RADA ELECTRONIC INDUSTRIES LTD
Form 20-F
April 01, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 20-F

[ ] **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

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

For the fiscal year ended December 31, 2018

OR

[ ] **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

OR

[ ] **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report.

Commission file number: 0-15375

RADA ELECTRONIC INDUSTRIES LTD.

(Exact name of Registrant as specified in its charter

and translation of Registrant's name Into English)

Israel

(Jurisdiction of incorporation or organization)

7 Giborei Israel Street, Netanya 4250407, Israel

(Address of principal executive offices)

Avi Israel - CFO,

+972 9 892 1122 (phone), + 972 9 885 5885 (fax)

7 Giborei Israel Street, Netanya 4250407, Israel

(Name, telephone, facsimile number and address of company contact person)

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

Title of each class	Name of each exchange on which registered
Ordinary Shares, NIS 0.030 Par Value	**NASDAQ Capital Market**

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

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

37,516,891 Ordinary Shares (As of December 31, 2018)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes [ ] No [X]

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes [ ] No [X]

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 [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes [X] No [ ]

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

Large accelerated filer [ ] Accelerated filer [ ]
Emerging growth company [ ] Non-accelerated filer [X]

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, 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. [ ]

† The term “new or revised financial accounting standard” refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP [X]	International Financial Reporting Standards as issued by the International Accounting Standards Board [ ]	Other [ ]

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17 [ ] Item 18 [ ]

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes [ ] No [X]

This annual report on Form 20-F is incorporated by reference into the registrant’s Registration Statements on Form F-3 File Nos. 333-212021, 333-216973, 333-220304, 333-226387 and 333-226845, and Form S-8 Registration Statement File No. 333-212284.

INTRODUCTION

We are an Israel based defense electronics company. We specialize in the development, manufacturing, marketing and sales of military avionics systems and inertial navigation systems for manned and unmanned aircraft, and tactical land radars for force and border protection applications.

Our shares are traded on the NASDAQ Capital Market under the symbol "RADA." As used in this annual report, the terms "we," "us" and "our" mean RADA Electronic Industries Ltd. and its subsidiaries, unless otherwise indicated.

Our consolidated financial statements appearing in this annual report are prepared in U.S. dollars and in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. All references in this annual report to "dollars" or "$" are to U.S. dollars and all references in this annual report to "NIS" are to New Israeli Shekels.

Statements made in this annual report concerning the contents of any contract, agreement or other document are summaries of such contracts, agreements or documents and are not complete descriptions of all of their terms. If we filed any of these documents as an exhibit to this annual report or to any previous filing with the Securities and Exchange Commission, or the SEC, you may read the document itself for a complete recitation of its terms.

Except for the historical information contained in this annual report, the statements contained in this annual report are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the Private Securities Litigation Reform Act of 1995, as amended, with respect to our business, financial condition and results of operations. Such forward-looking statements reflect our current view with respect to future events and financial results. We urge you to consider that statements which use the terms "anticipate," "believe," "do not believe," "expect," "plan," "intend," "estimate," a similar expressions are intended to identify forward-looking statements. We remind readers that forward-looking statements are merely predictions and therefore inherently subject to uncertainties and other factors and involve known and unknown risks that could cause the actual results, performance, levels of activity, or our achievements, or industry results, to be materially different from any future results, performance, levels of activity, or our achievements expressed or implied by such forward-looking statements. Such forward-looking statements are also included in Item 4 – "Information on the Company" and Item 5 – "Operating and Financial Review and Prospects." Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. Except as required by applicable law, including the securities laws of the United States, we undertake no obligation to publicly release any update or revision to any forward-looking statements to reflect new information, future events or circumstances, or otherwise after the date hereof. We have attempted to identify significant uncertainties and other factors affecting forward-looking statements in the Risk Factors section that appears in Item 3D. "Key Information - Risk Factors."

TABLE OF CONTENTS

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

A. Selected Financial Data

We derived the following consolidated statements of operations data for the years ended December 31, 2016, 2017 and 2018 and the consolidated balance sheet data as of December 31, 2017 and 2018 from our audited consolidated financial statements, included elsewhere in this annual report. We derived the consolidated statements of operations data for the years ended December 31, 2014 and 2015, and the consolidated balance sheet data as of December 31, 2014, 2015 and 2016 from our audited consolidated financial statements that are not included in this annual report. (See Item 4A. “Discontinued Operations”).

