our Thionyl Chloride battery project in China and our integrated vehicle VAA systems for our Communications Systems business, and our expectation is that new product development will drive our growth. As in the past, we will continue to make funding decisions for our research and development efforts based upon strategic demand for customer applications.

Battery & Energy Products

We continue to internally develop non-rechargeable cells and batteries with the goal of broadening our product offering to our customers.

We continue to internally develop our rechargeable product portfolio, including batteries, battery management systems, cables and charging systems, as our customers' needs for portable power continue to grow and new technologies become available.

The U.S. government sponsors research and development programs, which Ultralife participates in, designed to improve the performance and safety of existing battery systems and to develop new battery systems.

Communications Systems

We continue to internally develop a variety of communications accessories and systems for the global defense market to meet the ever-changing demands of our customers.

Safety; Regulatory Matters; Environmental Considerations

Certain of the materials utilized in our batteries may pose safety problems if improperly used, stored, or handled. We have designed our batteries to minimize safety hazards both in manufacturing and use. Our batteries are subject to the regulations noted below, among others.

The transportation of non-rechargeable and rechargeable Lithium batteries is regulated in the U.S. by the Department of Transportation's Pipeline and Hazardous Materials Safety Administration ("PHMSA"), and internationally by the International Civil Aviation Organization ("ICAO") and corresponding International Air Transport Association ("IATA"), Dangerous Goods Regulations and the International Maritime Dangerous Goods Code ("IMDG"), and other country specific regulations. These regulations are based on the United Nations Recommendations on the Transport of Dangerous Goods Model Regulations and the United Nations Manual of Tests and Criteria. We currently ship our products pursuant to PHMSA, ICAO, IATA, IMDG and other country specific hazardous goods regulations. The regulations require companies to meet certain testing, packaging, labeling, marking and shipping paper specifications for safety reasons. We have not incurred, and do not expect to incur, any significant costs in order to comply with these regulations. We believe we comply with all current U.S. and international regulations for the shipment of our products, and we intend and expect to comply with any new regulations that are imposed. We have established our own testing facilities to ensure that we comply with these regulations. However, if we are unable to comply with any such new regulations, or if regulations are introduced that limit our or our customers' ability to transport our products in a cost-effective manner, this could have a material adverse effect on our business, financial condition and results of operations.

The European Union's Restriction of Hazardous Substances Directive ("the EU RoHS Directive") places restrictions on the use of certain hazardous substances in electrical and electronic equipment. All applicable products sold in the European Union market must pass RoHS compliance. While this directive does not apply to batteries and does not currently affect our defense products, should any changes occur in the directive that would affect our products, we intend and expect to comply with any new regulations that are imposed. However, we cannot assure that the cost of complying with such new regulations would not have a material adverse effect on us. Our commercial chargers are substantially in compliance with the EU RoHS Directive.

The European Union's Battery Directive "on batteries and accumulators and waste batteries and accumulators" (the "EU Battery Directive") is intended to cover all types of batteries regardless of their shape, volume, weight, material composition or use. It is aimed at reducing mercury, cadmium, lead and other metals in the environment by minimizing the use of these substances in batteries and by treating and re-using old batteries. The EU Battery Directive applies to all types of batteries except those used to protect European Member States' security, for military purposes, or sent into space. To achieve these objectives, the EU Battery Directive prohibits the marketing of some batteries containing hazardous substances. It establishes schemes aimed at high level of collection and recycling of batteries with quantified collection and recycling targets. The EU Battery Directive sets out minimum rules for producer responsibility and provisions with regard to labeling of batteries and their removability from equipment. The EU Battery Directive requires product markings for batteries and accumulators to provide information on capacity and to facilitate reuse and safe disposal. We currently ship our products pursuant to the requirements of the EU Battery Directive.

This EU Battery Directive requires that producers or importers of particular classes of electrical goods are financially responsible for specified collection, recycling, treatment and disposal of past and future covered products. This directive assigns levels of responsibility to companies doing business in European Union markets based on their relative market share. This directive calls on each European Union member state to enact enabling legislation to implement the directive. As additional European Union member states pass enabling legislation our compliance system should be sufficient to meet such requirements. Our current estimated costs associated with our compliance with these directives based on our current market share are not significant. However, we continue to evaluate the impact of these directives as European Union member states implement guidance, and actual costs could differ from our current estimates.

China's "Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products" ("China RoHS 2") provides a regulatory framework including hazardous substance restrictions similar to those imposed by the EU RoHS Directive. China RoHS 2 applies to methods for the control and reduction of pollution and other public hazards to the environment caused during the production, sale, and import of electrical and electronic products ("EEP") in China. The regulatory framework of China RoHS 2, also now references the updated marking and labeling requirements under Standard SJ/T 11364-2014 ("Marking Standard"). The methods under China RoHS 2 only apply to EEP placed in the marketplace in China. We believe our compliance system is sufficient to meet our requirements under China RoHS 2. Our current estimated costs associated with our compliance with this regulation based on our current market share are not significant. However, we continue to evaluate the impact of this regulation, and actual costs could differ from our current estimates.

National, state and local laws impose various environmental controls on the manufacture, transportation, storage, use and disposal of batteries and of certain chemicals used in the manufacture of batteries. Although we believe that our operations are in material compliance with current environmental regulations, there can be no assurance that changes in such laws and regulations will not impose costly compliance requirements on us or otherwise subject us to future liabilities, costs and expenses. There can be no assurance that additional or modified regulations relating to the manufacture, transportation, storage, use and disposal of materials used to manufacture our batteries or restricting disposal of batteries will not be imposed or that such regulations will not have a material adverse effect on our business, financial condition and results of operations. In 2019 and 2018, we spent approximately \$188 and \$266, respectively, on environmental compliance, including costs to properly dispose of potentially hazardous waste.

Since non-rechargeable and rechargeable Lithium battery chemistries react adversely with water and water vapor, certain of our manufacturing processes must be performed in a controlled environment with low relative humidity. Our Newark, New York and Shenzhen, China facilities contain dry rooms or glove box equipment, as well as specialized air-drying equipment.

In addition to the environmental regulations previously described, our products are subject to U.S. and international laws and regulations governing international trade and exports including but not limited to the International Traffic in Arms Regulations ("ITAR"), the Export Administration Regulations ("EAR") and trade sanctions against embargoed countries.

The ITAR is a set of United States government regulations that control the export and import of defense-related articles and services on the United States Munitions List. These regulations implement the provisions of the Arms Export Control Act, and are described in the Code of Federal Regulations. The Department of State Directorate of Defense Trade Controls interprets and enforces ITAR. Its goal is to safeguard U.S. national security and further U.S. foreign policy objectives.

The related EAR are enforced and interpreted by the Bureau of Industry and Security in the Commerce Department. The Department of Defense is also involved in the review and approval process. Inspections in support of import and export laws are performed at border crossings by Customs and Border Protection, an agency of the Department of Homeland Security.

Products and services developed and manufactured in our foreign locations are subject to the export and import controls of the nation in which the foreign location operates.

We believe we are in material compliance with these domestic and international export regulations. However, failure of compliance could have a material adverse effect on our business through possible fines, denial of export privileges, or loss of customers. Further, while we are not aware of any proposed changes to these regulations, any change in the scope or enforcement of export or import regulations or related legislation could have a material adverse effect on our business through increased costs of compliance or reduction in the international growth prospects available to us.

Based upon our current sales volumes, our future estimated costs associated with our compliance with ITAR, EAR, and the foreign export and import controls are not significant. However, we continue to evaluate the impact of these regulations, and actual costs could differ from our current estimates.

Battery & Energy Products

Our non-rechargeable battery products incorporate Lithium metal, which reacts with water and may cause fires if not handled properly. In the past, we have experienced fires that have temporarily interrupted certain manufacturing operations. We believe that we have adequate fire suppression systems and insurance, including business interruption insurance, to protect against the occurrence of fires and fire losses in our facilities.

Our 9-volt battery, among other sizes, is designed to conform to the dimensional and electrical standards of the American National Standards Institute. Authorized certification bodies such as Underwriters Laboratories, Intertek and SGS recognize several of our products.

Communications Systems

We are not currently aware of any regulatory requirements regarding the disposal of communications products.

Corporate

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 Section 1502 (the “Dodd-Frank Act”) requires public companies to disclose whether tantalum, tin, gold and tungsten, commonly known as “conflict minerals,” are necessary to the functionality or production of a product manufactured by a public company and if those elements originated from armed groups in the Democratic Republic of Congo or adjoining countries. To comply with the Dodd-Frank Act, as implemented by SEC rules, we are required to perform due diligence inquiries of our suppliers to determine whether or not our products contain such minerals and from which countries and source (smelter) the minerals were obtained. Our annual report on Form SD was filed by the statutory due date of June 1, 2019 for the 2018 calendar year and we continue to utilize appropriate measures with our suppliers in order to better ascertain the origin of the conflict minerals in our products.

Competition

Competition in both the battery and communications systems markets is, and is expected to remain, intense. The competition ranges from development stage companies to major domestic and international companies, many of which have financial, technical, marketing, sales, manufacturing, distribution and other resources significantly greater than ours. We compete against companies producing batteries as well as companies producing communications systems. We compete on the basis of design flexibility, performance, price, reliability and customer support. There can be no assurance that our technologies and products will not be rendered obsolete by developments in competing technologies or services that are currently under development or that may be developed in the future or that our competitors will not market competing products and services that obtain market acceptance more rapidly than ours.

Historically, although other entities may attempt to take advantage of the growth of the battery market, the Lithium battery cell industry has certain technological and economic barriers to entry. The development of technology, equipment and manufacturing techniques and the operation of a facility for the automated production of Lithium battery cells require large capital expenditures, which may deter new entrants from commencing production. Through our experience in battery cell manufacturing, we have also developed significant production and design expertise in the non-rechargeable battery market, which we believe would be difficult for new entrants to reproduce without substantial time and expense.

Employees

As of December 31, 2019, we employed a total of 573 permanent and temporary employees: 39 in research and development, 455 in production and 79 in sales and administration. None of our employees are represented by a labor union.

ITEM 1A. RISK FACTORS

Our business faces many risks. As such, prospective investors and shareholders should carefully consider and evaluate all of the risk factors described below as well as other factors discussed in this Annual Report on Form 10-K and in our other filings with the SEC. Any of these factors could adversely affect our business, financial condition and results of operations. Additional risks and uncertainties that are not currently known to us or that are not currently believed by us to be material may also harm our business operations and financial results. These risk factors may change from time to time and may be amended, supplemented, or superseded by updates to the risk factors contained in periodic reports on Form 10-Q and Form 10-K that we file with the SEC in the future.

A significant portion of our revenues is derived from certain key customers.

We have two customers, Thales Defense & Security, Inc. and L3Harris Technologies, both large defense primary contractors, which comprised 14% and 12% of our total revenues in 2019, respectively, and 7% and 16% of our total revenues in 2018, respectively. There were no other customers that comprised greater than 10% of our total revenues during these years. While we consider our relationship with our major customers to be good, the reduction, delay or cancellation of orders from these customers or their insolvency / inability to pay, for any reason, would reduce our revenue and operating income and could materially and adversely affect our business, operating results and financial condition in other ways.

A decline in demand for products using our batteries or communications systems could reduce demand for our products and/or our products could become obsolete resulting in lower revenues and profitability.

A substantial portion of our business depends on the continued demand for products using our batteries and communications systems sold by our customers, including original equipment manufacturers. Our success depends significantly upon the success of those customers' products in the marketplace. We are subject to many risks beyond our control that influence the success or failure of a particular product or service offered by a customer, including:

- competition faced by the customer in its particular industry,
- market acceptance of the customer's product or service,
- the engineering, sales, marketing and management capabilities of the customer,
- technical challenges unrelated to our technology or products faced by the customer in developing its products or services, and
- the financial and other resources of the customer.

The market for our products is characterized by changing technology and evolving industry standards, often resulting in product obsolescence or short product lifecycles. Although we believe that our products utilize state-of-the-art technology, there can be no assurance that competitors will not develop technologies or products that would render our technologies and products obsolete or less marketable. Many of the companies with which we compete with have substantially greater resources than we do, and some have the capacity and volume of business to be able to produce their products more efficiently than we can. In addition, these companies are developing or have developed products using a variety of technologies that are expected to compete with our technologies. Furthermore, we have noted an increase in foreign competition, especially in Asia, over the last several years which tend to compete on price in the battery industry. If these companies successfully market their products in a manner that renders our technologies obsolete, this would reduce our revenue and operating income and could have other material adverse effects on our business, financial condition and results of operations.

Our operations in China are subject to unique risks and uncertainties, including political shifts, tariffs and trade restrictions.

Our operating facility in China presents risks including, but not limited to, changes in local regulatory requirements, changes in labor laws, local wage laws, environmental regulations, taxes and operating licenses, compliance with U.S. regulatory requirements, including the Foreign Corrupt Practices Act, uncertainties as to application and interpretation of local laws and enforcement of contract and intellectual property rights, currency restrictions, currency exchange controls, fluctuations of currency, and currency revaluations, eminent domain claims, civil unrest, power outages, water shortages, labor shortages, labor disputes, increase in labor costs, rapid changes in government, economic and political policies, political or civil unrest, acts of terrorism, or the threat of boycotts, other civil disturbances, the continued impact of the imposition of tariffs by the U.S. Government on 9-Volt batteries that we manufacture in China as well as any retaliating trade policies or restrictions, and an outbreak of a contagious disease which may cause us or our suppliers and/or customers to temporarily suspend operations in the affected city. Any such disruptions could depress our earnings and have other material adverse effects on our business, financial condition and results of operations.

For example, during 2014 the landlord for our China facility informed us that the local village government in Shenzhen was exercising its right of eminent domain and that the lease for our facility would not be extended past its expiration in October 2014 due to zoning changes. Accordingly, we developed and executed a plan which we completed in 2015. Under the plan we found a replacement facility, entered into an initial five-year lease, negotiated compensation from the local government for our forfeited leasehold improvements and moving expenses, refurbished the replacement facility to meet our operational needs and relocated all of our operations and employees to the new facility. While this situation was handled on time, on plan and with no known disruption to our business, there can be no assurances that other situations posing such risks to the business will be successfully remediated to the same extent.

We may incur significant costs or liabilities to satisfy obligations under the terms of the warranties we supply and the contractual terms under which we sell our products and services.

With respect to our battery products, we typically offer warranties against any defects in manufacture or workmanship for a period up to one year from the date of purchase. With respect to our communications systems products, we now offer up to a three-year warranty. We provide for a reserve for these potential warranty expenses, which is based on an analysis of historical warranty issues. There is no assurance that future warranty claims will be consistent with past history, and in the event we experience a significant increase in warranty claims, there is no assurance that our reserves will be sufficient. Excessive warranty claims could have a material adverse effect on our business, financial condition and results of operations.

Our supply of raw materials and components could be disrupted or delayed due to business conditions, weather, or other factors out of our control, or the cost of those raw materials and components may materially increase.

Certain materials and components used in our products are available only from a single or a limited number of suppliers. As such, some materials and components could become in short supply resulting in limited availability and/or increased costs. Additionally, we may elect to develop relationships with a single or limited number of suppliers for materials and components that are otherwise generally available. Due to our supplying defense products to the U.S. government, we could receive a government preference to continue to obtain critical supplies to meet military production needs. However, if the government did not provide us with a government preference in such circumstances, the difficulty in obtaining supplies could have a material adverse effect on our business, financial condition and results of operations. We believe that alternative suppliers are available to supply materials and components that could replace materials and components currently used and that, if necessary, we would be able to redesign our products to make use of such alternatives. However, any interruption in the supply from any supplier that serves as a sole source could delay product shipments and have a material adverse effect on our business, financial condition and results of operations. We have experienced interruptions of product deliveries by sole source suppliers in the past, and we cannot guarantee that we will not experience a material interruption of deliveries from sole source suppliers in the future. Of particular note is the increased demand for Lithium-based cells from the electric vehicle manufacturers. While this has resulted in increased supply of such cells, we continue to monitor our supply chain closely to ensure that any potential supply interruptions are minimized.

With the improvement of the U.S. economy, our lead times for certain critical components from our suppliers could be extended resulting in shipping delays causing us to miss contractual timelines. Our internal purchasing process is focused on the current economic environment, and lead times are considered when placing orders from our vendors, but we cannot control the ability of our vendors or potential vendors to be qualified to meet our deadlines.

Additionally, we could face increasing pricing pressure from our suppliers dependent upon volume due to rising costs by these suppliers that could be passed on to us in higher prices for our raw materials, which could increase our cost of business, lower our margins and have other materially adverse effects on our business, financial condition and results of operations.

Our efforts to develop new products or new commercial applications for our products could be prolonged or could fail.

Although we develop certain products for new commercial applications, we cannot assure that these new products will be accepted due to the highly competitive nature of the industry. There are many new product and technology entrants into the markets into which we sell our products, and we must continually reassess the markets in which our products can be successful and seek to engage customers in those markets that will adopt our products for use in their products. In addition, these customers must be successful with their products in their markets for us to gain increased business. Increased competition, failure to gain customer acceptance of products, the introduction of competitive technologies or failure of our customers in their markets could have a further adverse effect on our business and reduce our revenue and operating income.

Reductions or delays in U.S. and foreign military spending could have a material adverse effect on our business, financial condition and results of operations.

A significant portion of our revenues is derived from contracts with the U.S. and foreign militaries or OEMs that supply the U.S. and foreign militaries. In the years ended December 31, 2019 and 2018, approximately \$47,100 or 44% and \$46,100 or 53%, respectively, of our revenues were comprised of sales made directly or indirectly to the U.S. and foreign militaries.

While significant gains have been made in commercial markets with our Battery & Energy Products business, we are still highly dependent on sales to U.S. Government customers. The amounts and percentages of our net revenue that were derived from sales to U.S. Government customers, including the Department of Defense, whether directly or through prime contractors, was approximately \$41,300 or 39% in 2019 and \$39,900 or 46% in 2018. Therefore, any significant disruption or deterioration of our relationship with the U.S. Government or any prime defense contractor could significantly reduce our revenue. Our competitors continuously engage in efforts to expand their business relationships with the U.S. Government and will continue these efforts in the future, and the U.S. Government may choose to use other contractors or suppliers.

Budget and appropriations decisions made by the U.S. Government, including possible future sequestration periods or other similar formulaic reductions in federal expenditures, are outside of our control and have long-term consequences for our business. A decline in U.S. military expenditures could result in a reduction in the military's demand for our products, which could have a material adverse effect on our business, financial condition and results of operations.

Breaches in security, whether cyber or physical, and other disruptions and/or our inability to prevent or respond to such breaches, could diminish our ability to generate revenues or contain costs, compromise our assets, and negatively impact our business in other ways.

We face certain security threats, including threats to our information technology infrastructure, attempts to gain access to our proprietary or classified information, and threats to physical and cyber security. Our information technology networks and related systems are critical to the operation of our business and essential to our ability to successfully perform day-to-day operations. The risks of a security breach, cyber-attack, cyber intrusion, or disruption, particularly through actions taken by computer hackers, foreign governments and cyber terrorists, have increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. Although we have acquired and developed systems and processes designed to protect our proprietary or classified information, they may not be sufficient and the failure to prevent these types of events could disrupt our operations, require significant management attention and resources, and could negatively impact our reputation among our customers and the public, which could have a negative impact on our financial condition, and weaken our results of operations and liquidity. In 2017, we formed a cyber security executive management committee with oversight responsibility to minimize the risk of breaches. In 2018, the Committee with the assistance of outside security consultants completed a comprehensive Systems Security Plan ("SSP") and a Plan of Action Memorandum ("POAM") in compliance with the requirements of National Institute of Standards and Technology ("NIST") Special Publication 800-171, Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations. In 2019, the Company made further progress in implementing many of the security measures in our SSP and POAM, including increasing the security awareness across our employee base. The Committee continues to review all key aspects of cyber security utilizing our outside security consultants to ensure a robust plan is in place and provides quarterly updates to our Board.

Our quarterly and annual results and the price of our common stock could fluctuate significantly.

Our future operating results may vary significantly from quarter-to-quarter and from year-to-year depending on factors such as the timing and shipment of significant orders, new product introductions, the transition of new products to higher-volume production, major project wins, U.S. and foreign government demand, delays in customer releases of purchase orders, delays in receiving raw materials from vendors, the mix of distribution channels through which we sell our products and services and general economic conditions. Frequently, a substantial portion of our revenue in each quarter is generated from orders booked and fulfilled during that quarter. As a result, revenue levels are difficult to predict for each quarter. If revenue results are below expectations, operating results will be adversely affected as we have a sizeable base of fixed overhead costs that do not fluctuate much with changes in revenue. Due to such variances in operating results, we have sometimes failed to meet, and in the future may not meet, market expectations regarding our future operating results.

In addition to the uncertainties of quarterly and annual operating results, future announcements concerning us or our competitors, including technological innovations or commercial products, litigation or public concerns as to the safety or commercial value of one or more of our products may cause the market price of our common stock to fluctuate substantially, all of which may be unrelated to our operating results.

Our entrance into new markets could lead to additional exposure to financial risk or increased liability, and our failure to enter into those markets could lead to negative customer perception or loss of business from existing customers.

Our new products supporting our commercial diversification strategy will likely result in the introduction of our products in new end markets that we have not participate in before. These new market opportunities may carry certain risks that we may not have experienced in the past or that we may be fully aware. While we perform intensive due diligence in the launch of our products in new end markets and mitigate our risks with our contracts and insurance coverage, we may not be fully aware of the risks that may exist until we gain more experience in these markets.

Fluctuations in the price of oil & gas and the resulting volatility in the level of downhole drilling could have a material adverse effect on our business, financial condition and results of operations.

The pricing ups and downs typically encountered in the oil & gas industry, especially over the past few years, have placed financial strain not only on the producers, but also the companies that provide oilfield services and equipment to them. The cyclical nature in this industry, whether driven by geopolitical developments; international tensions; supply and demand economics; the introduction of new global, national, and industry-specific regulations; and technology, is an ongoing reality. A significant downturn in the price of oil resulting in a decrease in downhole drilling could have an impact on our financial results. In response, we would expect to mitigate a portion, but not all of this risk, by seeking product/market diversification including subsea electrification.

We are subject to certain safety risks, including the risk of fire, inherent in the manufacture, use and transportation of Lithium batteries.

Due to the high energy inherent in Lithium batteries, our Lithium batteries can pose certain safety risks, including the risk of fire. We incorporate procedures in research, development, product design, manufacturing processes and the transportation of Lithium batteries that are intended to minimize safety risks, but we cannot assure that accidents will not occur or that our products will not be subject to recall for safety concerns. Although we currently carry insurance policies which cover loss of plant and machinery, leasehold improvements, inventory and business interruption, any accident, whether at the manufacturing facilities or from the use of the products, may result in significant production delays or claims for damages resulting from injuries or death. While we maintain what we believe to be sufficient casualty liability coverage to protect against such occurrences, these types of losses could reduce our available cash and our operating and net income and have other material adverse effects on our reputation, business, financial condition and results of operation.

The loss of top management and key personnel could significantly harm our business, and our ability to put in place a succession plan and recruit experienced, competent management is critical to the success of the business.

The continuity of our officers and executive team is vital to the successful implementation of our business model and growth strategy designed to deliver sustainable, consistent profitability. A top management priority has been the development and implementation of a formal written succession plan to mitigate the risks associated with the loss of senior executives. This formal succession plan is updated annually and presented to our Board of Directors. There is no guarantee that we will be successful in our efforts to effectively implement our succession plan.

Because of the specialized, technical nature of our business, we are highly dependent on certain members of our management, sales, engineering and technical staffs. The loss of these employees could have a material adverse effect on our business, financial condition and results of operations. Our ability to effectively pursue our business strategy will depend upon, among other factors, the successful retention of our key personnel, recruitment of additional highly skilled and experienced managerial, sales, engineering and technical personnel, and the integration of such personnel obtained through business acquisitions. We cannot assure that we will be able to retain or recruit this type of personnel. An inability to hire sufficient numbers of people or to find people with the desired skills could result in greater demands being placed on limited management resources which could delay or impede the execution of our business plans and have other material adverse effects on our business, financial condition and results of operations.

Our growth and expansion strategy could strain or overwhelm our resources.

Rapid growth of our business could significantly strain management, operations and technical resources. If we are successful in obtaining rapid market growth of our products, we will likely be required to deliver large volumes of quality products to customers on a timely basis at a reasonable cost. For example, demand for our new or existing products combined with our ability to penetrate new markets and geographies or secure a major project award, could strain the current capacity of our manufacturing facilities and require additional capital resources, equipment and time to meet the required demand. We cannot assure, however, that our business will grow rapidly or that our efforts to expand manufacturing and quality control activities will be successful or that we will be able to satisfy commercial scale production requirements on a timely and cost-effective basis.

We also may be required to continue to improve our operations, management and financial systems and controls in order to remain competitive. The failure to manage growth and expansion effectively could have an adverse effect on our business, financial condition, and results of operations. We address these risks in the annual update of our three-year Strategic Plan which is presented to our Board of Directors.

Any inability to comply with changes to the regulations for the shipment of our products could limit our ability to transport our products to customers in a cost-effective manner and reduce our operating income and margins.

The transportation of Lithium batteries is regulated by the International Civil Aviation Organization (“ICAO”) and corresponding International Air Transport Association (“IATA”) Dangerous Goods Regulations and the International Maritime Dangerous Goods Code (“IMDG”) and in the U.S. by the Department of Transportation’s Pipeline and Hazardous Materials Safety Administration (“PHMSA”). These regulations are based on the United Nations Recommendations on the Transport of Dangerous Goods Model Regulations and the United Nations Manual of Tests and Criteria. We currently ship our products pursuant to ICAO, IATA and PHMSA hazardous goods regulations. These regulations require companies to meet certain testing, packaging, labeling and shipping specifications for safety reasons. We have not incurred, and do not expect to incur, any significant costs in order to comply with these regulations. We believe we comply with all current U.S. and international regulations for the shipment of our products, and we intend and expect to comply with any new regulations that are imposed. We have established our own testing facilities to ensure that we comply with these regulations. If we are unable to comply with the new regulations, however, or if regulations are introduced that limit our ability to transport our products to customers in a cost-effective manner, this could reduce our operating income and margins, and have other material adverse effects on our business, financial condition and results of operations.

Our customers may not meet the volume expectations in our supply agreements.

We sell most of our products and services through supply agreements and contracts. While supply agreements and contracts contain volume-based pricing based on expected volumes, we cannot assure that adjustments to reflect volume shortfalls will be made under current industry practices because pricing is rarely adjusted retroactively when contract volumes are not achieved. Every effort is made to adjust future prices accordingly, but our ability to adjust prices is generally based on market conditions and we may not be able to adjust prices in various circumstances.

Any impairment of goodwill and indefinite-lived intangible assets, and other intangible assets, could negatively impact our results of operations.

Our goodwill and indefinite-lived intangible assets are subject to an impairment test on an annual basis and are also tested whenever events and circumstances indicate that goodwill and other indefinite-lived intangible assets may be impaired. Any excess goodwill and/or indefinite-lived intangible assets value resulting from the impairment test must be written off in the period of determination. Intangible assets (other than goodwill and indefinite-lived intangible assets) are generally amortized over the useful life of such assets. In addition, from time to time, we may acquire or make an investment in a business which will require us to record goodwill based on the purchase price and the value of the acquired tangible and intangible assets. We may subsequently experience unforeseen issues with an acquisition which may adversely affect the anticipated results of the business or value of the intangible assets and trigger an evaluation of the recoverability of the recorded goodwill and intangible assets for such business. There is a possibility that our goodwill and other intangible assets could be impaired should there be a significant change in our internal forecasts and other assumptions we use in our impairment analysis. Future determinations of significant write-offs of goodwill or intangible assets as a result of an impairment test or accelerated amortization of other intangible assets could have a negative impact, although not affecting cash, on our results of operations.

Negative publicity of Lithium ion batteries may negatively impact the industries or markets we operate in.

We are unable to predict the impact, severity or duration of negative publicity related to fire/mishandling of Lithium ion batteries or the environmental impact of their disposal, and how it may impact the industries or markets we serve. Ongoing negative attention being given to Lithium ion batteries that are used in certain cellular phones or are integrated into the power systems of new commercial aircraft and electric motor vehicles may have an impact on the Lithium ion battery industry as a whole, regardless of the design or usage of those batteries. The residual effects of such events could have an adverse effect on our business, financial condition, and results of operations.

We are subject to foreign currency fluctuations.

We maintain manufacturing operations in North America, Europe and China, and we export products to various countries. We purchase materials and sell our products in foreign currencies, and therefore currency fluctuations may impact our pricing of products sold and materials purchased. Sales to non-U.S. customers make up a significant percentage of our total revenues. For example, the percentage of our business with customers outside of the U.S. slightly increased in 2019 to 41% compared to 39% in 2018. A future strengthening of the U.S. Dollar relative to our customers' currencies could make our products relatively more expensive to them, and may adversely affect our sales levels and reduce profitability. In addition, our United Kingdom and China subsidiaries maintain their books in local currency and the translation of the subsidiary financial statements into U.S. dollars for our consolidated financial statements could have an adverse effect on our consolidated financial results due to changes in local currency value relative to the U.S. dollar. With the rapid pace of geopolitical events, it is difficult at this time to assess any future impact to the Company, despite our proactive efforts to minimize the short-term risks of currency fluctuations. Accordingly, currency fluctuations could have a material adverse effect on our business, financial condition and results of operations by increasing our expenses and reducing our income. Finally, we maintain certain domestic U.S. cash balances denominated in foreign currencies, and the U.S. dollar equivalent of these balances fluctuates with changes in the foreign exchange rates between these currencies and the U.S. dollar.

A finding that our proprietary and intellectual property rights are not enforceable or invalid could allow our competitors and others to produce competing products based on our proprietary and intellectual property or limit our ability to continue to manufacture and market our products.

We believe our success depends more on the knowledge, ability, experience and technological expertise of our employees than on the legal protection of patents and other proprietary rights. However, we claim proprietary rights in various unpatented technologies, know-how, trade secrets and trademarks relating to our products and manufacturing processes. We cannot guarantee the degree of protection these various claims may or will afford, or that competitors will not independently develop or patent technologies that are substantially equivalent or superior to our technology. We protect our proprietary rights in our products and operations through contractual obligations, including nondisclosure agreements with certain employees, customers, consultants and strategic partners. There can be no assurance as to the degree of protection these contractual measures may or will afford. We have had patents issued and have patent applications pending in the U.S. and elsewhere. We cannot assure (1) that patents will be issued from any of these pending applications, or that the claims allowed under any issued patents will be sufficiently broad to protect our technology, (2) that any patents issued to us will not be challenged, invalidated or circumvented, or (3) as to the degree or adequacy of protection any patents or patent applications may or will afford. Further, if we are found to be infringing third party patents, we cannot assure that we will not be subjected to significant damages or will be able to obtain licenses with respect to such patents on acceptable terms, if at all. The failure to obtain necessary licenses could delay product shipments or the introduction of new products, and costly attempts to design around such patents could foreclose the development, manufacture or sale of products.

We are subject to the contract rules and procedures of the U.S. and foreign governments. These rules and procedures create significant risks and uncertainties for us that are not usually present in contracts with private parties.

We continue to develop battery products and communications systems to meet the needs of the U.S. and foreign governments. We compete in solicitations for awards of contracts. The receipt of an award, however, does not always result in the immediate release of an order and does not guarantee in any way any given volume of orders. Any delay of solicitations or anticipated purchase orders by, or future failure of, the U.S. or foreign governments to purchase products manufactured by us could have a material adverse effect on our business, financial condition and results of operations. In these scenarios we are also typically required to successfully meet contractual specifications and to pass various qualification-testing for the products under contract. Our inability to pass these tests in a timely fashion, as well as meet delivery schedules for orders released under contract, could have a material adverse effect on our business, financial condition and results of operations.

Additionally, when a U.S. government contract is awarded, there is a government procedure that permits unsuccessful companies to formally protest such award if they believe they were unjustly treated in the evaluation process. As a result of these protests, the government is precluded from proceeding under these contracts until the protests are resolved. A prolonged delay in the resolution of a protest, or a reversal of an award resulting from such a protest could have material adverse effects on our business, financial condition and results of operations.

Our ability to use our net operating loss and tax credit carryforwards in the future may be limited, which could increase our tax liabilities and reduce our cash flow and net income.

At December 31, 2019, we had approximately \$58,400 of U.S. net operating loss carryforwards and \$1,907 of U.S. tax credit carryforward available to offset future taxable income, as well as net operating loss carryforwards of \$10,600 in the U.K. We continually assess the carrying value of these assets based on the relevant accounting standards. At December 31, 2018, the Company recognized the release of the valuation allowance on our net operating loss carryforwards and other U.S. deferred tax assets on the basis of management's assessment. Based on the results of our assessment, management concluded that, due to projected profitability, it is more likely than not that our U.S. deferred tax assets will be fully realized. While we achieved profitable growth in 2019 for the fifth consecutive year, failure to achieve our business targets could result in future charges to our income tax provision if any of the net operating loss or tax credit carryforwards are not utilized. See discussion in Management's Discussion & Analysis on Page 26.

We could be adversely affected by violations of the US Foreign Corrupt Practices Act ("FCPA"), the U.K. Bribery Act or other anti-corruption laws.

The FCPA, U.K. Bribery Act and other anti-corruption laws generally prohibit companies and their intermediaries from making improper payments (to foreign officials and otherwise) and require companies to keep accurate books and records and maintain appropriate internal controls. Our training program and policies mandate compliance with such laws. We operate in some parts of the world that have experienced governmental corruption to some degree, and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. If we are found to be liable for violations of anti-corruption laws (either due to our own acts or our inadvertence, or due to the acts or inadvertence of others, including employees of our third party partners or agents), we could suffer from civil and criminal penalties or other sanctions, incur significant internal investigation costs and suffer reputational harm.

Compliance with government regulations regarding the use of "conflict minerals" may result in increased costs and risks to the Company.

As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Act"), the SEC has promulgated disclosure requirements regarding the use of certain minerals, which are mined from the Democratic Republic of Congo and adjoining countries, known as conflict minerals. The disclosure rules were effective in May 2014. We are required to perform due diligence inquiries of our supply chain and publicly disclose whether we manufacture (as defined in the Act) any products that contain conflict minerals and could incur significant costs related to implementing a process that will meet the mandates of the Act. Additionally, customers typically rely on us to provide critical data regarding the parts they purchase, including conflict mineral information. Our material sourcing is broad-based and multi-tiered, and we may not be able to easily verify the origins for conflict minerals used in the products we sell. We have many suppliers and each provides conflict mineral information in a different manner, if at all. Accordingly, because the supply chain is complex, we may face reputational challenges if we are unable to sufficiently verify the origins of conflict minerals used in our products. Additionally, customers may demand that the products they purchase be free of conflict minerals. This may limit the number of suppliers that can provide products in sufficient quantities to meet customer demand or at competitive prices.

The U.S. and foreign governments can audit our contracts with their respective defense and government agencies and, under certain circumstances, can adjust the economic terms, delivery schedule or other terms of those contracts.

A portion of our business comes from sales of products and services to the U.S. and foreign governments through various contracts. These contracts are subject to procurement laws and regulations that lay out policies and procedures for acquiring goods and services. The regulations also contain guidelines for managing contracts after they are awarded, including conditions under which contracts may be terminated, in whole or in part, at the government's convenience or for default. Failure to comply with the procurement laws or regulations can result in civil, criminal or administrative proceedings involving fines, penalties, suspension of payments, or suspension or disbarment from government contracting or subcontracting for a period of time.

We may incur significant costs because of known and unknown environmental matters.

National, state and local laws impose various environmental controls on the manufacture, transportation, storage, use and disposal of batteries and of certain chemicals used in the manufacture of batteries. We use and generate a variety of chemicals and other hazardous by-products in our manufacturing operations. These environmental laws govern, among other things, air emissions, wastewater discharges and the handling, storage and release of wastes and hazardous substances. Such laws and regulations can be complex and are subject to change. Although we believe that our operations are in substantial compliance with current environmental regulations and that, except as noted below, there are no environmental conditions that will require material expenditures for clean up at our present or former facilities or at facilities to which we have sent waste for disposal, there can be no assurance that changes in such laws and regulations will not impose costly compliance requirements on us or otherwise subject us to future liabilities. There can be no assurance that additional or modified regulations relating to the manufacture, transportation, storage, use and disposal of materials used to manufacture our batteries or restricting disposal of batteries will not be imposed, or as to how these regulations will affect our customers or us. Such changes in regulations could reduce our operating income and margins and have other material adverse effects on our business, financial condition and results of operations. We could incur substantial costs as a result of violations of environmental laws, including clean-up costs, fines and sanctions and third-party property damage or personal injury claims. Failure to comply with environmental requirements could also result in enforcement actions that materially limit or otherwise affect the operations of the facilities involved. Under certain environmental laws, a current or previous owner or operator of an environmentally contaminated site may be held liable for the entire cost of investigation, removal or remediation of hazardous materials at such property. This liability could result whether or not the owner or operator knew of, or was responsible for, the presence of any hazardous materials.

The EU RoHS Directive places restrictions on the use of certain hazardous substances in electrical and electronic equipment. All applicable products sold in the European Union market after July 1, 2006 must comply with EU RoHS Directive. While this directive does not apply to batteries and does not currently affect our defense products, should any changes occur in the directive that would affect our products, we intend and expect to comply with any new regulations that are imposed. Our commercial chargers are in compliance with this directive. Additional European Union directives, entitled the Waste Electrical and Electronic Equipment (“WEEE”) Directive and the Directive "on batteries and accumulators and waste batteries and accumulators", impose regulations affecting our non-defense products. These directives require that producers or importers of particular classes of electrical goods are financially responsible for specified collection, recycling, treatment and disposal of past and future covered products. These directives assign levels of responsibility to companies doing business in European Union markets based on their relative market share. These directives call on each European Union member state to enact enabling legislation to implement the directive. As additional European Union member states pass enabling legislation our compliance system should be sufficient to meet such requirements. Our current estimated costs associated with our compliance with these directives based on our current market share are not significant. However, we continue to evaluate the impact of these directives as European Union member states implement guidance, and actual costs could differ from our current estimates.