	Year Ended December 31,				
	2014	2015	2016	2017	2018
	(U.S. dollars in thousands)				
Revenues	$21,625	$14,074	$12,821	$26,182	$28,032
Cost of revenues	15,284	11,665	11,379	17,919	17,914
Gross profit	6,341	2,409	1,442	8,263	10,118
Research and development, net	789	693	758	1,575	3,092
Marketing and selling	2,392	2,357	2,269	2,137	2,860
General and administrative	1,667	1,513	1,814	2,568	4,001
Goodwill impairment	-	587	-	-	-
Net loss from sale of fixed assets	-	-	-	-	103
Operating income (loss)	1,493	(2,741)	(3,399)	1,983	62
Financial (income) expense, net	1,256	3,577	1,521	156	(119)

Net income (loss) from continuing operations	237	(6,318)	(4,920)	1,827	181
Net income (loss) from discontinued operations	(36)	(179)	13	515	(404)
Net income (loss)	201	(6,497)	(4,907)	2,342	(223)
Net income (loss) attributable to non-controlling interest from discontinued operations	(7)	(36)	3	103	(386)
Net income (loss) attributable to RADA Electronic Industries' shareholders	$208	$(6,461)	$(4,910)	$2,239	$163
Basic net income (loss) per Ordinary share attributable for RADA Electronic Industries' shareholders	$0.02	$(0.53)	$(0.35)	$0.07	$0.02
Diluted net income (loss) per Ordinary share attributable for RADA Electronic Industries' shareholders	$0.02	$(0.53)	$(0.35)	$0.06	$0.02
Weighted average number of shares used to compute basic net income (loss) per share	8,945	11,904	14,029	24,957	33,185
Weighted average number of shares used to compute diluted net income (loss) per share	8,945	11,904	14,029	28,127	33,717

	As of December 31,				
	2014	2015	2016	2017	2018
	(U.S. dollars in thousands)				
BALANCE SHEET DATA:					
Working capital	$35	$6,522	$11,106	$25,641	$37,840
Total assets	20,097	18,576	20,987	36,030	53,502
Short-term credits and current maturities of long-term loans	6,709	-	-	-	-
Convertible note - short term	3,000	3,090	3,175	-	-
Shareholders’ equity	$3,547	$8,507	$10,516	$28,526	$42,213

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Investing in our Ordinary Shares involves a high degree of risk and uncertainty. You should carefully consider the risks and uncertainties described below before investing in our Ordinary Shares. Our business, prospects, financial condition and results of operations could be adversely affected due to any of the following risks. In that case, the value of our Ordinary Shares could decline, and you could lose all or part of your investment.

Risks Related to Our Business and Our Industry

We have a history of operating losses and although we returned to operating profitability in 2017, we may not be able to sustain profitable operations in the future. To the extent that we incur operating losses in the future, we may not have sufficient working capital to fund our operations.

We incurred operating losses in three of the five years ended December 31, 2018 and may not be able to achieve or sustain profitable operations in the future or generate positive cash flows from operations. As of December 31, 2018, our accumulated deficit was $77 million, and we had cash, cash equivalents and short-term bank deposits of $20.8 million, compared to cash, cash equivalents and short-term bank deposits of $12.4 million as of December 31, 2017. Based on our current operations, we believe our existing funds will be sufficient to fund our operations in 2019. To the extent that we incur operating losses in the future or are unable to generate free cash flows from our business, we may not have sufficient working capital to fund our operations and will be required to obtain additional financing. Such financing may not be available, or if available, may not be on terms satisfactory to us. If adequate funds are not available to us, our business, and results of operations and financial condition will be adversely affected.

While we have met with initial success in the introduction of our advanced ground radars for tactical applications such as defense forces protection and border protection, there can be no assurance that we will succeed in obtaining general market acceptance or that we will ever recover our investment in this new product family.

We have developed a number of radar hardware platforms for use in combat vehicles and tactical protection applications for defense forces and border protection. In December 2014, we announced the first significant order for this product family, a $4.5 million order from the Israel Ministry of Defense. To date, we have received over $ 35 million in orders for our ground radar products, but cannot assure you that our ground radars will achieve broad market acceptance.

We may be required to obtain financing for strategic opportunities, which financing may not be available for us in a timely manner or on favorable terms, and which may dilute the holdings of our shareholders and/or require us to incur additional debt.

In order to invest in strategic opportunities in support of our growth plans and/or business development activities, we may be required to obtain funds from financing sources, including through debt vehicles or re-financing, sale of new securities or other financing alternatives. There is no assurance that we will be able to obtain sufficient funding, if at all, from the financing sources detailed above or other sources in a timely manner (or on commercially reasonable terms) in order to allow us to fund our growth plans and/or business development activities, which may adversely affect our financial position and operations, may dilute the holdings of our shareholders or require us to incur additional debt.

Competition in the market for defense electronics is intense. Our products may not achieve market acceptance, which could adversely affect our business, financial condition and results of operations.

The market for our products is highly competitive and we may not be able to compete effectively in our market. Our principal competitors in the defense electronics market, include Israel Aerospace Industries Ltd., or IAI, Raytheon Company, Northrop Grumman Corporation, Thales Group, and SRC Inc. We expect to continue to face competition from these and other competitors. Most of our competitors are larger and have substantially greater resources than us, including financial, technological, marketing and distribution capabilities, and enjoy greater market recognition than we do. These competitors are able to achieve greater economies of scale and may be less vulnerable to price competition than us. We may not be able to offer our products as part of integrated systems to the same extent as our competitors or successfully develop or introduce new products that are more cost effective or offer better performance than those of our competitors. Failure to do so could adversely affect our business, financial condition and results of operations.

We may not be able to implement our growth strategy which could adversely affect our business, financial condition and results of operations.

In line with our growth strategy, we entered into a number of strategic relationships with Embraer S.A., or Embraer, Hindustan Aeronautics Ltd., or HAL, IAI, Lockheed Martin Corporation, or Lockheed Martin, Boeing Defense, Space & Security, or Boeing, Rafael Advanced Defense Systems Ltd., or Rafael, Elbit Systems Ltd., or Elbit, and Leonardo DRS, or DRS and SAZE Technologies LLC., or SAZE, to increase our penetration into the defense electronics market. We are currently investing and intend to continue to invest significant resources to develop these relationships and additional new relationships. Should our relationships fail to materialize into significant agreements or should we fail to work efficiently with these companies, we may lose sales and marketing opportunities and our business, results of operations and financial condition could be adversely affected.

Our growth is dependent in part on the development of new products, based on internal research and development. We may not accurately identify market needs before we invest in the development of a new product. In addition, we might face difficulties or delays in the development process that will result in our inability to timely offer products that satisfy the market and competing products may emerge during the development and certification process.

Reductions in defense budgets worldwide may cause a reduction in our revenues, which would adversely affect our business, operating results and financial condition.

Substantially all of our revenues are derived from the sale of products with military applications. These revenues totaled approximately $28 million, or 100% of our revenues in 2018, $26.1 million, or 100% of our revenues, in the year ended December 31, 2017 and $12.8 million, or 100% of our revenues, in the year ended December 31, 2016. The defense budgets of a number of countries have declined and may be reduced in the future. Declines in defense budgets may result in reduced demand for our products and manufacturing services. This would result in reduction in our core business' revenues and adversely affect our business, results of operations and financial condition.

Unfavorable national and global economic conditions could have a material adverse effect on our business, operating results and financial condition.

During periods of slowing economic activity, our customers may reduce their demand for our products, technology and professional services, which would reduce our sales, and our business, operating results and financial condition may be adversely affected. Significant portions of our operations are conducted outside the markets in which our products and solutions are manufactured or generally sold, and accordingly, we often export a substantial number of products into such markets. We may, therefore, be denied access to potential customers or suppliers or denied the ability to ship products from any of our subsidiaries into the countries in which we currently operate or wish to operate, as a result of economic, legislative, political and military conditions, including hostilities and acts of terrorism, in such countries.