The EU Battery Directive is intended to cover all types of batteries regardless of their shape, volume, weight, material composition or use. It is aimed at reducing mercury, cadmium, lead and other metals in the environment by minimizing the use of these substances in batteries and by treating and re-using old batteries. This directive applies to all types of batteries except those used to protect European Member States' security, for military purposes, or sent into space. To achieve these objectives, the EU Battery Directive prohibits the marketing of some batteries containing hazardous substances. It establishes processes aimed at high levels of collection and recycling of batteries with quantified collection and recycling targets. The directive sets out minimum rules for producer responsibility and provisions with regard to labeling of batteries and their removability from equipment. Product markings are required for batteries and accumulators to provide information on capacity and to facilitate reuse and safe disposal. We currently ship our products pursuant to the requirements of the directive. Our current estimated costs associated with our compliance with these directives based on our current market share are not significant. However, we continue to evaluate the impact of these directives as European Union member states implement guidance, and actual costs could differ from our current estimates.

The China RoHS 2 directive provides a regulatory framework, including similar hazardous substance restrictions as are imposed by the EU RoHS Directive, and applies to methods for the control and reduction of pollution and other public hazards to the environment caused during the production, sale, and import of EEP in China affecting a broad range of electronic products and parts. The regulatory framework of China RoHS 2, also now references the updated marking and labeling requirements under Standard SJ/T 11364-2014 (“Marking Standard”). The methods under China RoHS 2 only apply to EEP placed in the marketplace in China. We believe our compliance system is sufficient to meet our requirements under China RoHS 2. Our current estimated costs associated with our compliance with this regulation based on our current market share are not significant. However, we continue to evaluate the impact of this regulation, and actual costs could differ from our current estimates.

A number of domestic and international communities are prohibiting the landfill disposal of batteries and requiring companies to make provisions for product recycling. Of particular note are the EU Batteries Directive and the New York State Rechargeable Battery Recycling Law. We are committed to responsible product stewardship and ongoing compliance with these and future statutes and regulations. The compliance costs associated with current recycling statutes and regulations are not expected to be significant at this time. However, we continue to evaluate the impact of these regulations, and actual costs could differ from our current estimates and additional laws could be enacted by these and other states which entail greater costs of compliance.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

As of December 31, 2019, we own two buildings in Newark, New York comprising approximately 250,000 square feet, which serve operations primarily in the Battery & Energy Products operating segment. Our corporate headquarters are located in our Newark, New York facility. We own one building in Missouri City, Texas comprising 69,000 square feet, which houses our recently acquired SWE business. We also lease approximately 97,000 square feet in two buildings on one campus in Shenzhen, China and approximately 25,000 square feet in six buildings in a contiguous area in Newcastle-under-Lyme, United Kingdom, which serve operations in the Battery & Energy Products operating segment. The Shenzhen, China campus location includes a dormitory facility. We lease approximately 32,500 square feet in a facility in Virginia Beach, Virginia, which serves operations in the Communications Systems operating segment. We also lease sales and administrative offices, as well as manufacturing and production facilities, in India, which serve operations in the Battery & Energy Products operating segment. Our research and development efforts for our Battery & Energy Products are conducted at our Newark, New York, Missouri City, Texas, Newcastle-under-Lyme, United Kingdom and Shenzhen, China facilities, while our research and development efforts for our Communications Systems products are conducted in our leased facilities in Tallahassee, Florida and in Virginia Beach, Virginia. We believe that our facilities are adequate and suitable for our current needs. However, we may require additional manufacturing and administrative space if demand for our products and services grows.

ITEM 3. LEGAL PROCEEDINGS

We are subject to legal proceedings and claims that arise from time to time in the normal course of business. We believe that the final disposition of any such matters will not have a material adverse effect on the Company's financial position, results of operations or cash flows. However, recognizing that legal matters are subject to inherent uncertainties, there exists the possibility that ultimate resolution of these matters could have a material adverse impact on the Company's financial position, results of operations or cash flows in the period in which any such effects are recorded. We are not aware of any such situations at this time.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market Information

Ultralife's common stock is listed on the NASDAQ Global Market under the symbol "ULBI."

Holder

As of February 6, 2020, there were approximately 3,200 registered holders of record of our common stock.

Purchases of Equity Securities by the Issuer

On October 31, 2018, the Company's Board of Directors approved a share repurchase program (the "Share Repurchase Program") which became effective on November 1, 2018 and under which the Company was authorized to repurchase up to 2.5 million shares of its outstanding common stock over a period not to exceed twelve months. The Share Repurchase Program concluded on October 31, 2019.

Share repurchases under this program were made in accordance with SEC Rule 10b-18 using a variety of methods, which included open market purchases and block trades in compliance with applicable insider trading and other securities laws and regulations. With the exception of repurchases made during stock trading black-out periods under 10b5-1 Plans, the timing, manner, price and amount of any repurchases were determined at the Company's discretion.

From the inception of the Share Repurchase Program on November 1, 2018 through its conclusion on October 31, 2019, we repurchased a total of 372,974 shares of our common stock for an aggregate consideration (including fees and commissions) of \$2,699. In 2018, we repurchased a total of 105,674 shares of our common stock for an aggregate consideration of \$742 (including fees and commissions). In 2019, we repurchased a total of 267,300 shares of our common stock for an aggregate consideration (including fees and commissions) of \$1,957.

The following table sets forth information regarding 2018 and 2019 purchases of our common stock under this program:

	Total Number of Shares Purchased	Weighted Average Price Paid Per Share	Total Number of Shares Purchased As Part of Publicly Announced Program
November 2018	29,691	\$ 7.26	29,691
December 2018	75,983	\$ 6.89	75,983
Total for 2018	105,674	\$ 6.99	105,674
January 2019	267,100	\$ 7.29	267,100
February 2019	200	\$ 7.49	200
Total for 2019	267,300	\$ 7.29	267,300
Total	372,974	\$ 7.21	372,974

Dividends

We have never declared or paid any cash dividends on our capital stock. Pursuant to our current credit facility, we are precluded from paying any dividends. We intend to retain earnings, if any, to finance future operations and expansion and, therefore, do not anticipate paying any cash dividends in the foreseeable future. Any future payment of dividends will depend upon our financial condition, capital requirements and earnings, as well as upon other factors that our Board of Directors may deem relevant.

ITEM 6. SELECTED FINANCIAL DATA

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

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

The following discussion and analysis should be read in conjunction with the accompanying consolidated financial statements and notes thereto appearing in Item 8 of this Form 10-K.

The financial information in this Management's Discussion and Analysis of Financial Condition and Results of Operations is presented in thousands of dollars, except for share and per share amounts. All figures presented below represent results from continuing operations, unless otherwise specified.

General

We offer products and services ranging from power solutions to communications and electronics systems to customers across the globe in the government, defense and commercial sectors. With an emphasis on strong engineering and a collaborative approach to problem solving, we design, manufacture, install and maintain power and communications systems including rechargeable and non-rechargeable batteries, communications and electronics systems and accessories and custom engineered systems. We sell our products worldwide through a variety of trade channels, including original equipment manufacturers ("OEMs"), industrial and defense supply distributors and directly to U.S. and international defense departments.

We report our results in two operating segments: Battery & Energy Products and Communications Systems. The Battery & Energy Products segment includes Lithium 9-volt, cylindrical, thin cell and various other non-rechargeable batteries, in addition to rechargeable batteries, uninterruptable power supplies, charging systems and accessories, such as cables. The Communications Systems segment includes RF amplifiers, power supplies, cable and connector assemblies, amplified speakers, equipment mounts, case equipment, integrated communication systems for fixed or vehicle applications and communications and electronics systems design. We believe that reporting performance at the gross profit level is the best indicator of segment performance. As such, we report segment performance at the gross profit level and operating expenses as Corporate charges.

We continually evaluate ways to grow, including opportunities to expand through mergers, acquisitions and joint ventures, which can broaden the scope of our products and services, expand operating and market opportunities and provide the ability to enter new lines of business synergistic with our portfolio of product offerings.

In January 2016, we acquired Accutronics Limited ("Accutronics"), a U.K. corporation based in Newcastle-under-Lyme, U.K., a leading independent designer and manufacturer of smart batteries and charger systems for high-performance, feature-laden portable and handheld electronic devices. We acquired Accutronics to advance our strategy of commercial revenue diversification, to expand our geographic penetration, and to achieve revenue growth from new product development.

On May 1, 2019, we acquired Southwest Electronic Energy Corporation, a Texas corporation ("SWE"), and a leading designer and manufacturer of high-performance smart battery systems and battery packs to customer specifications using lithium cells. SWE serves a variety of industrial markets, including oil & gas, remote monitoring, process control and marine, which demand uncompromised safety, service, reliability and quality. We acquired SWE as a bolt-on acquisition to further support our strategy of commercial revenue diversification by providing entry to the oil and gas exploration and production, and subsea electrification markets, which were previously unserved by us. Another key benefit includes obtaining a highly valuable technical team of battery pack and charger system engineers and technicians to add to our new product development-based revenue growth initiatives in our commercial end-markets particularly asset tracking, smart metering and other industrial applications.

Currently, we do not experience significant seasonal sales trends in any of our operating segments, although sales to the U.S. Defense Department and other international defense organizations can be sporadic based on the needs of those particular customers.

Consolidated revenues increased by \$19,605 or 22.5% to \$106,795 for the year ended December 31, 2019 compared to \$87,190 for the year ended December 31, 2018. During 2019, we experienced revenue growth of 19.1% for our Battery & Energy products business and 36.6% for our Communications Systems business. This 2019 performance reflected a \$18,638 or 45.4% increase in sales to our commercial customers and a \$967 or 2.1% increase in sales to government and defense customers. The increase in our commercial business was due primarily to the acquisition of SWE in May 2019, partially offset by lower demand for 9-Volt batteries, especially in U.S. markets impacted from the tariffs imposed on China sourced products. The increase in government and defense sales primarily resulted from 2019 shipments under two October 2018 contract awards totaling \$19,200 for our Communications Systems business to supply Vehicle Amplifier-Adaptors (“VAA”) and Mounted Power Amplifiers to a large global defense contractor to support the U.S. Army’s Network Modernization initiatives, Leader Radio Program and other opportunities. This was partially offset by the 2018 fulfillment of a \$3,348 contract received in January 2018 from the U.S. Government’s Defense Logistics Agency to supply our legacy BA-5390 batteries and shipments to fulfill VIPER and SFAB awards in 2018. A follow-up order for \$4,869 of our legacy BA-5390 was received in December 2019 for shipment in 2020.

Gross margin slightly decreased to 29.2% for the year ended December 31, 2019 from 29.3% for the year ended December 31, 2018. The 10-basis point decrease was due primarily to costs incurred for the transition of new products to high volume production in 2019.

Operating expenses increased by \$4,769 or 25.1% to \$23,797 during the year ended December 31, 2019, compared to \$19,028 during the year ended December 31, 2018. This increase was due primarily to our acquisition of SWE in May 2019 and a \$817 or 18.1% increase in new product development spending for our core businesses. Operating expenses as a percentage of revenues increased 50 basis points from 21.8% in 2018 to 22.3% in 2019 due to our higher investment in new product development in 2019.

Income tax provision was \$1,457 for the year ended December 31, 2019 compared to an income tax benefit of \$18,386 for the year ended December 31, 2018. A non-cash tax benefit of \$18,652 was included in our 2018 results reflecting our release of the valuation allowance on our U.S. deferred tax assets as of December 31, 2018 based on management’s assessment of a number of factors including the expectation of future sustained profitability of our business sufficient to utilize our net operating losses and tax credits. The release of the valuation allowance in 2018 resulted in the use of the U.S. statutory tax rate in accordance with U.S. Generally Accepted Accounting Principles (“GAAP”) to report the tax provision on domestic generated income in 2019. Accordingly, the 2019 effective tax rate was 21.5%. Excluding the one-time tax benefit in 2018, and including the use of U.S. net operating loss carryforwards, the tax provisions for 2019 and 2018 would have been \$221 or a 3.3% effective rate and \$266 or a 4.0% effective rate, respectively, primarily reflecting income generated by our foreign operations.

Net income attributable to Ultralife was \$5,205 for 2019 and \$24,930 for 2018, which includes the non-cash tax benefit of \$18,652 reflecting the prior year release of the U.S. valuation allowance. Reported earnings per share for 2019 was \$0.33 per basic share (\$0.32 per diluted share), compared to \$1.57 per basic share (\$1.53 per diluted share) which includes \$0.40 from our operating performance plus \$1.17 related to the tax benefit. Recognizing the use of net operating losses and tax credits on U.S. generated income, Adjusted earnings per share for 2019 was \$0.41 per basic share (\$0.40 per diluted share). See the section “Adjusted Earnings Per Share” beginning on page 32 for a reconciliation of Adjusted EPS to EPS and to net income attributable to Ultralife.

Adjusted EBITDA, defined as net income attributable to Ultralife before net interest expense, provision (benefit) for income taxes, depreciation and amortization, plus/minus expenses/income that we do not consider reflective of our continuing operations, amounted to \$11,007 for the year ended December 31, 2019 compared to \$9,902 for the prior period. See the section “Adjusted EBITDA” beginning on page 31 for a reconciliation of Adjusted EBITDA to Net Income Attributable to Ultralife.

The Company’s liquidity remains solid, with cash on hand of \$7,405, working capital of \$53,183 and a current ratio of 4.1. As of December 31, 2018, prior to the acquisition of SWE, the Company had cash on hand of \$25,934, working capital of \$51,774 and a current ratio of 4.4.

Having invested in engineering resources to support new product development, we are focused on capturing new opportunities and continued end-market diversification in 2020. These new opportunities combined with a Battery & Energy Products backlog that is higher than the beginning of 2019 give us confidence that we will extend our track record of profitable growth.

Results of Operations

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018:

	Year Ended December 31		Increase/ (Decrease)
	2019	2018	
Revenues:			
Battery & Energy Products	\$ 83,996	\$ 70,497	\$ 13,499
Communications Systems	22,799	16,693	\$ 6,106
Total	106,795	87,190	19,605
Cost of Products Sold:			
Battery & Energy Products	61,183	50,923	10,260
Communications Systems	14,447	10,684	3,763
Total	75,630	61,607	14,023
Gross Profit:			
Battery & Energy Products	22,813	19,574	3,239
Communications Systems	8,352	6,009	2,343
Total	31,165	25,583	5,582
Operating Expenses	23,797	19,028	4,769
Operating Income	7,368	6,555	813
Other Expense (Income), Net	597	(58)	655
Income Before Taxes	6,771	6,613	158
Income Tax Provision (Benefit)	1,457	(18,386)	19,843
Net Income	5,314	24,999	(19,685)
Net Income Attributable to Non-Controlling Interest	109	69	40
Net Income Attributable to Ultralife	\$ 5,205	\$ 24,930	\$ (19,725)
Net Income Attributable to Ultralife Common Shares – Basic	\$ 0.33	\$ 1.57	\$ (1.24)
Net Income Attributable to Ultralife Common Shares – Diluted	\$ 0.32	\$ 1.53	\$ (1.21)
Weighted Average Shares Outstanding –Basic	15,782,583	15,881,976	(99,393)
Weighted Average Shares Outstanding – Diluted	16,179,119	16,346,980	(167,861)

Revenues. Total revenues for the year ended December 31, 2019 amounted to \$106,795, an increase of \$19,605, or 22.5% from the \$87,190 reported for the year ended December 31, 2018.

Battery & Energy Products revenues increased \$13,499, or 19.1%, for the year ended December 31, 2019. Commercial revenues of this business increased 45.4% from 2018 and now comprise 71.1% of total segment sales versus 58.2% last year. The year-over-year increase primarily resulted from the acquisition of SWE in May 2019 partially offset by a 22.0% decline in 9-Volt sales, especially in U.S. markets impacted by the tariffs imposed on China sourced products. Government and defense sales of this business decreased 17.4% from 2018 and now comprise 28.9% of total segment sales versus 41.8% last year. The decrease primarily reflects the timing of orders including a \$3,348 contract received in January 2018 from the U.S. Government's Defense Logistics Agency to supply our legacy BA-5390 batteries in 2018. A follow-up order for \$4,869 of our legacy BA-5390 was received in December 2019 for shipment in 2020.

Communications Systems revenues increased \$6,106 or 36.6% for the year ended December 31, 2019. The increase primarily resulted from 2019 shipments under two October 2018 contract awards totaling \$19,200 to supply Vehicle Amplifier-Adaptors ("VAA") and Mounted Power Amplifiers to a large global defense contractor to support the U.S. Army's Network Modernization initiatives, Leader Radio Program and other opportunities. Approximately 71% of the products provided for in these contracts were shipped in 2019, which exceeded shipments to fulfill VIPER and SFAB in 2018, with the remainder to be shipped in 2020.

Our order backlog at December 31, 2019 was \$42,558, a decrease of \$8,386 or 16.5% from the backlog at December 31, 2018, which was \$50,944. For our Battery & Energy Products business, the backlog increased \$6,489 or 22.2% to \$35,744 from \$29,255. The increase primarily resulted from the December 2019 legacy BA-5390 delivery contract received from the Defense Logistics Agency in December 2019 and the inclusion of the SWE backlog, which was acquired on May 1, 2019. The 2019 year-end backlog is related to orders that are expected to ship throughout 2020 and does not include future shipments under the indefinite delivery/indefinite quantity Defense Logistic Awards for our BA-5390 batteries (\$21,400) and BA-5790/BA-5795 batteries (\$49,800). For our Communications Systems business, the backlog decreased \$14,875 or 68.6% to \$6,814 from \$21,689. The decrease is primarily a result of 2019 shipments under two October 2018 contract awards totaling \$19,200 to supply our Vehicle Amplifier-Adaptors (“VAA”) and Mounted Power Amplifiers to a large global defense contractor to support the U.S. Army’s Network Modernization initiatives, Leader Radio Program and other opportunities. The 2019 backlog includes the remainder of the shipments under these contracts as well as a purchase order received on an October 2018 indefinite-delivery/indefinite quantity contract for vehicle communication kits for use by the U.S. Department of Defense. The 2019 year-end backlog is related to orders that are expected to ship throughout 2020.

Cost of Products Sold and Gross Profit. Cost of products sold for the year ended December 31, 2019 increased \$14,023 or 22.8% from the year ended December 31, 2018. Consolidated cost of products sold as a percentage of total revenue slightly increased from 70.7% for the year ended December 31, 2018 to 70.8% for the year ended December 31, 2019. Correspondingly, consolidated gross margin was 29.2% for the year ended December 31, 2019, compared with 29.3% for the year ended December 31, 2018. The 10-basis point decline in gross margin is due primarily to the transition of new products to high-volume production for both businesses.

For our Battery & Energy Products segment, the cost of products sold increased \$10,260 or 20.1%, from the year ended December 31, 2018. Battery & Energy Products’ gross profit for 2019 was \$22,813 or 27.2% of revenues, an increase of \$3,239 or 16.5% from gross profit of \$19,574, or 27.8% of revenues, for 2018. As a result, Battery & Energy Products’ gross margin as a percentage of revenues decreased for the year ended December 31, 2019 by 60 basis points from the prior year to 27.2%, reflecting costs associated with the transition of new products to higher volume production, including recently qualified military batteries and our new CR123A product.