The global macroeconomic environment is facing challenges, including the economic slowdown in China and the Eurozone, the end of quantitative easing by the U.S. Federal Reserve and the uncertain impact of "Brexit." There is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies adopted by the central banks and financial authorities of some of the world's leading economies, including the U.S. There have been concerns over conflicts, unrest and terrorist threats on a global level, which have resulted in volatility in oil and other markets. The U.S. and China have recently been involved in controversy over trade barriers in China that threatened a trade war between the countries and have implemented or proposed to implement tariffs on certain imported products. Sustained tension between the U.S. and China over trade policies could significantly undermine the stability of the global economy. It is unclear whether these challenges and uncertainties will be contained or resolved, and what effects they may have on the global political and economic conditions in the long term.

Any slowdown or instability in the global economy could impact income, purchasing power and consumption levels among other things, which could limit growth, increase delinquency rates and ultimately have a material adverse effect on us. In addition, any global economic slowdown or uncertainty may result in volatile conditions in the global financial markets, which could have a material adverse effect on us, including on our ability to access capital and liquidity on financial terms acceptable to us, if at all. Any such adverse effect on capital markets funding availability or costs or in deposit rates could have a material adverse effect on our interest margins and liquidity.

We may also be required in the future to increase our reserves for doubtful accounts. In addition, the fair value of some of our assets may decrease as a result of an uncertain economy and as a result, we may be required to record impairment charges in the future. If global economic and market conditions or economic conditions in key markets remain uncertain or weaken further, our financial condition and operating results may be materially adversely affected.

Sales of our products are subject to governmental procurement procedures and practices; termination, reduction or modification of contracts with our customers or a substantial decrease in our customers' budgets may adversely affect our business, operating results and financial condition.

Our products are primarily sold to governmental agencies, governmental authorities and government-owned companies, many of which have complex and time-consuming procurement procedures. A substantial time often elapses from the time we begin marketing a product until we actually sell that product to a particular customer. In addition, our sales to governmental agencies, authorities and companies are directly affected by these customers' budgetary constraints and the priority given in their budgets to the procurement of our products. A decrease in governmental funding for our customers' budgets would adversely affect our results of operations. This risk is heightened during periods of global economic slowdown. Accordingly, governmental purchases of our systems, products and services may decline in the future as the governmental purchasing agencies may terminate, reduce or modify contracts or subcontracts if:

- their requirements or budgetary constraints change;
- they cancel multi-year contracts and related orders if funds become unavailable;
- they shift spending priorities into other areas or for other products; or
- they adjust contract costs and fees on the basis of audits.

Any such event may have a material adverse effect on us.

Further, our business with the State of Israel and other governmental entities is, in general, subject to delays in funding and performance of contracts and the termination for convenience (among other reasons) of contracts or subcontracts with governmental entities. The termination, reduction or modification of our contracts or subcontracts with the Government of Israel in the event of change in requirements, policies or budgetary constraints would have an adverse effect on our business, operating results and financial condition.

If we do not receive the governmental approvals necessary for the export of our products, our revenues may decrease. Similarly, if our suppliers and partners do not receive government approvals necessary to export their products or designs to us, our revenues may decrease, and we may fail to implement our growth strategy.

Israel's defense export policy regulates the sale of our systems and products. Current Israeli policy encourages export to approved customers of defense systems and products, such as ours, as long as the export is consistent with Israeli government policy. A license is required to initiate marketing activities. We are also required to obtain a specific export license for any hardware exported from Israel. We may not be able to receive all the required permits and licenses for which we may apply in the future. If we do not receive the required permits for which we apply, our revenues may decrease.

We are subject to laws regulating export of "dual use" items (items that are typically sold in the commercial market, but that also may be used in the defense market) and defense export control legislation. Additionally, our participation in governmental procurement processes in Israel and other countries is subject to specific regulations governing the conduct of the process of procuring defense contracts. Furthermore, solicitations for procurements by governmental purchasing agencies in Israel and other countries are governed by laws, regulations and procedures relating to procurement integrity, including avoiding conflicts of interest and corruption in the procurement process. We may not be able to respond quickly and effectively to changing laws and regulations and any failure to comply with such laws and regulations may subject us to significant liability and penalties.

We depend on sales to key customers and the loss of one or more of our key customers would result in a loss of a significant amount of our revenues, which would adversely affect our business, financial condition and results of operations.

A significant portion of our revenues is derived from a small number of customers. During the years ended December 31, 2018 and 2017, 72% and 77% of our revenues, respectively, were attributable to nine customers. We anticipate that a significant portion of our future revenues will continue to be derived from sales to a small number of customers.

No assurances can be given that our customers will continue to purchase our products, that we will be successful in any bid for new contracts to provide such products, or that if we were granted subsequent orders, such orders would be of a scope comparable to the sales that we have experienced to date. If our principal customers do not continue to purchase products from us at current levels or if we do not retain such customers and we are not able to derive sufficient revenues from sales to new customers to compensate for their loss, our revenues would be reduced and adversely affect our business, cash flows, financial condition and results of operations.

We depend on suppliers of components for our products and if we are unable to obtain these components when needed, we could experience delays in the manufacturing of our products and our financial results could be adversely affected.

We acquire most of the components for the manufacturing of our products from suppliers and subcontractors, most of whom are located in Israel and the U.S. A number of these suppliers are currently the sole source of one or more components upon which we are dependent. Suppliers of some of the components for manufacturing require us to place orders with significant lead-time to assure supply in accordance with our manufacturing requirements. Delays in supply may significantly hurt our ability to fulfill our contractual obligations and may significantly hurt our business and result of operations. In addition, we may not be able to continue to obtain such components from these suppliers on satisfactory commercial terms. Temporary disruptions of our manufacturing operations would ensue if we were required to obtain components from alternative sources, which may have an adverse effect on our financial results.

Rapid technological changes may adversely affect the market acceptance of our products and could adversely affect our business, financial condition and results of operations.

The defense electronics market in which we compete is subject to technological changes, introduction of new products, change in customer demands and evolving industry standards. Our future success will depend upon our ability to keep pace with technological developments and to timely address the increasingly sophisticated needs of our customers by supporting existing and new technologies and by developing and introducing enhancements to our current products and new products. We may not be successful in developing and marketing enhancements to our products that will respond to technological change, evolving industry standards or customer requirements. In addition, we may experience difficulties that could delay or prevent the successful development, introduction and sale of such enhancements and such enhancements may not adequately meet the requirements of the market and may not achieve any significant degrees of market acceptance. If release dates of our new products or enhancements are delayed or, if when released, they fail to achieve market acceptance, our business, operating results and financial condition may be adversely affected.

We enter into fixed-price contracts that could expose us to losses in the event we fail to properly estimate our costs.

We enter into firm fixed-price contracts. If our initial cost estimates are incorrect, we can lose money on these contracts. Because many of these contracts involve new technologies, unforeseen events, such as technological difficulties and other cost overruns, can result in the contract pricing becoming less favorable or even unprofitable to us and have an adverse impact on our financial results.

Breaches of network or information technology security, natural disasters or terrorist attacks could have an adverse effect on our business.

Cyber-attacks or other breaches of network or IT security, natural disasters, terrorist acts or acts of war may cause equipment failures or disrupt our systems and operations. We may be subject to attempts to breach the security of our networks and IT infrastructure through cyber-attack, malware, computer viruses and other means of unauthorized access. The potential liabilities associated with these events could exceed the insurance coverage we maintain. Our inability to operate our facilities as a result of such events, even for a limited period of time, may result in significant expenses or loss of market share to other competitors in the defense electronics market. In addition, a failure to protect the privacy of customer and employee confidential data against breaches of network or IT security could result in damage to our reputation. To date, we have not been subject to cyber-attacks or other cyber incidents which, individually or in the aggregate, resulted in a material impact to our operations or financial condition.

We are subject to risks associated with international operations; we generate a significant portion of our sales from customers located in countries that may be adversely affected by political or economic instability and corruption.

We are aviation and defense company with worldwide operations. Although 79% of our sales are in Israel and North America, we expect to derive an increasing portion of our sales and future growth from other regions such as Latin America, India and Central and Eastern Europe, which may be more susceptible to political or economic instability. In addition, in many less-developed markets, we rely heavily on third-party representatives, consultants and other agents for business development, marketing and distribution of our products. Many of these third parties do not have internal compliance resources comparable to ours. Business activities in many of these markets have historically been more susceptible to corruption. If our efforts to screen third party agents and detect cases of potential misconduct fail, we could be held responsible for the noncompliance of these third parties under applicable laws and regulations, which may adversely affect our reputation and our business, financial condition or results of operations.