For our Communications Systems segment, the cost of products sold increased by \$3,763 or 35.2% from the year ended December 31, 2018. Communications Systems’ gross profit for the year ended December 31, 2019 was \$8,352 or 36.6% of revenues, an increase of \$2,343 or 39.0% from gross profit of \$6,009 or 36.0% of revenues, for the year ended December 31, 2018. The 60 basis points increase in gross margin as a percentage of revenue during 2019 to 36.6% is primarily due to sales product mix, partially offset by the costs to transition new products to high volume production, including vehicle amplifier-adaptors and mounted power amplifier new products supporting the U.S. Army’s Network Modernization initiatives, Leader Radio Program and other opportunities.

Operating Expenses. Total operating expenses for the year ended December 31, 2019 increased \$4,769 or 25.1% from the year ended December 31, 2018. This increase was due primarily to our acquisition of SWE in May 2019 and a \$817 or 18.1% increase in new product development spending for our core businesses.

Overall, operating expenses as a percentage of revenues were 22.3% for the year ended December 31, 2019 compared to 21.8% for the comparable 2018 period. Amortization expense associated with intangible assets related to our acquisitions increased to \$525 for the year ended December 31, 2019 (\$395 in selling, general and administrative expenses and \$130 in research and development costs) from \$397 for the year ended December 31, 2018 (\$250 in selling, general and administrative expenses and \$147 in research and development costs). This increase was due to our acquisition of SWE in May 2019. Research and development costs were \$6,805 in 2019, an increase of \$2,297 or 51.0%, from \$4,508 reported in 2018. This increase was due primarily to our acquisition of SWE in May 2019 and a \$817 or 18.1% increase in new product development spending for both of our core businesses. Selling, general, and administrative expenses increased \$2,472 or 17.0%, to \$16,992 for the year ended December 31, 2019 from \$14,520 for the year ended December 31, 2018. The increase resulted from our acquisition of SWE. We continued tight control over discretionary spending across the Company.

Other Expense (Income). Other expense (income) totaled \$597 for the year ended December 31, 2019 compared to (\$58) for the year ended December 31, 2018. Interest and financing expense, net of interest income, increased \$476 to \$539 for 2019 from \$63 for 2018 due to interest expense on the financing for our acquisition of SWE in May 2019. Miscellaneous expense (income) amounted to \$58 for 2019 compared with (\$121) for 2018, primarily due to transactions impacted by foreign currency fluctuation between the U. S. Dollar, Pound Sterling and Euro.

Income Taxes. The income tax provision was \$1,457 for the year ended December 31, 2019 compared to an income tax benefit of \$18,386 for the year ended December 31, 2018. A non-cash tax benefit of \$18,652 was included in our 2018 results reflecting our release of the valuation allowance on our U.S. deferred tax assets as of December 31, 2018 based on management's assessment of a number of factors including the expectation of future sustained profitability of our business sufficient to utilize our domestic net operating losses and tax credits. The release of the valuation allowance in 2018 resulted in the use of the U.S. statutory tax rate in accordance with GAAP to report the tax provision on domestic generated income in 2019. Accordingly, the 2019 effective tax rate was 21.5%. Excluding the one-time tax benefit in 2018, and including the use of U.S. net operating loss carryforwards, the tax provisions for 2019 and 2018 would have been \$221 or a 3.3% effective rate and \$266 or a 4.0% effective rate, respectively, primarily reflecting income generated by our foreign operations.

As of December 31, 2018, the Company recognized the release of the valuation allowance on our net operating loss carryforwards and other U.S. deferred tax assets on the basis of management's assessment. In evaluating the realizability of our U.S. deferred tax assets, management considered all available evidence and concluded that positive factors, including further demonstration of sustained profitability in our core business and continued improvement in our ability to achieve internal earnings forecasts, outweighed all negative factors, including our history of operating losses (prior to 2015) and historical operating volatility in our core business. Our assessment also considered our expectation to utilize our domestic net operating loss carryforwards, which expire 2020 thru 2035, and our general business tax credits, which expire 2028 thru 2037. Based on the results of our assessment, management concluded that it is more likely than not that our U.S. deferred tax assets will be fully realized. As anticipated, domestic net operating loss carryforwards due to expire 2019 were fully utilized. As of December 31, 2019, management continues to believe it is more likely than not that our U.S. deferred tax assets will be fully realized, including our domestic net operating loss carryforwards of \$58,400 and general business tax credits of \$1,907. Reversal of the valuation allowance on our U.S. deferred tax assets indicates our positive sentiment about Ultralife's future profitability.

As of December 31, 2019 and 2018, for certain past operations in the U.K., we continue to report a valuation allowance for net operating loss carryforwards of \$10,600, nearly all of which can be carried forward indefinitely. Management has concluded that the realizability of the UK net operating loss carryforwards is not more likely than not, as utilization of the net operating losses may be limited due to the change in the past U.K. operation. These net operating losses in the U.K. cannot currently be used to reduce taxable income at our other U.K. subsidiary, Accutronics Ltd. There are no other deferred tax assets related to the past U.K. operations. As of December 31, 2019 and 2018, we have not recognized a valuation allowance against our other foreign deferred tax assets, as we believe that it is more likely than not that they will be realized. We will continue to evaluate the realizability of our deferred tax assets in future periods.

Net Income Attributable to Ultralife. Net income attributable to Ultralife was \$5,205 for 2019 and \$24,930 for 2018, which includes the non-cash tax benefit of \$18,652. Reported earnings per share for 2019 was \$0.33 per basic share (\$0.32 per diluted share), compared to \$1.57 per basic share (\$1.53 per diluted share) which includes \$0.40 from our operating performance plus \$1.17 related to the tax benefit. Recognizing the use of net operating losses and tax credits on U.S. generated income, Adjusted earnings per share for 2019 was \$0.41 per basic share (\$0.40 per diluted share). See the section "Adjusted Earnings Per Share" beginning on page 31 for a reconciliation of Adjusted EPS to EPS and to net income attributable to Ultralife. Average common shares outstanding used to compute diluted earnings per share decreased from 16,346,980 in the 2018 period to 16,179,119 in the 2019 period, due primarily to shares repurchased under the Company's Share Repurchase Program which commenced on November 1, 2018 and concluded on October 31, 2019.

Adjusted EBITDA

In evaluating our business, we consider and use Adjusted EBITDA, a non-GAAP financial measure, as a supplemental measure of our operating performance. We define Adjusted EBITDA as net income attributable to Ultralife before net interest expense, provision (benefit) for income taxes, depreciation and amortization, and stock-based compensation expense. We also use Adjusted EBITDA as a supplemental measure to review and assess our operating performance and to enhance comparability between periods. We also believe the use of Adjusted EBITDA facilitates investors' understanding of operating performance from period to period by backing out potential differences caused by variations in such items as capital structures (affecting relative interest expense and stock-based compensation expense), the amortization of intangible assets acquired through our business acquisitions (affecting relative amortization expense and provision (benefit) for income taxes), the age and book value of facilities and equipment (affecting relative depreciation expense) and one-time charges/benefits relating to income taxes. We also present Adjusted EBITDA from operations because we believe it is frequently used by securities analysts, investors and other interested parties as a measure of financial performance. We reconcile Adjusted EBITDA to Net income attributable to Ultralife, the most comparable financial measure under GAAP.

We use Adjusted EBITDA in our decision-making processes relating to the operation of our business together with GAAP financial measures such as operating income. We believe that Adjusted EBITDA permits a comparative assessment of our operating performance, relative to our performance based on our GAAP results, while isolating the effects of depreciation and amortization, which may vary from period to period without any correlation to underlying operating performance, and of stock-based compensation, which is a non-cash expense that varies widely among companies. We believe that by presenting Adjusted EBITDA, we assist investors in gaining a better understanding of our business on a going forward basis. We provide information relating to our Adjusted EBITDA so that securities analysts, investors and other interested parties have the same data that we employ in assessing our overall operations. We believe that trends in our Adjusted EBITDA are a valuable indicator of our operating performance on a consolidated basis and of our ability to produce operating cash flows to fund working capital needs, to service debt obligations and to fund capital expenditures.

The term Adjusted EBITDA is not defined under GAAP, and is not a measure of operating income, operating performance or liquidity presented in accordance with GAAP. Our Adjusted EBITDA has limitations as an analytical tool, and when assessing our operating performance, Adjusted EBITDA should not be considered in isolation or as a substitute for net income attributable to Ultralife or other consolidated statement of operations data prepared in accordance with GAAP. Some of these limitations include, but are not limited to, the following:

- a. Adjusted EBITDA does not reflect (1) our cash expenditures or future requirements for capital expenditures or contractual commitments; (2) changes in, or cash requirements for, our working capital needs; (3) the interest expense, or the cash requirements necessary to service interest or principal payments, on our debt; (4) income taxes or the cash requirements for any tax payments; and (5) all of the costs associated with operating our business;
- b. Although depreciation and amortization are non-cash charges, the assets being depreciated and amortized often will have to be replaced in the future, and Adjusted EBITDA from continuing operations does not reflect any cash requirements for such replacements;
- c. While stock-based compensation is a component of cost of products sold and operating expenses, the impact on our consolidated financial statements compared to other companies can vary significantly due to such factors as assumed life of the stock-based awards and assumed volatility of our common stock; and
- d. Other companies may calculate Adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure.

We compensate for these limitations by relying primarily on our GAAP results and using Adjusted EBITDA only on a supplemental basis. Neither current nor potential investors in our securities should rely on Adjusted EBITDA as a substitute for any GAAP measures and we encourage investors to review the following reconciliation of Adjusted EBITDA to net income attributable to Ultralife.

	Years ended December 31,	
	2019	2018
Net income attributable to Ultralife	\$ 5,205	\$ 24,930
Add:		
Interest expense, net	539	63
Income tax provision (benefit)	1,457	(18,386)
Depreciation	2,220	1,972
Amortization of intangible assets & financing fees	569	433
Stock-based compensation expense	753	890
Non-cash purchase accounting adjustments	264	-
Adjusted EBIDTA	<u>\$ 11,007</u>	<u>\$ 9,902</u>

Adjusted EPS

In evaluating our business, we consider and use Adjusted EPS, a non-GAAP financial measure, as a supplemental measure of our business performance in addition to GAAP financial measures. We define Adjusted EPS as net income attributable to Ultralife Corporation excluding the provision for deferred taxes divided by our weighted average shares outstanding on both a basic and diluted basis. We believe that this information is useful in providing period-to-period comparisons of our results by reflecting the portion of our tax provision that will be offset by our U.S. net operating loss carryforwards and other tax credits for the foreseeable future. We reconcile Adjusted EPS to EPS, the most comparable financial measure under GAAP. Neither current nor potential investors in our securities should rely on Adjusted EPS as a substitute for any GAAP measures and we encourage investors to review the following reconciliation of Adjusted EPS to EPS and net income attributable to Ultralife.

Adjusted EPS is calculated as follows for the periods presented:

	Year Ended December 31					
	2019			2018		
	Amount	Per Basic Share	Per Diluted Share	Amount	Per Basic Share	Per Diluted Share
Net income attributable to Ultralife Corporate	\$ 5,205	\$.33	\$.32	\$ 24,930	\$ 1.57	\$ 1.53
Deferred tax provision	1,211	.08	.08	(18,643)	(1.17)	(1.15)
Adjusted net income attributable to Ultralife Corporation	<u>\$ 6,416</u>	<u>\$.41</u>	<u>\$.40</u>	<u>\$ 6,287</u>	<u>\$.40</u>	<u>\$.38</u>
Weighted average shares outstanding		15,783	16,179		15,882	16,347

Liquidity and Capital Resources

Cash Flows and General Business Matters

As of December 31, 2019, cash totaled \$7,405 (including restricted cash of \$270), a decrease of \$18,529, or 71.4%, from the beginning of the year primarily attributable to the Company's acquisition of SWE, strategic capital expenditures, increase in core inventory to complete shipments on a contract with a large global defense prime and the timing of collecting the accounts receivable relating to that contract. During the year ended December 31, 2019, we used \$2,970 of cash from operating activities as compared to generating \$10,886 of cash for the year ended December 31, 2018, a decrease of \$13,856. In 2019, cash used from operating activities was primarily a result of our net income of \$5,314 plus non-cash expenses of depreciation, amortization, and stock-based compensation totaling \$3,542 and deferred taxes of \$1,211, offset by a \$13,037 increase in working capital. The working capital increase reflects the increase in our core inventory to complete shipments on a contract with a large global defense prime and the timing of collecting the accounts receivable relating to that contract.

Cash used in investing activities increased from \$4,185 in 2018 to \$31,529 in 2019, attributable to our acquisition of SWE and increased capital expenditures. The year-over-year increase in capital expenditures was due primarily to strategic capital expenditures for improving and broadening our thionyl chloride products and automation equipment for cell production for our Battery and Energy Products business, and cyber-security improvements.

We generated \$16,124 in cash from financing activities during 2019, compared to \$1,168 from financing activities during 2018. In 2019, the Company drew down \$8,000 on its Term Loan Facility and \$10,182 under its Revolving Credit Facility primarily for the acquisition of SWE and paid \$866 on the Term Loan Facility and \$157 on debt placement costs (see *Debt Commitments*). In 2019 and 2018, we received \$930 and \$1,568, respectively, in funds from the issuance of common stock in connection with the exercise of stock options by our employees. In 2019 and 2018, we used \$8 and \$55, respectively, for tax withholdings related to stock-based awards. In 2019 and 2018, we spent \$1,957 and \$742 (including fees and commissions), respectively, to repurchase our common stock under the Company's Share Repurchase Program, which commenced on November 1, 2018 and ended on October 31, 2019. We also received \$397 in 2018 for a government grant awarded in the People's Republic of China to fund specified future technological research and development initiatives.

We continue to have significant U.S. net operating loss carryforwards available to utilize as an offset to taxable income. As of December 31, 2019, none of our U.S. net operating loss carryforwards have expired. See Note 7 to the consolidated financial statements for additional information.

As of December 31, 2019, we had made commitments to purchase approximately \$1,185 of production machinery and equipment.

Going forward, we expect positive operating cash flow to be adequate to meet obligations for both financing and investing.

Debt Commitments

On May 1, 2019, in connection with financing the SWE acquisition (see Note 2 to the consolidated financial statements), the Company drew down \$8,000 on its Term Loan Facility and \$6,782 under its Revolving Credit Facility. As of December 31, 2019, we had \$7,134 outstanding principal on the Term Loan Facility, of which \$1,372 is due to be paid over the next twelve months, and \$10,182 outstanding principal on the Revolving Credit Facility. As of December 31, 2019, the Company is in full compliance with its debt covenants under the Credit Facilities. Management believes that cash flow generated from future operations and remaining availability under our Revolving Credit Facility will be sufficient to meet our general funding requirements for the foreseeable future.

Other Matters

With respect to our battery products, we typically offer warranties against any defects due to product manufacture or workmanship for up to one year from the date of purchase. With respect to our communications accessory products, we typically offer a three-year warranty. We provide for a reserve for these potential warranty expenses, which is based on an analysis of historical warranty issues. There is no assurance that future warranty claims will be consistent with past history, and in the event we experience a significant increase in warranty claims, there is no assurance that our reserves would be sufficient. This could have a material adverse effect on our business, financial condition and results of operations.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements.

Critical Accounting Policies and Estimates

The above discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of our consolidated financial statements requires the application of accounting policies and the use of estimates. The accounting policies most important to the preparation of the consolidated financial statements and estimates that require management's most difficult, subjective or complex judgments are described below.

Revenue Recognition:

Revenues are generated from the sale of products. Performance obligations are met and revenue is recognized upon transfer of control to the customer, which is generally upon shipment. When contract terms require transfer of control upon delivery at a customer's location, revenue is recognized on the date of delivery. Revenue is measured as the amount of consideration we expect to receive in exchange for shipped product. Sales, value-added and other taxes billed and collected from customers are excluded from revenue. Customers, including distributors, do not have a general right of return. For products shipped under vendor managed inventory arrangements, revenue is recognized and billed when the product is consumed by the customer, at which point control has transferred and there are no further obligations by the Company.

Our contracts with customers generally have an original expected duration of less than one year. Pursuant to Topic 606, we have applied the practical expedient with respect to disclosure of the deferral and future expected timing of revenue recognition for transaction price allocated to remaining performance obligations.

Valuation of Inventory:

Inventories are stated at the lower of cost or net realizable value, with cost determined using the first-in, first-out ("FIFO") method. Our inventory includes raw materials, work in process and finished goods. We recognize provisions for excess, obsolete or slow-moving inventory. Inherent in our estimates of net realizable value in determining inventory valuation are assumptions related to expectations of future demand for our products, product lifecycles, product support, technical obsolescence, regulatory requirements, and economic and market conditions. Estimates related to the valuation of inventory are susceptible to changes as the underlying assumptions are continuously evaluated. If our assumptions are adversely different from those estimated by management, inventory adjustments to reduce inventory values would result in an increase in inventory write-offs and a decrease in gross margins.

Impairment of Long-Lived Assets:

We regularly assess all of our long-lived assets for impairment when events or circumstances indicate their carrying amounts may not be recoverable. This is accomplished by comparing the expected undiscounted future cash flows of the assets with the respective carrying amount as of the date of assessment. Should aggregate future cash flows be less than the carrying value, a write-down would be required, measured as the difference between the carrying value and the fair value of the asset. Fair value is estimated either through the assistance of an independent valuation or as the present value of expected discounted future cash flows. The discount rate used by us in our evaluation is an industry-based weighted average cost of capital. If the expected undiscounted future cash flows exceed the respective carrying amount as of the date of assessment, no impairment charge is recognized.

Goodwill and Other Indefinite Lived Intangible Assets:

The purchase price paid to effect an acquisition is allocated to the acquired tangible and intangible assets and liabilities at fair value. We do not amortize goodwill and intangible assets with indefinite lives, but instead evaluate these assets for impairment at least annually, or when events indicate that impairment exists. We amortize intangible assets that have definite lives so that the economic benefits of the intangible assets are recognized over their estimated useful life.

The quantitative impairment test for goodwill consists of a comparison of the fair value of the reporting unit with the carrying amount of the reporting unit to which it is assigned. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired. If the carrying amount of a reporting unit exceeds its fair value, a second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The impairment test for intangible assets with indefinite lives consists of a comparison of the fair value of the intangible assets with their carrying amounts. If the carrying value of the intangible assets exceeds the fair value, an impairment loss is recognized in an amount equal to that excess.

We conducted our annual impairment test for goodwill and other indefinite-lived intangible assets as of September 30, 2019 (the first day of our fiscal fourth quarter). We identified five goodwill reporting units. We performed a quantitative impairment test of goodwill using a discounted cash flow model and concluded that the fair value of each reporting unit exceeded its respective carrying value. To estimate the fair value of the reporting units, we used significant estimates and judgments, including an assessment of our future revenue prospects, revenue growth rates and profit margins based on past results, internal forecasts, industry and market based terminal growth rates, inputs to the weighted-average cost of capital used to discount future cash flows, excess working capital requirements and earnings multiples. We performed a quantitative impairment test of each of our four trademarks as of September 30, 2019 using the relief from royalty method and concluded that the fair value of each trademark exceeded its carrying value. Significant estimates and judgments included an assessment of our future revenue prospects, industry and market based terminal growth rates, inputs to the weighted-average cost of capital used to discount future cash flows, and royalty rates based on external market data. Based on the results of our quantitative impairment tests, and consideration of qualitative factors, no impairments were identified. Fair value exceeded carrying value for all reporting units and trademarks by more than 10%. There is a possibility that our goodwill and other intangible assets could be impaired in the future should there be a significant change in our internal forecasts and other assumptions we use in our impairment analysis.

Stock-Based Compensation:

We recognize compensation cost relating to share-based payment transactions in our financial statements. The cost is measured at the grant date, based on the estimated fair value of the award, and is recognized as an expense over the employee's requisite service period (generally the vesting period of the equity award). We calculate implied volatility for stock options based on an average of historical volatility over the expected life of the awards. The computation of expected term is determined based on historical experience of similar awards, giving consideration to the contractual terms of the awards and the vesting period. The interest rate for periods within the contractual life of the award is based on the U.S. Treasury yield in effect at the time of grant. Our awards are generally valued using the Black-Scholes method. If required, our market based awards are valued using a Monte Carlo simulation.

Income Taxes:

We account for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis of assets and liabilities and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. Pursuant to ASC 740, the realizability of our deferred tax assets is evaluated based on all available evidence, both positive and negative, weighted based on objective verifiability. Our assessment of the realizability of our deferred tax assets is based on a number of factors including but not limited to the sustainability of earnings from our core business, the accuracy of our internal earnings forecasts for future periods, our history of operating losses, our historical operating volatility, and the general business climate. As a significant portion of our deferred tax assets is comprised of net operating loss carryforwards, our ability to utilize our net operating loss carryforwards (before expiration) is also an important factor considered in our assessment. A valuation allowance is recognized when, based on the results of our assessment, the realizability of deferred tax assets is not more likely than not.

As of December 31, 2018, the Company recognized the release of the valuation allowance on our net operating loss carryforwards and other U.S. deferred tax assets on the basis of management's assessment. In evaluating the realizability of our U.S. deferred tax assets, management considered all available evidence and concluded that positive factors, including further demonstration of sustained profitability in our core business and continued improvement in our ability to achieve internal earnings forecasts, outweighed all negative factors, including our history of operating losses (prior to 2015) and historical operating volatility in our core business. Our assessment also considered our expectation to utilize our domestic net operating loss carryforwards, which expire 2020 thru 2035, and our general business tax credits, which expire 2028 thru 2037. Based on the results of our assessment, management concluded that it is more likely than not that our U.S. deferred tax assets will be fully realized. As of December 31, 2019, our domestic net operating loss carryforwards and general business tax credits were \$58,400 and \$1,907, respectively.

As of December 31, 2019 and 2018, for certain past operations in the U.K., we continue to report a valuation allowance for net operating loss carryforwards of \$10,600, nearly all of which can be carried forward indefinitely. Management has concluded that the realizability of the U.K. net operating loss carryforwards is not more likely than not, as utilization of the net operating losses may be limited due to the change in the past U.K. operation. There are no other deferred tax assets related to the past U.K. operations. As of December 31, 2019 and 2018, we have not recognized a valuation allowance against our other foreign deferred tax assets, as we believe that it is more likely than not that they will be realized. We will continue to evaluate the realizability of our deferred tax assets in future periods.

Business Combinations:

We account for businesses acquired using the acquisition method of accounting. Under this method, all acquisition-related costs are expensed as incurred. The underlying net assets are recorded at their respective acquisition-date fair values. As part of this process, we identify and attribute values and estimated lives to property and equipment and intangible assets acquired. These determinations involve significant estimates and assumptions, including those with respect to future cash flows, discount rates and asset lives, and therefore require considerable judgment. These determinations affect the amount of depreciation and amortization expense recognized in future periods. The results of operations of acquired businesses are included in the consolidated statements of income and comprehensive income beginning on the respective acquisition date.

Warranties:

We generally offer standard warranties against product defects. We do not offer separate service-type warranties. We estimate future warranty costs to be incurred for product failure rates, material usage and service costs in the development of our warranty obligations. Estimated future costs and related reserves are based on actual past experience and are generally estimated as a percentage of sales over the warranty period.

Environmental Issues:

Environmental expenditures, if any, that relate to current operations, are generally expensed. Remediation costs that relate to an existing condition caused by past operations are accrued when it is probable that these costs will be incurred and can be reasonably estimated.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements and schedules listed in Item 15(a)(1) are included in this Report beginning on page 40.

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of
Ultralife Corporation

Opinions on the Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Ultralife Corporation (the Company) and its subsidiaries as of December 31, 2019 and 2018, and the related consolidated statements of income and comprehensive income, changes in stockholders' equity and cash flows for the years then ended, and the related notes to the consolidated financial statements (collectively, the financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

As described in Management's Report on Internal Control over Financial Reporting, management has excluded Southwest Electronic Energy Corporation (SWE) from its assessment of internal control over financial reporting as of December 31, 2019, because it was acquired by the Company in a purchase business combination in the second quarter of 2019. We have also excluded SWE from our audit of internal control over financial reporting. SWE is a wholly owned subsidiary whose total assets and revenue represent approximately 12% and 18%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2019.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's financial statements and an opinion on the company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Freed Maxick CPAs, P.C.

We have served as the Company's auditor since 2016.

Rochester, New York
February 6, 2020

ULTRALIFE CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(Dollars in Thousands)

	December 31	
	2019	2018
ASSETS		
Current Assets:		
Cash	\$ 7,405	\$ 25,934
Trade accounts receivable, net of allowance for doubtful accounts of \$324 and \$296, respectively	30,106	16,015
Inventories, net	29,759	22,843
Prepaid expenses and other current assets	3,103	2,368
Total current assets	<u>70,373</u>	<u>67,160</u>
Property, plant and equipment, net	22,525	10,744
Goodwill	26,753	20,109
Other intangible assets, net	9,721	6,504
Deferred income taxes, net	13,222	15,444
Other noncurrent assets	1,963	887
Total assets	<u>\$ 144,557</u>	<u>\$ 120,848</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	\$ 9,388	\$ 9,919
Current portion of long-term debt	1,372	-
Accrued compensation and related benefits	1,655	1,494
Accrued expenses and other current liabilities	4,775	3,973
Total current liabilities	<u>17,190</u>	<u>15,386</u>
Long-term debt	15,780	-
Deferred income taxes	559	591
Other noncurrent liabilities	1,278	408
Total liabilities	<u>34,807</u>	<u>16,385</u>
Commitments and contingencies (Note 6)		
Shareholders' Equity:		
Preferred stock – par value \$.10 per share; authorized 1,000,000 shares; none issued	-	-
Common stock – par value \$.10 per share; authorized 40,000,000 shares; issued – 20,268,050 shares and 20,053,335 shares, respectively; outstanding – 15,866,868 shares and 15,920,585 shares, respectively	2,026	2,005
Capital in excess of par value	184,292	182,630
Accumulated deficit	(52,830)	(58,035)
Accumulated other comprehensive loss	(2,531)	(2,786)
Treasury stock - at cost; 4,401,182 shares and 4,132,750 shares, respectively	(21,231)	(19,266)
Total Ultralife Corporation equity	<u>109,726</u>	<u>104,548</u>
Non-controlling interest	24	(85)
Total shareholders' equity	<u>109,750</u>	<u>104,463</u>
Total liabilities and shareholders' equity	<u>\$ 144,557</u>	<u>\$ 120,848</u>

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

ULTRALIFE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME
(Dollars in Thousands, Except Per Share Amounts)

	Year ended December 31	
	2019	2018
Revenues	\$ 106,795	\$ 87,190
Cost of products sold	75,630	61,607
Gross profit	<u>31,165</u>	<u>25,583</u>
Operating expenses:		
Research and development	6,805	4,508
Selling, general and administrative	16,992	14,520
Total operating expenses	<u>23,797</u>	<u>19,028</u>
Operating income	7,368	6,555
Other expense (income):		
Interest and financing expense	539	63
Miscellaneous	58	(121)
Income before income taxes	<u>6,771</u>	<u>6,613</u>
Income tax provision (benefit)	<u>1,457</u>	<u>(18,386)</u>
Net income	5,314	24,999
Net income attributable to non-controlling interest	109	69
Net income attributable to Ultralife Corporation	5,205	24,930
Other comprehensive income (loss):		
Foreign currency translation adjustments	255	(1,175)
Comprehensive income attributable to Ultralife Corporation	<u>\$ 5,460</u>	<u>\$ 23,755</u>
Net income per share attributable to Ultralife Corporation common shareholders – Basic:	<u>\$.33</u>	<u>\$ 1.57</u>
Net income per share attributable to Ultralife Corporation common shareholders – Diluted:	<u>\$.32</u>	<u>\$ 1.53</u>
Weighted average shares outstanding – Basic	<u>15,783</u>	<u>15,882</u>
Weighted average shares outstanding – Diluted	<u>16,179</u>	<u>16,347</u>

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

ULTRALIFE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Dollars in Thousands)

	Common stock		Capital in excess of par value	Accumulated other comprehensive income (loss)	Accumulated deficit	Treasury stock	Non- controlling interest	Total
	Number of shares	Amount						
Balance – December 31, 2017	19,670,928	\$ 1,966	\$ 180,211	\$ (1,611)	\$ (82,894)	\$ (18,469)	\$ (154)	\$ 79,049
Cumulative effect adjustment (1)					(71)			(71)
Share repurchases						(742)		(742)
Stock option exercises	382,407	39	1,529					1,568
Tax withholdings on option exercises						(55)		(55)
Stock-based compensation - stock options			817					817
Stock-based compensation - restricted stock			73					73
Foreign currency translation adjustments				(1,175)				(1,175)
Net income					24,930		69	24,999
Balance – December 31, 2018	20,053,335	\$ 2,005	\$ 182,630	\$ (2,786)	\$ (58,035)	\$ (19,266)	\$ (85)	\$ 104,463
Share repurchases						(1,957)		(1,957)
Stock option exercises	208,881	21	909					930
Stock-based compensation - stock options			623					623
Stock-based compensation - restricted stock	5,834		130					130
Tax withholding on restricted shares						(8)		(8)
Foreign currency translation adjustments				255				255
Net income					5,205		109	5,314
Balance – December 31, 2019	<u>20,268,050</u>	<u>\$ 2,026</u>	<u>\$ 184,292</u>	<u>\$ (2,531)</u>	<u>\$ (52,830)</u>	<u>\$ (21,231)</u>	<u>\$ 24</u>	<u>\$ 109,750</u>

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

ULTRALIFE CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars In Thousands)

	Year ended December 31	
	2019	2018
OPERATING ACTIVITIES:		
Net income	\$ 5,314	\$ 24,999
Adjustments to reconcile net income to net cash (used in) provided by operating activities:		
Depreciation	2,220	1,972
Amortization of intangible assets	525	397
Amortization of financing fees	44	36
Stock-based compensation	753	890
Deferred income tax expense	1,211	(18,643)
Changes in operating assets and liabilities:		
Accounts receivable	(10,416)	(1,511)
Inventories, gross	(3,319)	2,348
Inventory reserves	1,123	838
Prepaid expenses and other assets	(1,575)	373
Income taxes receivable and payable	25	9
Accounts payable and other liabilities	1,125	(822)
Net cash (used in) provided by operating activities	<u>(2,970)</u>	<u>10,886</u>
INVESTING ACTIVITIES:		
Purchase of SWE, net of cash acquired	(25,248)	-
Purchases of property, plant and equipment	(6,281)	(4,185)
Net cash used in investing activities	<u>(31,529)</u>	<u>(4,185)</u>
FINANCING ACTIVITIES:		
Proceeds from revolving credit facility	10,182	-
Proceeds from term loan facility	8,000	-
Payment of term loan facility	(866)	-
Repurchase of common stock	(1,957)	(742)
Payment of debt issuance costs	(157)	-
Proceeds from exercise of stock options	930	1,568
Tax withholdings on stock-based awards	(8)	(55)
Proceeds from government grant	-	397
Net cash provided by financing activities	<u>16,124</u>	<u>1,168</u>
Effect of exchange rate changes on cash	<u>(154)</u>	<u>(265)</u>
INCREASE (DECREASE) IN CASH	(18,529)	7,604
Cash - Beginning of year	25,934	18,330
Cash - End of year	<u>\$ 7,405</u>	<u>\$ 25,934</u>
Supplemental cash flow information:		
Construction in process in accounts payable	\$ 74	\$ 1,616
Income taxes paid	<u>\$ 266</u>	<u>\$ 220</u>
Interest paid	<u>\$ 576</u>	<u>\$ 132</u>

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

ULTRALIFE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Dollars in Thousands, Except Per Share Amounts)

Note 1 - Summary of Operations and Significant Accounting Policies

a. *Description of Business*

As used in this annual report, unless otherwise indicated, the terms “we”, “our” and “us” refer to Ultralife Corporation (“Ultralife”) and includes our wholly-owned subsidiaries, ABLE New Energy Co., Limited and its wholly-owned subsidiary ABLE New Energy Co.; Ltd; Ultralife UK LTD and its wholly-owned subsidiary, Accutronics Ltd; Ultralife Batteries (UK) Ltd.; Southwest Electronic Energy Corporation and its wholly-owned subsidiary, CLB, INC.; and our majority-owned joint venture Ultralife Batteries India Private Limited.

We offer products and services ranging from power solutions to communications and electronics systems. Through our engineering and collaborative approach to problem solving, we serve government, defense and commercial customers across the globe. We design, manufacture, install and maintain power and communications systems including: rechargeable and non-rechargeable batteries, charging systems, communications and electronics systems and accessories, and custom engineered systems. We sell our products worldwide through a variety of trade channels, including original equipment manufacturers (“OEMs”), industrial and defense supply distributors, and directly to U.S. and international defense departments.

b. *Principles of Consolidation*

The consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) and include the accounts of Ultralife Corporation, our wholly-owned subsidiaries, Ultralife Batteries (UK) Ltd., Ultralife UK LTD, and its wholly-owned subsidiary Accutronics Ltd, ABLE New Energy Co., Limited and its wholly-owned subsidiary ABLE New Energy Co., Ltd. (“ABLE” collectively), Southwest Electronic Energy Corporation and its wholly-owned subsidiary, CLB, INC. (“SWE” collectively) (Note 2), and our majority-owned subsidiary Ultralife Batteries India Private Limited (“India JV”). Intercompany accounts and transactions have been eliminated in consolidation.

c. *Management's Use of Judgment and Estimates*

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at year end and the reported amounts of revenues and expenses during the reporting period. Key areas affected by estimates include: (a) carrying value of goodwill and intangible assets; (b) reserves for deferred tax assets, excess and obsolete inventory, warranties, and bad debts; (c) valuation of assets acquired and liabilities assumed in business combinations; (d) various expense accruals; and (e) stock-based compensation. Our actual results could differ from these estimates.

d. *Reclassifications*

Certain items previously reported in specific financial statement captions are reclassified to conform to the current presentation. There were no material reclassifications for the years ended December 31, 2019 and 2018.

e. *Cash*

Our cash balances may at times exceed federally insured limits. We have not experienced any losses in these accounts and believe we are not exposed to any significant risk with respect to cash.

f. *Accounts Receivable and Allowance for Doubtful Accounts*

We extend credit to our customers in the normal course of business. We perform ongoing credit evaluations and generally do not require collateral. Payment terms are generally 30 days. Trade accounts receivable are recorded at their invoiced amounts, net of allowance for doubtful accounts. We evaluate the adequacy of our allowance for doubtful accounts quarterly. Accounts outstanding for longer than contractual payment terms are considered past due and are reviewed for collectability. We maintain reserves for potential credit losses based upon our historical experience and the aging of specific receivables. Receivable balances are written off when collection is deemed unlikely.

g. *Inventories*

Inventories are stated at the lower of cost or net realizable value with cost determined under the first-in, first-out (FIFO) method. We record provisions for excess, obsolete or slow-moving inventory based on changes in customer demand, technology developments or other economic factors.

h. *Property, Plant and Equipment*

Property, plant and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives. Estimated useful lives are as follows (in years):

Buildings	10 – 40
Machinery and Equipment	5 – 10
Furniture and Fixtures	3 – 10
Computer Hardware and Software	3 – 5
Leasehold Improvements	Lesser of useful life or lease term

Betterments, renewals and extraordinary repairs that extend the life of the assets are capitalized. Other repairs and maintenance costs are expensed when incurred. When disposed, the cost and accumulated depreciation applicable to assets retired are removed from the accounts and the gain or loss on disposition is recognized in operating income.

i. *Long-Lived Assets, Goodwill and Intangibles*

We assess all of our long-lived assets for impairment when events or circumstances indicate that their carrying amounts may not be recoverable. For property, plant and equipment and amortizable intangible assets, this is accomplished by comparing the expected undiscounted future cash flows of the assets with the respective carrying amount as of the date of assessment. If the expected undiscounted future cash flows exceed the respective carrying amount as of the date of assessment, no impairment is recognized. Should aggregate future cash flows be less than the carrying value, a write-down would be required, measured as the difference between the carrying value and the fair value of the asset. Fair value is estimated as the present value of expected discounted future cash flows. The discount rate used in our evaluation is an industry-based weighted average cost of capital.

The purchase price paid to effect an acquisition is allocated to the acquired tangible and intangible assets and liabilities at fair value. We do not amortize goodwill and intangible assets with indefinite lives, but instead evaluate these assets for impairment at least annually, or when events indicate that impairment exists. We amortize intangible assets that have definite lives so that the economic benefits of the intangible assets are being recognized over their weighted-average estimated useful life.

The quantitative impairment test for goodwill consists of a comparison of the fair value of the reporting unit with the carrying amount of the reporting unit to which it is assigned. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired. If the carrying amount of a reporting unit exceeds its fair value, a second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The impairment test for intangible assets with indefinite lives consists of a comparison of the fair value of the intangible assets with their carrying amounts. If the carrying value of the intangible assets exceeds the fair value, an impairment loss is recognized in an amount equal to that excess.

j. *Translation of Foreign Currency*

The financial statements of our foreign subsidiaries are translated from the functional currency into U.S. dollar equivalents, with translation adjustments recorded as the sole component of accumulated other comprehensive loss. Exchange gains and losses related to foreign currency transactions and balances denominated in currencies other than the functional currency are recognized in net income.

k. *Revenue Recognition*

Revenues are generated from the sale of products. Performance obligations are met and revenue is recognized upon transfer of control to the customer, which is generally upon shipment. When contract terms require transfer of control upon delivery at a customer's location, revenue is recognized on the date of delivery. Revenue is measured as the amount of consideration we expect to receive in exchange for shipped product. Sales, value-added and other taxes billed and collected from customers are excluded from revenue. Customers, including distributors, do not have a general right of return. For products shipped under vendor managed inventory arrangements, revenue is recognized and billed when the product is consumed by the customer, at which point control has transferred and there are no further obligations by the Company.

Revenues recognized from prior period performance obligations for the years ended December 31, 2019 and 2018 were not material.

As of December 31, 2019 and 2018, the Company had no unsatisfied performance obligations for contracts with an original expected duration of greater than one year. Pursuant to Topic 606, we have applied the practical expedient with respect to disclosure of the deferral and future expected timing of revenue recognition for transaction price allocated to remaining performance obligations.

Deferred revenue, unbilled revenue and deferred contract costs recorded on our consolidated balance sheets as of December 31, 2019 and 2018 were not material.

l. *Warranty Reserves*

We generally offer standard warranties against product defects. We do not offer separate service-type warranties. We estimate future warranty costs to be incurred for product failure rates, material usage and service costs in the development of our warranty obligations. Estimated future costs are based on actual past experience and are generally estimated as a percentage of sales over the warranty period. Warranty costs are recorded as costs of products sold. Provision for warranty costs is recorded in other current liabilities and other long-term liabilities on our consolidated balance sheets based on the duration of the warranty. Refer to Note 6.

m. *Shipping and Handling Costs*

Costs incurred by us related to shipping and handling are included in cost of products sold. Amounts charged to customers pertaining to these costs are reflected as revenue.

n. *Sales Commissions*

Sales commissions are expensed as incurred for contracts with an expected duration of one year or less. There were no sales commissions capitalized as of December 31, 2019 and 2018.

o. *Research and Development*

Research and development expenditures are charged to operations as incurred. The majority of research and development expenses pertain to salaries and benefits, developmental supplies, depreciation and other contracted services. For the years ended December 31, 2019 and 2018, we expended \$8,025 and \$5,230, respectively, on research and development, including costs of \$1,220 and \$722, respectively, on customer sponsored research and development activities, which are included in cost of goods sold.

p. *Environmental Costs*

Environmental expenditures that relate to current operations are expensed. Remediation costs that relate to an existing condition caused by past operations are accrued when it is probable that these costs will be incurred and can be reasonably estimated.

q. *Income Taxes*

We account for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis of assets and liabilities and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. Pursuant to ASC 740, a valuation allowance is recognized when the realizability of deferred tax assets is not more likely than not, on the basis of all available evidence, both positive and negative, weighted based on objective verifiability.

r. *Concentration Related to Customers and Suppliers*

We have two customers, both large defense primary contractors, which comprised 14% and 12% of our total revenues in 2019, respectively, and 7% and 16% of our total revenues in 2018, respectively. 2019 revenues from these two customers represented 64% of our total Communications Systems segment revenues and 15% of our total Battery & Energy Products segment revenues. 2018 revenues from these two customers represented 34% of our total Communications Systems segment revenues and 20% of our total Battery & Energy Products segment revenues. There were no other customers that comprised greater than 10% of our total revenues during these years.

Currently, we do not experience significant seasonal trends in our revenues. Since a significant portion of our revenues are based on purchases from U.S. and allied country defense departments, the timing of our sales could be impacted by delays in the government budget process and the decisions to deploy resources to support military purchases of our products.

We generally do not distribute our products to a concentrated geographical area nor is there a significant concentration of credit risks arising from individuals or groups of customers engaged in similar activities, or who have similar economic characteristics. While direct and indirect sales to the U.S. Department of Defense have been substantial during 2019 and 2018, we do not consider this customer to be a significant credit risk.

Certain materials and components used in our products are available only from a single or a limited number of suppliers. As such, some materials and components could become in short supply resulting in limited availability and/or increased costs. Additionally, we may elect to develop relationships with a single or limited number of suppliers for materials and components that are otherwise generally available. Although we believe that alternative suppliers are available to supply materials and components that could replace materials and components currently used and that, if necessary, we would be able to redesign our products to make use of such alternatives, any interruption in the supply from any supplier that serves as a sole source could delay product shipments and have a material adverse effect on our business, financial condition and results of operations. We have experienced interruptions of product deliveries by sole source suppliers in the past.

s. *Fair Value Measurements and Disclosures*

Fair value is defined as the price that would be received for an asset or the exit price that would be paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. Fair value is estimated by applying the following hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

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

Level 2: Observable inputs, other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or that we corroborate with observable market data for substantially the full term of the related assets or liabilities.

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

The fair value of financial instruments approximated their carrying values at December 31, 2019 and 2018. The fair value of cash, trade accounts receivable, trade accounts payable, accrued liabilities, and the current portion of long-term debt approximates carrying value due to the short-term nature of these instruments. The carrying value of long-term debt approximates fair value, as the variable interest rates approximate current market rates.

t. *Earnings Per Share*

Basic earnings per share ("EPS") is computed by dividing net income attributable to Ultralife Corporation by the weighted average shares of common stock outstanding for the period. Diluted EPS reflects the assumed exercise and conversion of dilutive outstanding stock options and unvested restricted stock, if any, applying the treasury stock method.

For the year ended December 31, 2019, the calculation of diluted EPS included 899,041 stock options and 31,666 restricted stock awards. Inclusion of these shares resulted in 396,536 additional shares in the calculation of diluted EPS. There were 642,751 outstanding stock options as of December 31, 2019 excluded from the calculation of diluted EPS, as inclusion of these shares would have been anti-dilutive.

For the year ended December 31, 2018, the calculation of diluted EPS included 1,127,837 stock options and 17,500 restricted stock awards. Inclusion of these shares resulted in 465,004 additional shares in the calculation of diluted EPS. There were 448,250 outstanding stock options as of December 31, 2018 excluded from the calculation of diluted EPS, as inclusion of these shares would have been anti-dilutive.

u. *Stock-Based Compensation*

We have various stock-based employee compensation plans that are described more fully in Note 7. The compensation cost relating to share-based payment transactions is measured at the grant date, based on the estimated fair value of the award, and is recognized as expense over the employee's requisite service period (generally the vesting period of the equity award).

v. *Segment Reporting*

We have two operating segments – Battery & Energy Products, and Communications Systems. The basis for determining our operating segments is the manner in which financial information is used in monitoring our operations. Management operates and organizes itself according to business units that comprise unique products and services across geographic locations.

w. *Recent Accounting Pronouncements*

Recently Adopted Accounting Guidance

Leases

Effective January 1, 2019, the Company adopted Accounting Standards Update 2016-02 – *Leases* (Topic 842). Adoption of the new standard did not materially impact the prior year consolidated statements of operations and cash flows. The prior year consolidated balance sheet has been revised for the effects of the new standard. The effects to our consolidated balance sheet as of December 31, 2018 are presented below.

The Company adopted the new standard applying the modified retrospective approach. The Company measured and recognized leases upon adoption which had commenced as of the beginning or during the prior year. The package of practical expedients permitted under the transition guidance of the new standard was elected which allowed us to carry forward the historical lease classification and determination of whether an arrangement is or contains a lease on existing leases. The use-of-hindsight transition practical expedient was applied to determine the lease term for existing leases, which resulted in the lengthening of the lease term at commencement for one of our operating facilities.

At contract inception, the Company determines whether the arrangement is or contains a lease and determines the lease classification. The lease term is determined based on the non-cancellable term of the lease adjusted to the extent optional renewal terms and termination rights are reasonably certain. Lease expense is recognized evenly over the lease term. Variable lease payments are recognized as period costs. The present value of remaining lease payments is recognized as a liability on the balance sheet with a corresponding right-of-use asset adjusted for prepaid or accrued lease payments. The Company uses its incremental borrowing rate for the discount rate, unless the interest rate implicit in the lease contract is readily determinable. The Company has adopted the practical expedients to not separate non-lease components from lease components and to not present short-term leases on the balance sheet.

The impact on the consolidated balance sheet as of December 31, 2018 is shown below.

Impact to Previously Reported Results

Consolidated Balance Sheet as of December 31, 2018:

	As Previously Reported	Lease Standard Adjustment	As Adjusted
Other noncurrent assets	\$ 82	\$ 805	\$ 887
Prepaid expenses and other current assets	2,429	(61)	2,368
Accrued expenses and other current liabilities	3,534	439	3,973
Other noncurrent liabilities	32	376	408
Accumulated deficit	(57,964)	(71)	(58,035)

See Note 9 for further disclosure regarding lease accounting.

Recent Accounting Guidance Not Yet Adopted

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-13, Financial Instruments-Credit Losses (Topic 326), which requires entities to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. This replaces the existing incurred loss model and is applicable to the measurement of credit losses on financial assets measured at amortized cost. This guidance is effective for the Company for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022. The Company is currently assessing the impact that adopting this new accounting standard will have on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, "Intangibles – Goodwill and Other (Topic 350) – Simplifying the Test for Goodwill Impairment", which eliminates the two-step process that required identification of potential impairment and a separate measure of the actual impairment. The annual assessment of goodwill impairment will be determined by using the difference between the carrying amount and the fair value of the reporting unit. The standard is effective for annual and interim impairment tests performed in periods beginning after December 15, 2019 and is to be applied on a prospective basis. The Company is currently assessing the impact that adopting this new accounting standard will have on our consolidated financial statements.

Note 2 – Acquisition

On May 1, 2019, the Company completed the acquisition of 100% of the issued and outstanding shares of Southwest Electronic Energy Corporation, a Texas corporation (“SWE”), for an aggregate purchase price of \$26,190 inclusive of \$942 cash acquired and post-closing adjustments.

SWE is a leading independent designer and manufacturer of high-performance smart battery systems and battery packs to customer specifications using lithium cells. SWE serves a variety of industrial markets, including oil & gas, remote monitoring, process control and marine, which demand uncompromised safety, service, reliability and quality. The Company acquired SWE as a bolt-on acquisition to further support our strategy of commercial revenue diversification by providing entry to the oil and gas exploration and production, and subsea electrification markets, which are currently unserved by Ultralife. Another key benefit includes obtaining a highly valuable technical team of battery pack and charger system engineers and technicians to add to our new product development-based revenue growth initiatives in our commercial end-markets particularly asset tracking, smart metering and other industrial applications.

The acquisition of SWE was completed pursuant to a Stock Purchase Agreement dated May 1, 2019 (the “Stock Purchase Agreement”) by and among Ultralife, SWE, Southwest Electronic Energy Medical Research Institute, a Texas non-profit (the “Seller”), and Claude Leonard Backstein, an individual (the “Shareholder”). The Stock Purchase Agreement contains customary terms and conditions including representations, warranties and indemnification provisions. A portion of the consideration paid to the Seller is being held in escrow for indemnification purposes.

The aggregate purchase price for the acquisition was funded by the Company through a combination of cash on hand and borrowings under the Credit Facilities (Note 3).

The purchase price allocation was determined in accordance with the accounting treatment of a business combination pursuant to FASB ASC Topic 805, Business Combinations (ASC 805). Accordingly, the fair value of the consideration was determined, and the assets acquired and liabilities assumed have been recorded at their fair values at the date of the acquisition. The excess of the purchase price over the estimated fair values has been recorded as goodwill.

The allocation of purchase price to the assets acquired and liabilities assumed at the date of the acquisition is presented in the table below. Management is responsible for determining the fair value of the tangible and intangible assets acquired and liabilities assumed as of the date of acquisition. Management considered several factors, including reference to an analysis performed under ASC 805 solely for the purpose of allocating the purchase price to the assets acquired and liabilities assumed. The Company’s estimates are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. These valuations require the use of management’s assumptions, which would not reflect unanticipated events and circumstances that may occur.

Cash	\$	942
Accounts receivable		3,621
Inventories		4,685
Other current assets		431
Property, plant and equipment		9,177
Goodwill		6,534
Customer relationships		2,522
Trade name		1,127
Accounts payable		(1,060)
Other current liabilities		(778)
Deferred tax liability, net		(1,011)
Net assets acquired	\$	<u>26,190</u>

The goodwill included in the Company’s purchase price allocation presented above represents the value of SWE’s assembled and trained workforce, the incremental value that SWE engineering and technology will bring to the Company and the revenue growth which is expected to occur over time which is attributable to increased market penetration from future new products and customers. The goodwill acquired in connection with the acquisition is not deductible for income tax purposes.

The operating results and cash flows of SWE are reflected in the Company’s consolidated financial statements from the date of acquisition. SWE is included in the Battery & Energy Products segment.

For the year ended December 31, 2019, SWE contributed revenue of \$18,746 and net income of \$1,238, inclusive of a \$264 increase in cost of products sold for the fair value step-up of acquired inventory sold during the period, non-recurring expenses of \$165 directly related to the acquisition, interest expense of \$453 directly related to the financing of the SWE acquisition, and amortization expense of \$161 on acquired identifiable intangible assets.

During the year ended December 31, 2019, the Company incurred non-recurring transaction costs of \$322 directly attributable to the acquisition. Debt issuance costs of \$157, including placement, renewal and legal fees, are amortized to interest expense over a weighted average life of 4.6 years based on the terms of the related Credit Facilities. Other non-recurring transaction costs of \$165, including one-time accounting, legal and due diligence services, were expensed during the year.

The following supplemental pro forma information presents the combined results of operations, inclusive of the purchase accounting adjustments and one-time acquisition-related expenses described above, as if the acquisition of SWE had been completed on January 1, 2018, the beginning of the comparable prior period.

The supplemental pro forma results do not exclude the agreed upon departure of the Shareholder from SWE and dissolution of the SWE Board of Directors upon consummation of the acquisition or the realization of any expected synergies or other cost reductions following the completion of the business combination. The supplemental pro forma results are presented for informational purposes only and should not be considered indicative of the financial position or results of operations had the acquisition been completed as of the dates indicated and does not purport to indicate the future combined financial position or results of operation.

Set forth below are the unaudited supplemental pro forma results of the Company and SWE for the years ended December 31, 2019 and 2018 as if the acquisition had occurred as of January 1, 2018.

	Years Ended December 31	
	2019	2018
Revenue	\$ 115,590	\$ 115,566
Operating income	8,008	6,278
Net Income attributable to Ultralife Corporation	5,526	24,280
Net income per share attributable to Ultralife Corporation:		
Basic	\$ 0.35	\$ 1.53
Diluted	\$ 0.34	\$ 1.49

Note 3 – Debt

Credit Facilities

On May 1, 2019, Ultralife, SWE, and CLB, INC., a Texas corporation and wholly owned subsidiary of SWE (“CLB”), as borrowers, entered into the First Amendment Agreement (the “First Amendment Agreement”) with KeyBank National Association (“KeyBank” or the “Bank”), as lender and administrative agent, to amend the Credit and Security Agreement by and among Ultralife and KeyBank dated May 31, 2017 (the “Credit Agreement”, and together with the First Amendment Agreement, the “Amended Credit Agreement”).

The Amended Credit Agreement, among other things, provides for a five-year, \$8,000 senior secured term loan (the “Term Loan Facility”) and extends the term of the \$30,000 senior secured revolving credit facility (the “Revolving Credit Facility”, and together with the Term Loan Facility, the “Credit Facilities”) through May 31, 2022. Up to six months prior to May 31, 2022, the Revolving Credit Facility may be increased to \$50,000 with the Bank’s concurrence.

Upon closing of the SWE acquisition on May 1, 2019, the Company drew down the full amount of the Term Loan Facility and \$6,782 under the Revolving Credit Facility. As of December 31, 2019, the Company had \$7,134 outstanding principal on the Term Loan Facility, of which \$1,372 is included in current portion of long-term debt on the balance sheet, and \$10,182 outstanding principal on the Revolving Credit Facility. As of December 31, 2019, total unamortized debt issuance costs of \$164 associated with the Amended Credit Agreement are classified as a reduction of long-term debt on the balance sheet.

The Company is required to repay the borrowings under the Term Loan Facility in sixty (60) equal consecutive monthly payments commencing on May 31, 2019, in arrears, together with applicable interest. All unpaid principal and accrued and unpaid interest with respect to the Term Loan Facility is due and payable in full on April 30, 2024. All unpaid principal and accrued and unpaid interest with respect to the Revolving Credit Facility is due and payable in full on May 31, 2022. The Company may voluntarily prepay principal amounts outstanding at any time subject to certain restrictions.

As of December 31, 2019, the aggregate principal amounts of long-term debt are scheduled to mature as follows: \$1,420 in 2021, \$11,650 in 2022, \$1,519 in 2023, and \$1,355 in 2024.

In addition to the customary affirmative and negative covenants, the Company must maintain a consolidated fixed charge coverage ratio of equal to or greater than 1.15 to 1.0, and a consolidated senior leverage ratio of equal to or less than 2.5 to 1.0, each as defined in the Amended Credit Agreement. The Company was in full compliance with its covenants as of December 31, 2019.

Borrowings under the Credit Facilities are secured by substantially all the assets of the Company. Availability under the Revolving Credit Facility is subject to certain borrowing base limits based on receivables and inventories.

Interest will accrue on outstanding indebtedness under the Credit Facilities at the Base Rate or the Overnight LIBOR Rate, as selected by the Company, plus the applicable margin. The Base Rate is the higher of (a) the Prime Rate, (b) the Federal Funds Effective Rate plus 50 basis points, and (c) the Overnight LIBOR Rate plus one hundred basis points. The applicable margin ranges from zero to negative 50 basis points for the Base Rate and from 185 to 215 basis points for the Overnight LIBOR Rate and are determined based on the Company’s senior leverage ratio. As of December 31, 2019, the variable interest rates were 3.56% for the Revolving Credit Facility and 3.41% for the Term Loan Facility.

The Company must pay a fee of 0.1% to 0.2% based on the average daily unused availability under the Revolving Credit Facility.

Payments must be made by the Company to the extent borrowings exceed the maximum amount then permitted to be drawn on the Credit Facilities and from the proceeds of certain transactions. Upon the occurrence of an event of default, the outstanding obligations may be accelerated and the Bank will have other customary remedies including resort to the security interest the Company provided to the Bank.

Note 4 – Share Repurchase Program

On October 31, 2018, the Company’s Board of Directors approved a share repurchase program (the “Share Repurchase Program”) which became effective on November 1, 2018, under which the Company is authorized to purchase up to 2.5 million shares of its outstanding common stock over a period not to exceed twelve months.

Under the Share Repurchase Program, shares may be purchased in open market transactions, including through block purchases, through privately negotiated transactions, or pursuant to any trading plan that may be adopted in accordance with Rule 10b5-1 of the Securities Exchange Act of 1934. The timing, manner, price and amount of any repurchase will be determined at the Company’s discretion and the Share Repurchase Program may be suspended, terminated or modified by the Company’s Board of Directors at any time for any reason and does not obligate the Company to purchase any specific number of shares. Under the Program, all purchases will be made in accordance with Securities Exchange Act Rule 10b-18, which sets certain restrictions on the method, timing, price and volume of open market stock repurchases.

During 2019, we repurchased a total of 267,300 shares of our common stock for an aggregate consideration (including fees and commissions) of \$1,957.

From the inception of the Share Repurchase Program on November 1, 2018, we repurchased a total of 372,974 shares of our common stock for an aggregate consideration (including fees and commissions) of \$2,699.

Note 5 - Supplemental Balance Sheet Information

a. Cash and Restricted Cash

The Company had cash and restricted cash totaling \$7,405 and \$25,934 as of December 31, 2019 and 2018, respectively.

	December 31	
	2019	2018
Cash	\$ 7,135	\$ 25,583
Restricted cash	270	351
Total	<u>\$ 7,405</u>	<u>\$ 25,934</u>

As of December 31, 2019 and December 31, 2018, restricted cash included \$188 and \$266, respectively, relating to a government grant awarded in the People’s Republic of China to fund specified technological research and development initiatives. The grant proceeds are realized to income as a direct offset to expense as the related expenditures are incurred. For the year ended December 31, 2019, grant proceeds of \$78 were realized to income. As of December 31, 2019 and December 31, 2018, restricted cash included euro-denominated deposits of \$82 and \$85, respectively, withheld by the Dutch tax authorities and third-party VAT representatives in connection with a previously utilized logistics arrangement in the Netherlands. Restricted cash is included as a component of the cash balance for purposes of the consolidated statements of cash flows.

b. Inventory, Net

Inventories are stated at the lower of cost or net realizable value with cost determined under the first-in, first-out (FIFO) method. The composition of inventories, net was:

	December 31	
	2019	2018
Raw materials	\$ 18,485	\$ 13,274
Work in process	2,548	2,016
Finished products	8,726	7,553
Total	<u>\$ 29,759</u>	<u>\$ 22,843</u>

c. *Property, Plant and Equipment*

Major classes of property, plant and equipment consisted of the following:

	December 31	
	2019	2018
Land	\$ 1,273	\$ 123
Buildings and leasehold improvements	8,148	8,267
Machinery and equipment	62,562	51,261
Furniture and fixtures	2,112	2,058
Computer hardware and software	6,528	5,590
Construction in progress	4,730	4,302
	<u>85,353</u>	<u>71,601</u>
Less – Accumulated depreciation	(62,828)	(60,857)
Total	<u>\$ 22,525</u>	<u>\$ 10,744</u>

Depreciation expense was \$2,220 and \$1,972 for the years ended December 31, 2019 and 2018, respectively.

d. *Goodwill and Other Intangible Assets*

The Company performed its annual impairment tests of goodwill and other indefinite-lived intangible assets as of the first day of the fiscal fourth quarter of 2019 and 2018.

The Company performed a quantitative impairment test as of September 30, 2019 of its five identified goodwill reporting units including a reporting unit for SWE (Note 2) which is a component of the Battery & Energy Products segment. The fair value for the reporting units could not be determined using readily available quoted Level 1 inputs or Level 2 inputs that were observable in active markets. Therefore, we used a discounted cash flow model to estimate the fair value of the reporting units, using Level 3 inputs. To estimate the fair value of the reporting units, we used significant estimates and judgments, including an assessment of our future revenue prospects, revenue growth rates and profit margins based on internal forecasts, industry and market based terminal growth rates, inputs to the weighted-average cost of capital used to discount future cash flows, and earnings multiples.

The Company performed a quantitative impairment test of its four other indefinite-lived intangible assets (trademarks). The fair value of our trademarks could not be determined using readily available quoted Level 1 inputs or Level 2 inputs that were observable in active markets. Therefore, we used a relief from royalty approach to estimate the fair value of our trademarks, using Level 3 inputs. Significant estimates and judgments included an assessment of our future revenue prospects, industry and market based terminal growth rates, inputs to the weighted-average cost of capital used to discount future cash flows, and royalty rates based on external market data.

As a result of the impairment tests performed for 2019 and 2018, we determined that no impairments existed. Fair value exceeded carrying value for all reporting units and trademarks by more than 10%, except for the goodwill test as of September 30, 2019 for SWE which was acquired five months prior.

There is a possibility that our goodwill and other intangible assets could be impaired in the future should there be a significant change in our internal forecasts and other assumptions used in our impairment analysis.

The following table summarizes the goodwill activity by segment for the years ended December 31, 2019 and 2018:

	Battery & Energy Products	Communications Systems	Total
Balance – January 1, 2018	\$ 8,965	\$ 11,493	\$ 20,458
Effect of foreign currency translation	(349)	-	(349)
Balance – December 31, 2018	<u>8,616</u>	<u>11,493</u>	<u>20,109</u>
Acquisition of SWE	6,534	-	6,534
Effect of foreign currency translation	110	-	110
Balance – December 31, 2019	<u>\$ 15,260</u>	<u>\$ 11,493</u>	<u>\$ 26,753</u>

The composition of intangible assets was:

	December 31, 2019		
	Cost	Accumulated amortization	Net
Trademarks	\$ 3,403	\$ -	\$ 3,403
Customer relationships	9,080	4,721	4,359
Patents and technology	5,521	4,869	652
Distributor relationships	377	377	-
Trade name	1,511	204	1,307
Total other intangible assets	<u>\$ 19,892</u>	<u>\$ 10,171</u>	<u>\$ 9,721</u>

	December 31, 2018		
	Cost	Accumulated amortization	Net
Trademarks	\$ 3,405	\$ -	\$ 3,405
Customer relationships	6,471	4,392	2,079
Patents and technology	5,486	4,725	761
Distributor relationships	377	377	-
Trade name	370	111	259
Total other intangible assets	<u>\$ 16,109</u>	<u>\$ 9,605</u>	<u>\$ 6,504</u>

The change in the cost value of other intangible assets is a result of the SWE acquisition (Note 2) and the effect of foreign currency translations.

Amortization of other intangible assets was included in the following financial statement captions:

	Year ended December 31	
	2019	2018
Research and development expense	\$ 130	\$ 147
Selling, general and administrative expense	395	250
Total	<u>\$ 525</u>	<u>\$ 397</u>

Future amortization expense of amortizable intangible assets will be approximately \$360, \$341, \$326, \$323 and \$313 for the five fiscal years ending December 31, 2020 through 2024, respectively.

Note 6 - Commitments and Contingencies

a. Indemnity

Our organizational documents provide that our directors or officers will be reimbursed for all expenses, to the fullest extent permitted by law arising out of their performance.

b. Purchase Commitments

As of December 31, 2019, we have made commitments to purchase approximately \$1,185 of production machinery and equipment.

c. China

Our operating facility in China presents risks including, but not limited to, changes in local regulatory requirements, changes in labor laws, local wage laws, environmental regulations, taxes and operating licenses, compliance with U.S. regulatory requirements, including the Foreign Corrupt Practices Act, uncertainties as to application and interpretation of local laws and enforcement of contract and intellectual property rights, currency restrictions, currency exchange controls, fluctuations of currency, and currency revaluations, eminent domain claims, civil unrest, power outages, water shortages, labor shortages, labor disputes, increase in labor costs, rapid changes in government, economic and political policies, political or civil unrest, acts of terrorism, or the threat of boycotts, other civil disturbances and the possible impact of the imposition of tariffs by the U.S. Government on 9 Volt batteries that we manufacture in China as well as any retaliating trade policies or restrictions. Any such disruptions could depress our earnings and have other material adverse effects on our business, financial condition and results of operations.

d. *Employment Contracts*

We have an employment contract with Michael D. Popielec, our President and Chief Executive Officer, which remains in effect until terminated by either party. This agreement provides for a base salary, as adjusted for increases at the discretion of our Board of Directors, and includes incentive bonuses based upon attainment of specified quantitative and qualitative performance goals. This agreement also provides for severance payments in the event of specified events of termination of employment. In addition, this agreement provides for a lump sum payment in the event of termination of employment in connection with a change in control.

As part of our employment commencement process, employees are required to enter into agreements providing for confidentiality of certain information and the assignment of rights to inventions made by them while employed by us. These agreements also contain certain non-competition and non-solicitation provisions effective during the employment term and for varying periods thereafter depending on position and location. There can be no assurance that we will be able to enforce these agreements. All of our employees agree to abide by the terms of a Code of Ethics policy that provides for the confidentiality of certain information received during the course of their employment.

e. *Product Warranties*

We estimate future warranty costs to be incurred for product failure rates, material usage and service costs in the development of our warranty obligations. Estimated future costs are based on actual past experience and are generally estimated as a percentage of sales over the warranty period. Changes in our product warranty liability during the years ended December 31, 2019 and 2018 were as follows:

	2019	2018
Balance, January 1	\$ 95	\$ 149
Assumed warranty obligations – SWE	145	-
Provision for warranties issued	114	7
Settlements made	(159)	(61)
Balance, December 31	<u>\$ 195</u>	<u>\$ 95</u>

f. *Contingencies and Legal Matters*

We are subject to legal proceedings and claims that arise from time to time in the normal course of business. We believe that the final disposition of any such matters will not have a material adverse effect on the Company's financial position, results of operations or cash flows. However, recognizing that legal matters are subject to inherent uncertainties, there exists the possibility that ultimate resolution of these matters could have a material adverse impact on the Company's financial position, results of operations or cash flows in the period in which any such effects are recorded. We are not aware of any such situations at this time.

Note 7 - Shareholders' Equity

a. *Stock-Based Compensation Expense*

We recorded non-cash stock compensation expense in each period as follows:

	Year ended December 31	
	2019	2018
Stock options	\$ 623	\$ 817
Restricted stock grants	130	73
Total	<u>\$ 753</u>	<u>\$ 890</u>

These are more fully discussed as follows:

b. *Stock Options*

We have various stock-based employee compensation plans, for which compensation cost is recognized in the financial statements. The cost is measured at the grant date, based on the estimated fair value of the award, and is recognized as an expense over the employee's requisite service period (generally the vesting period of the equity award).

Our shareholders have approved various equity-based plans that permit the grant of stock options, restricted stock and other equity-based awards. In addition, our shareholders have approved the grant of stock options outside of these plans.

In June 2004, our shareholders adopted the 2004 Long-Term Incentive Plan ("2004 LTIP") pursuant to which we were authorized to issue up to 750,000 shares of common stock and grant stock options, restricted stock awards, stock appreciation rights and other stock-based awards. Through shareholder approved amendments to the LTIP in 2006, 2008, 2011, and 2013, the total number of shares authorized under the 2004 LTIP was increased to 2,900,000.

In June 2014, our shareholders approved the 2014 Long-Term Incentive Plan ("2014 LTIP") as the successor plan to the 2004 LTIP that expired on June 10, 2014. Under the 2014 LTIP, a total of 1,750,000 shares of common stock will be available for grant of awards. Of the total number of shares of common stock available for awards under the 2014 LTIP, no more than 800,000 shares of common stock may be used for awards other than stock options and stock appreciation rights. Grants under the 2014 LTIP may be awarded through June 2, 2024.

Stock options granted under the LTIPs are either Incentive Stock Options ("ISOs") or Non-Qualified Stock Options ("NQSOs"). Key employees are eligible to receive ISOs and NQSOs; however, directors and consultants are eligible to receive only NQSOs. Most ISOs vest over a three-year period and expire on the seventh anniversary of the grant date. As of December 31, 2019, there were 610,628 stock options outstanding under the 2004 LTIP and 931,164 stock options outstanding under the 2014 LTIP.

On December 30, 2010, pursuant to the terms of his employment agreement, we granted our President and Chief Executive Officer, Michael D. Popielec, options to purchase shares of common stock under the 2004 LTIP as follows: (i) 50,000 shares at \$6.42, vesting in annual increments of 12,500 shares over a four-year period commencing December 30, 2011; (ii) 250,000 shares at \$6.42, vesting in annual increments of 62,500 shares over a four-year period commencing December 30, 2011; (iii) 200,000 shares at \$10.00, with vesting to begin on the date the stock reaches a closing price of \$10.00 per share for 15 trading days within a 30-day trading period, with such vesting in annual increments of 50,000 shares over the four anniversary dates of that date; and (iv) 200,000 shares at \$15.00, with vesting to begin on the date the stock reaches a closing price of \$15.00 per share for 15 trading days within a 30-day trading period, with such vesting in annual increments of 50,000 shares over the four anniversary dates of that date. The options set forth in items (ii), (iii) and (iv) were subject to shareholder approval of an amendment to the 2004 LTIP, which approval was obtained on June 7, 2011.

All such options in items (i) and (ii) were due to expire on December 30, 2017. On April 19, 2017, the Company's Board of Directors extended the expiration date to December 30, 2020.

All such options in items (iii) and (iv) were due to expire as of the later of December 30, 2017 and five years after the initial vesting commences, but in no event later than December 30, 2020. On July 25, 2018, the Company's Board of Directors modified the option in item (iii) such that the option will vest immediately upon the Company's common stock first reaching a closing price \$10.00 for 15 trading days in a 30 trading-day period. The option became fully vested during the third quarter of 2018 and expires December 30, 2020. The transaction has been accounted for as an equity award modification pursuant to Accounting Standards Codification Topic 718, Compensation – Stock Compensation. During the third quarter 2018, the Company recognized compensation cost of \$182 representing the incremental fair value of the modified award computed as of the modification date as the difference between the fair value of the modified award and the fair value of the original award immediately before it was modified. The incremental fair value was determined using a Monte Carlo simulation option-pricing model consistent with the valuation methodology used to value and recognize the original award. The market-based conditions for the option in item (iv) had not been met as of December 31, 2019.

As of December 31, 2019, there was \$737 of total unrecognized compensation costs related to outstanding stock options, which we expect to recognize over a weighted average period of 1.2 years.

We use the Black-Scholes option-pricing model to estimate fair value of stock-based awards. The following weighted average assumptions were used to value options granted during the years ended December 31, 2019 and 2018:

	Year ended December 31	
	2019	2018
Risk-free interest rate	1.8%	2.6%
Volatility factor	48.3%	46.8%
Weighted average expected life (years)	5.3	5.0
Forfeiture rate	10.0%	10.0%
Dividends	0.0%	0.0%

We used a Monte Carlo simulation option-pricing model to estimate the fair value of market performance stock-based awards, of which there were no new awards for the years ended December 31, 2019 and 2018.

We calculate expected volatility for stock options by taking an average of historical volatility over the expected term. The computation of expected term was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards and vesting schedules. The interest rate for periods within the contractual life of the award is based on the U.S. Treasury yield in effect at the time of grant. Forfeiture rates are calculated by dividing unvested shares forfeited by beginning shares outstanding. The pre-vesting forfeiture rate is calculated yearly and is determined using a historical twelve-quarter rolling average of the forfeiture rates.

The following tables summarize data for the stock options issued by us:

Year ended December 31, 2019

	Number of shares	Weighted average exercise price per share	Weighted average remaining contractual term	Aggregate intrinsic value
Shares under option – January 1	1,576,087	\$ 6.58		
Options granted	282,500	8.27		
Options exercised	(208,881)	4.45		
Options forfeited or expired	(107,914)	10.93		
Shares under option – December 31	<u>1,541,792</u>	<u>\$ 6.88</u>	<u>3.21</u>	<u>\$ 1,991</u>
Vested and expected to vest - December 31	<u>1,445,563</u>	<u>\$ 6.79</u>	<u>3.04</u>	<u>\$ 1,959</u>
Options exercisable – December 31	<u>1,083,581</u>	<u>\$ 6.28</u>	<u>2.09</u>	<u>\$ 1,872</u>

Year ended December 31, 2018

	Number of shares	Weighted average exercise price per share
Shares under option – January 1	1,860,211	\$ 5.96
Options granted	217,500	9.68
Options exercised	(422,793)	4.49
Options forfeited or expired	(78,831)	11.75
Shares under option – December 31	<u>1,576,087</u>	<u>\$ 6.58</u>
Options exercisable – December 31	<u>1,064,127</u>	<u>\$ 5.89</u>

The following table represents additional information about stock options outstanding at December 31, 2019:

Range of exercise prices	Option outstanding			Options exercisable	
	Number of outstanding options	Weighted-average remaining contractual life	Weighted-average exercise price	Number of options exercisable	Weighted-average exercise price
\$3.22 - \$3.99	244,377	1.70	\$ 3.82	244,377	\$ 3.82
\$4.00 - \$5.99	336,331	3.81	4.95	269,601	4.79
\$6.00 - \$9.99	761,084	4.02	7.89	369,603	6.99
\$10.00	200,000	1.00	10.00	200,000	10.00
\$3.22 - \$10.00	<u>1,541,792</u>	<u>3.21</u>	<u>\$ 6.88</u>	<u>1,083,581</u>	<u>\$ 6.28</u>

The weighted average fair value of options granted during the years ended December 31, 2019 and 2018 was \$3.77 and \$4.22, respectively. The total intrinsic value of options (which is the amount by which the stock price exceeded the exercise price of the options on the date of exercise) exercised during the years ended December 31, 2019 and 2018 was \$931 and \$1,722, respectively.

Cash received from option exercises under our stock-based compensation plans for the years ended December 31, 2019 and 2018 was \$930 and \$1,568, respectively.

c. *Restricted Stock Awards*

In April 2019, 20,000 shares of restricted stock were awarded to certain of our employees at a weighted-average grant date fair value of \$11.12 per share. In January 2018, 17,500 shares of restricted stock were awarded to certain of our employees at a weighted-average grant date fair value of \$7.16 per share. All outstanding restricted shares vest in equal annual installments over three years. Unrecognized compensation cost related to these restricted shares was \$145 at December 31, 2019.

d. *Reserved Shares*

There were 486,272 shares of common stock available for future issuance under equity compensation plans as of December 31, 2019.

Note 8 - Income Taxes

For the years ended December 31, 2019 and 2018, we recognized income tax expense (benefit) of \$1,457 and (\$18,386), respectively.

	Year ended December 31	
	2019	2018
Current:		
Federal	\$ -	\$ -
State	43	-
Foreign	203	257
	<u>246</u>	<u>257</u>
Deferred:		
Federal	1,236	(18,514)
State	-	-
Foreign	(25)	(129)
	<u>1,211</u>	<u>(18,643)</u>
Total income tax provision	<u>\$ 1,457</u>	<u>\$ (18,386)</u>

The income tax benefit for 2018 primarily represents a non-cash benefit of \$18,652 upon recognizing the release of the valuation allowance on our U.S. deferred tax assets as of December 31, 2018.

As of December 31, 2018, the Company recognized the release of the valuation allowance on our net operating loss carryforwards and other U.S. deferred tax assets on the basis of management's assessment. In evaluating the realizability of our U.S. deferred tax assets, management considered all available evidence and concluded that positive factors, including further demonstration of sustained profitability in our core business and continued improvement in our ability to achieve internal earnings forecasts, outweighed all negative factors, including our history of operating losses (prior to 2015) and historical operating volatility in our core business. Our assessment also considered our expectation to utilize our domestic net operating loss carryforwards, which expire 2020 thru 2035, and our general business tax credits, which expire 2028 thru 2037. Based on the results of our assessment, management concluded that it is more likely than not that our U.S. deferred tax assets will be fully realized. As of December 31, 2019, our domestic net operating loss carryforwards and general business tax credits were \$58,400 and \$1,907, respectively.

As of December 31, 2019 and 2018, for certain past operations in the U.K., we continue to report a valuation allowance for net operating loss carryforwards of approximately \$10,600, nearly all of which can be carried forward indefinitely. Management has concluded that the realizability of the U.K. net operating loss carryforwards is not more likely than not, as utilization of the net operating losses may be limited due to the change in the past U.K. operation. These net operating losses in the U.K. cannot currently be used to reduce taxable income at our other U.K. subsidiary, Accutronics Ltd. There are no other deferred tax assets related to the past U.K. operations. As of December 31, 2019 and 2018, we have not recognized a valuation allowance against our other foreign deferred tax assets, as we believe that it is more likely than not that they will be realized. We will continue to evaluate the realizability of our deferred tax assets in future periods.

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amount used for income tax purposes. Significant components of our deferred tax assets and liabilities are as follows:

	December 31	
	2019	2018
Deferred tax assets:		
Property, plant and equipment	\$ -	\$ 168
Net operating loss carryforwards	14,579	15,622
Tax credit carryforwards	1,907	1,817
Intangible assets	1,283	1,231
Accrued expenses, reserves and other	2,265	1,838
Total deferred tax assets	<u>20,034</u>	<u>20,676</u>
Valuation allowance for deferred tax assets	<u>(1,942)</u>	<u>(1,942)</u>
Net deferred tax assets	<u>18,092</u>	<u>18,734</u>
Deferred tax liabilities:		
Other	-	(25)
Property, plant and equipment	(342)	-
Intangible assets	(5,087)	(3,856)
Total deferred tax liabilities	<u>(5,429)</u>	<u>(3,881)</u>
Net deferred tax assets	<u>\$ 12,663</u>	<u>\$ 14,853</u>

Net deferred tax assets (liabilities) are comprised of the following balance sheet amounts:

	December 31	
	2019	2018
Deferred tax assets	\$ 13,222	\$ 15,444
Deferred tax liabilities	(559)	(591)
	<u>\$ 12,663</u>	<u>\$ 14,853</u>

At December 31, 2019, the Company maintains its assertion that all foreign earnings will be indefinitely reinvested in those operations.

For financial reporting purposes, income from continuing operations before income taxes is as follows:

	Year ended December 31	
	2019	2018
United States	\$ 5,992	\$ 6,226
Foreign	779	387
	<u>\$ 6,771</u>	<u>\$ 6,613</u>

The provision for income taxes differs from the amount of income tax determined by applying the applicable U.S. statutory federal income tax rate to income from continuing operations before income taxes as follows:

	Year ended December 31	
	2019	2018
Statutory income tax rate	21%	21%
(Increase) decrease in tax provision resulting from:		
Equity compensation	(0.4)	(2.9)
Income tax credits	(0.4)	(1.0)
Foreign tax rates	(0.5)	0.3
Valuation allowance	-	(297.3)
Other	1.8	2.0
Effective income tax rate	<u>21.5%</u>	<u>(277.9)%</u>

Accounting for Uncertainty in Income Taxes

There were no unrecognized tax benefits related to uncertain tax positions at December 31, 2019 and 2018.

As a result of our operations, we file income tax returns in various jurisdictions including U.S. federal, U.S. state and foreign jurisdictions. We are routinely subject to examination by taxing authorities in these various jurisdictions. Our U.S. tax matters for the years 2000 through 2019 remain subject to examination by the Internal Revenue Service (“IRS”) due to our net operating loss carryforwards. Our U.S. tax matters for the years 2000 through 2019 remain subject to examination by various state and local tax jurisdictions due to our net operating loss carryforwards. Our tax matters for the years 2010 through 2019 remain subject to examination by the respective foreign tax jurisdiction authorities.

Note 9 – Operating Leases

The Company has operating leases predominantly for operating facilities. As of December 31, 2019, the remaining lease terms on our operating leases range from less than one year to approximately 5 years. Renewal options to extend our leases have been exercised. Termination options are not reasonably certain of exercise by the Company. There is no transfer of title or option to purchase the leased assets upon expiration. There are no residual value guarantees or material restrictive covenants. In July 2019, the Company entered into a five-year agreement to extend the operating lease term of its Shenzhen facility.

The components of lease expense for the current and prior-year comparative periods were as follows:

	Year ended December 31	
	2019	2018
Operating lease cost	\$ 628	\$ 590
Variable lease cost	84	89
Total lease cost	<u>\$ 712</u>	<u>\$ 679</u>

Supplemental cash flow information related to leases was as follows:

	Year ended December 31	
	2019	2018
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$ 611	\$ 592
Right-of-use assets obtained in exchange for lease liabilities:	\$ 1,586	\$ -

Supplemental balance sheet information related to leases was as follows:

	Balance Sheet Classification	December 31	
		2019	2018
Assets:			
Operating lease right-of-use asset	Other noncurrent assets	\$ 1,866	\$ 805
Liabilities:			
Current operating lease liability	Accrued expenses and other current liabilities	\$ 620	\$ 439
Operating lease liability, net of current portion	Other noncurrent liabilities	1,247	376
Total operating lease liability		\$ 1,867	\$ 815
Weighted-average remaining lease term (years)		3.7	2.1
Weighted-average discount rate		4.5%	4.5%

Future minimum lease payments as of December 31, 2019 are as follows:

Maturity of Operating Lease Liabilities

2020	685
2021	470
2022	355
2023	364
2024	182
Thereafter	0
Total lease payments	2,056
Less: Imputed interest	(189)
Present value of remaining lease payments	\$ 1,867

Note 10 - 401(k) Retirement Benefit Plan

We maintain a defined contribution 401(k) plan covering substantially all employees. Employees can contribute a portion of their salary or wages as prescribed under Section 401(k) of the Internal Revenue Code and, subject to certain limitations, we may, at the discretion of our Board of Directors, authorize an employer contribution based on a portion of the employees' contributions. For the year ended December 31, 2019, the Company matched 50% on the first 6% contributed by an employee, or a maximum of 3% of the employee's income. For the year ended December 31, 2018, the Company matched 50% on the first 4% contributed by an employee. For 2019 and 2018, we contributed \$319 and \$204, respectively, to the 401(k) plan.

Note 11 - Business Segment Information

We report our results in two operating segments: Battery & Energy Products and Communications Systems. The Battery & Energy Products segment includes: Lithium 9-volt, cylindrical and various other non-rechargeable batteries, in addition to rechargeable batteries, uninterruptable power supplies, charging systems and accessories. The Communications Systems segment includes: RF amplifiers, power supplies, cable and connector assemblies, amplified speakers, equipment mounts, case equipment, man-portable systems, integrated communication systems for fixed or vehicle applications and communications and electronics systems design. We believe that reporting performance at the gross profit level is the best indicator of segment performance.

2019:

	Battery & Energy Products	Communications Systems	Corporate	Total
Revenue	\$ 83,996	\$ 22,799	\$ -	\$ 106,795
Segment contribution	22,813	8,352	(23,797)	7,368
Other expense			597	597
Income tax expense			1,457	1,457
Non-controlling interest			109	109
Net income attributable to Ultralife			\$	\$ 5,205
Total assets	\$ 79,413	\$ 40,458	\$ 24,686	\$ 144,557
Capital expenditures	\$ 5,805	\$ 44	\$ 432	\$ 6,281
Goodwill	\$ 15,260	\$ 11,493	-	\$ 26,753
Depreciation and amortization of intangible assets	\$ 2,104	\$ 364	\$ 277	\$ 2,745
Stock-based compensation	\$ 355	\$ 119	\$ 279	\$ 753

2018:

	Battery & Energy Products	Communications Systems	Corporate	Total
Revenue	\$ 70,497	\$ 16,693	\$ -	\$ 87,190
Segment contribution	19,574	6,009	(19,028)	6,555
Other income			(58)	(58)
Income tax benefit			(18,386)	(18,386)
Non-controlling interest			69	69
Net income attributable to Ultralife			\$	\$ 24,930
Total assets	\$ 50,648	\$ 27,482	\$ 42,718	\$ 120,848
Capital expenditures	\$ 2,948	\$ 614	\$ 623	\$ 4,185
Goodwill	\$ 8,616	\$ 11,493	-	\$ 20,109
Depreciation and amortization of intangible assets	\$ 1,611	\$ 375	\$ 383	\$ 2,369
Stock-based compensation	\$ 333	\$ 106	\$ 451	\$ 890

Long-lived assets (including goodwill and intangible assets) held outside the U.S., principally in the United Kingdom and China, were \$12,414 and \$11,502 at December 31, 2019 and 2018, respectively.

U.S. and Non-U.S. Revenue Information¹:

2019:	Total Revenue	United States	Non-United States
Battery & Energy Products	\$ 83,996	\$ 42,224	\$ 41,772
Communications Systems	22,799	21,151	1,648
Total	\$ 106,795	\$ 63,375	\$ 43,420
		59%	41%

2018:	Total Revenue	United States	Non-United States
Battery & Energy Products	\$ 70,497	\$ 37,898	\$ 32,599
Communications Systems	16,693	15,156	1,537
Total	\$ 87,190	\$ 53,054	\$ 34,136
		61%	39%

¹ Sales classified to U.S. include shipments to U.S.-based prime contractors which in some cases may serve non-U.S. projects

Commercial and Government/Defense Revenue Information:

2019:	Total Revenue	Commercial	Government/Defense
Battery & Energy Products	\$ 83,996	\$ 59,682	\$ 24,314
Communications Systems	22,799	-	22,799
Total	\$ 106,795	\$ 59,682	\$ 47,113
		56%	44%

2018:	Total Revenue	Commercial	Government/Defense
Battery & Energy Products	\$ 70,497	\$ 41,044	\$ 29,453
Communications Systems	16,693	-	16,693
Total	\$ 87,190	\$ 41,044	\$ 46,146
		47%	53%

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation Of Disclosure Controls And Procedures – Our president and chief executive officer (principal executive officer) and our chief financial officer and treasurer (principal financial officer) have evaluated our disclosure controls and procedures (as defined in Securities Exchange Act Rule 13a-15(e)) as of the end of the period covered by this annual report. Based on this evaluation, our president and chief executive officer and chief financial officer and treasurer concluded that our disclosure controls and procedures were effective as of such date.

Changes In Internal Controls Over Financial Reporting –There has been no change in our internal control over financial reporting (as defined in Securities Exchange Act Rule 13a-15(f)) that occurred during the fourth quarter of the fiscal year covered by this annual report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting – Our management team is responsible for establishing and maintaining adequate internal control over our financial reporting. Our internal control over financial reporting is a process designed 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. Because of the inherent limitations of internal control systems, our internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in Internal Control-Integrated Framework (2013). Based on our assessment, we concluded that, as of December 31, 2019, our internal control over financial reporting was effective based on those criteria.

In accordance with guidance issued by the SEC, registrants are permitted to exclude acquisitions from the final assessment of internal control over financial reporting for the first fiscal year in which the acquisition occurred while integrating the acquired operations. Our management's evaluation of internal control over financial reporting excluded SWE, which we acquired on May 1, 2019, as discussed in Note 2 to the consolidated financial statements. Total revenue of SWE from the date of acquisition included in our consolidated results represented 18% of our consolidated revenues for the year ended December 31, 2019. Total assets of SWE (excluding acquired goodwill and other intangible assets which were included in management's evaluation) represented 12% of our consolidated total assets as of December 31, 2019.

Freed Maxick CPAs, P.C., an independent registered public accounting firm, which has audited and reported on the consolidated financial statements contained in this Annual Report on Form 10-K, has audited the effectiveness of the Company's internal control over financial reporting as stated in their report, which is included in Part II, Item 8.

ITEM 9B. OTHER INFORMATION

None.

PART III

The information required by Part III, other than as set forth in Item 12, and each of the following items is omitted from this report and will be presented in our definitive proxy statement ("Proxy Statement") to be filed pursuant to Regulation 14A, not later than 120 days after the end of the fiscal year covered by this report, in connection with our 2020 Annual Meeting of Shareholders, which information included therein is incorporated herein by reference.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The sections entitled "Election of Directors", "Executive Officers", "Delinquent Section 16(a) Reports Compliance" and "Corporate Governance" in the Proxy Statement are incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The sections entitled "Executive Compensation", "Directors Compensation", "Employment Arrangements" and "Compensation and Management Committee" in the Proxy Statement are incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The section entitled "Security Ownership of Certain Beneficial Owners" and "Security Ownership of Management" in the Proxy Statement is incorporated herein by reference.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,541,792	\$ 6.88	486,272
Equity compensation plans not approved by security holders	-	-	-
Total	1,541,792	\$ 6.88	486,272

See Note 7 in the notes to consolidated financial statements for additional information.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The section entitled "Corporate Governance - General" in the Proxy Statement is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The section entitled "Proposal to Ratify the Selection of Independent Registered Accounting Firm - Principal Accountant Fees and Services" in the Proxy Statement is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this report:

1. Financial Statements

The financial statements and schedules required by this Item 15 are set forth in Part II, Item 8 of this report.

(b) Exhibits. The following exhibits are filed as a part of this report:

Exhibit Index	Description of Document	Incorporated By Reference from:
2.1	Stock Purchase Agreement, dated May 1, 2019, by and among Ultralife Corporation, Southwest Electronic Energy Corporation, Southwest Electronic Energy Medical Research Institute, and Claude Leonard Benckenstein	Exhibit 10.1 of the Form 8-K filed on May 2, 2019
2.2	Stock Purchase Agreement Relating to Accutronics Limited by and between Robert Andrew Phillips and Others and Ultralife Corporation	Exhibit 2.2 of the Form 10-K for the year ended December 31, 2015, filed March 2, 2016
3.1	Restated Certificate of Incorporation	Exhibit 3.1 of the Form 10-K for the year ended December 31, 2008, filed March 13, 2009
3.2	Amended and Restated By-laws	Exhibit 3.2 of the Form 8-K filed December 9, 2011
4.1	Specimen Stock Certificate	Exhibit 4.1 of the Form 10-K for the year ended December 31, 2008, filed March 13, 2009
10.1*	Amendment to the Agreement relating to rechargeable batteries	Exhibit 10.24 of our Form 10-K for the fiscal year ended June 30, 1996 (this Exhibit may be found in SEC File No. 0-20852)
10.2†	Ultralife Corporation 2014 Long-Term Incentive Plan	Appendix A to our Definitive Proxy Statement filed on April 21, 2014
10.3†	Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan	Exhibit 99.2 of our Registration Statement on Form S-8 filed on July 26, 2004, File No. 333-117662
10.4†	Amendment No. 1 to Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan	Exhibit 99.3 of our Registration Statement on Form S-8 filed August 18, 2006, File No. 333-136737
10.5†	Amendment No. 2 to Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan	Exhibit 99.4 of our Registration Statement on Form S-8 filed November 13, 2008, File No. 333-155349
10.6†	Amendment No. 3 to Ultralife Batteries, Inc. Amended and Restated 2004 Long-Term Incentive Plan	Exhibit 99.5 of our Registration Statement on Form S-8 filed November 13, 2008, File No. 333-155349
10.7†	Employment Agreement between the Registrant and Michael D. Popielec dated December 6, 2010	Exhibit 10.40 of the Form 10-K for the year ended December 31, 2010, filed March 15, 2011
10.8†	Amendment No. 4 to Ultralife Corporation Amended and Restated 2004 Long-Term Incentive Plan	Exhibit 4.5 of the Registration Statement on Form S-8 filed on January 30, 2012, File No. 333-179235
10.9†	Amendment No. 5 to Ultralife Corporation Amended and Restated 2004 Long-Term Incentive Plan	Exhibit 10.1 of the Form 8-K filed on May 26, 2011
10.10†	Restricted Stock Unit Agreement between Ultralife Corporation and Michael D. Popielec. Dated June 4, 2013	Exhibit 10.1 of the Form 10-Q for the quarter ended June 30, 2013, filed August 9, 2013

10.11†	Amendment No. 6. to Ultralife Corporation Amended and Restated 2004 Long-Term Incentive Plan	Appendix A of Form DEF 14A filed on April 22, 2013
10.12	Credit and Security Agreement between Ultralife Corporation and KeyBank National Association dated May 31, 2017	Exhibit 10.1 of the Form 8-K filed on June 6, 2017
10.13	First Amendment Agreement, dated May 1, 2019, by and among Ultralife Corporation, Southwest Electronic Energy Corporation, CLB, INC., and KeyBank National Association Subsidiaries	Exhibit 10.1 of the Form 8-K filed on May 2, 2019
21		Filed herewith
23.1	Consent of Freed Maxick CPAs, P.C.	Filed herewith
31.1	CEO 302 Certifications	Filed herewith
31.2	CFO 302 Certifications	Filed herewith
32	906 Certifications	Filed herewith
100.INS	XBRL Instance Document	Filed herewith
100.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith
100.CAL	XBRL Taxonomy Calculation Linkbase Document	Filed herewith
100.LAB	XBRL Taxonomy Label Linkbase Document	Filed herewith
100.PRE	XBRL Taxonomy Presentation Linkbase Document	Filed herewith
100.DEF	XBRL Taxonomy Definition Document	Filed herewith

* Confidential treatment has been granted as to certain portions of this exhibit.

† Management contract or compensatory plan or arrangement.

SIGNATURES

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

ULTRALIFE CORPORATION

Date: February 6, 2020

/s/ Michael D. Popielec

Michael D. Popielec

President, Chief Executive Officer and Director

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

Date: February 6, 2020

/s/ Michael D. Popielec

Michael D. Popielec

President, Chief Executive Officer and Director

(Principal Executive Officer)

Date: February 6, 2020

/s/ Philip A. Fain

Philip A. Fain

Chief Financial Officer and Treasurer

(Principal Financial Officer and Principal

Accounting Officer)

Date: February 6, 2020

/s/ Thomas L. Saeli

Thomas L. Saeli (Director)

Date: February 6, 2020

/s/ Robert W. Shaw II

Robert W. Shaw II (Director)

Date: February 6, 2020

/s/ Ranjit C. Singh

Ranjit C. Singh (Director)

Date: February 6, 2020

/s/ Bradford T. Whitmore

Bradford T. Whitmore (Director)

INDEX TO EXHIBITS

21	Subsidiaries
23.1	Consent of Freed Maxick CPAs, P.C.
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Calculation Linkbase Document
101.LAB	XBRL Taxonomy Label Linkbase Document
101.PRE	XBRL Taxonomy Presentation Linkbase Document
101.DEF	XBRL Taxonomy Definition Document

SUBSIDIARIES

We have a 100% ownership interest in Ultralife Batteries (UK) LTD, incorporated in the United Kingdom.

We have a 100% ownership interest in ABLE New Energy Co., Limited, incorporated in Hong Kong, which has a 100% ownership interest in ABLE New Energy Co., Ltd, incorporated in the People's Republic of China.

We have a 100% ownership interest in Ultralife Energy Services Corporation, incorporated in Florida.

We have a 51% ownership interest in Ultralife Batteries India Private Limited, incorporated in India.

Through our ownership interest in Ultralife UK LTD, we have a 100% controlling interest in Accutronics, Ltd., also incorporated in the United Kingdom.

We have 100% ownership interest in Southwest Electronic Energy Corporation and its wholly-owned subsidiary, CLB, Inc. (collectively "SWE"), both incorporated in Texas.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-8 (Nos. 333-117662, 333-136737, 333-155349, 333-179235 and 333-203037) of our report dated February 6, 2020, relating to the consolidated financial statements and effectiveness of internal control over financial reporting of Ultralife Corporation appearing in this Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ Freed Maxick CPAs, P.C.

Rochester, New York
February 6, 2020

I, Michael D. Popielec, certify that:

1. I have reviewed this annual report on Form 10-K of Ultralife Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of 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: February 6, 2020

/s/ Michael D. Popielec

Michael D. Popielec

President and Chief Executive Officer

I, Philip A. Fain, certify that:

1. I have reviewed this annual report on Form 10-K of Ultralife Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of 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: February 6, 2020

/s/ Philip A. Fain

Philip A. Fain

Chief Financial Officer and Treasurer

Section 1350 Certification

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (“Section 906”), Michael D. Popielec and Philip A. Fain, the President and Chief Executive Officer and Chief Financial Officer and Treasurer, respectively, of Ultralife Corporation, certify that (i) the Annual Report on Form 10-K for the year ended December 31, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (ii) the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of Ultralife Corporation.

A signed original of this written statement required by Section 906 has been provided to Ultralife Corporation and will be retained by Ultralife Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Date: February 6, 2020

/s/ Michael D. Popielec

Michael D. Popielec

President and Chief Executive Officer

Date: February 6, 2020

/s/ Philip A. Fain

Philip A. Fain

Chief Financial Officer and Treasurer

This certification is being furnished as required by Rule 13a-14(b) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code, and shall not be deemed “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that Section. This certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that we specifically incorporate this certification by reference.