Exports (whether direct sales or sales through our Israeli customers) accounted for 63% of our revenues in 2018, 76% of our revenues in 2017 and 43% of our revenues in 2016. Our reliance on export sales subjects us to many risks inherent in engaging in international business, including:

- Limitations and disruptions resulting from the imposition of government controls;
- Changes in regulatory requirements;
- Export license requirements;
- Economic or political instability;
- Trade restrictions;
- Changes in tariffs;
- Currency fluctuations;
- Longer receivable collection periods and greater difficulty in accounts receivable collection;
- Greater difficulty in safeguarding intellectual property;
- Difficulties in managing overseas subsidiaries and international operations; and
- Potential adverse tax consequences.

We may not be able to sustain or increase revenues from international operations and may encounter significant difficulties, in connection with the sale of our products in international markets. Any of those events may adversely affect our business, operating results and financial condition.

In addition, as a company registered with the SEC, we are subject to the regulations imposed by the Foreign Corrupt Practices Act, or FCPA, which generally prohibits registrants and their intermediaries from making improper payments to foreign officials, for the purpose of obtaining or keeping business or obtaining an improper business benefit. We have adopted proactive procedures to promote compliance with the FCPA, but we may be held liable for actions taken by our strategic or local partners or agents even though these partners may not themselves be subject to the FCPA. Any determination that we have violated the FCPA could materially and adversely affect our business, results of operations, and cash flows.

Currency exchange rate fluctuations in the world markets in which we conduct business could have a material adverse effect on our business, results of operations and financial condition.

Most of our revenues are in dollars or are linked to the dollar, while a portion of our expenses, principally salaries and related personnel expenses, are incurred in other currencies, particularly in NIS. Therefore, our costs in such other currencies, as expressed in dollars, are influenced by the exchange rate between the dollar and the relevant currency. We are also exposed to the risk that the rate of inflation in Israel will exceed the rate of depreciation of the NIS in relation to the dollar or that the timing of this depreciation lags behind inflation in Israel. This would have the effect of increasing the dollar cost of our operations. In the past, the NIS exchange rate with the dollar and other foreign currencies has fluctuated, generally reflecting inflation rate differentials. We cannot predict any future trends in the rate of inflation in Israel or the rate of depreciation or appreciation of the NIS against the dollar. If the dollar cost of our operations in Israel increases, our dollar-measured results of operations will be adversely affected. We engage in currency hedging transactions intended to partly reduce the effect of fluctuations in foreign currency exchange rates on our results of operations. However, such transactions may not materially reduce the effect of fluctuations in foreign currency exchange rates on our results of operations.

Claims that our products infringe upon the intellectual property of third parties may require us to incur significant costs, enter into licensing agreements or license substitute technology.

Third parties may assert infringement claims against us or claims that we have violated a patent or infringed on a copyright, trademark or other proprietary right belonging to them. Any infringement claim, even one without merit, could result in the expenditure of significant financial and managerial resources to defend against the claim. Moreover, a successful claim of product infringement against us or a settlement could require us to pay substantial amounts or obtain a license to continue to use the technology that is the subject of the claim, or otherwise restrict or prohibit our use of the technology. We might not be able to obtain a license from the third party asserting the claim on commercially reasonable terms, if at all. We also may not be able to obtain a license from another provider of suitable alternative technology to permit us to continue offering the product. Infringement claims asserted against us could have a material adverse effect on our business, operating results and financial condition.

Regulations related to conflict minerals may cause us to incur additional expenses and could limit the supply and increase the costs of certain metals used in the manufacturing of our solutions.

The Dodd-Frank Wall Street Reform and Consumer Protection Act imposes disclosure requirements regarding the use in components of our products of “conflict minerals” mined from the Democratic Republic of Congo and adjoining countries, whether the components of our products are manufactured by us or third parties. These requirements could affect the pricing, sourcing and availability of minerals used in the manufacture of components we use in our products. Although the SEC has provided guidance with respect to a portion of the conflict mineral filing requirements that may somewhat reduce our reporting practices, there are costs associated with complying with the disclosure requirements and customer requests, such as costs related to our due diligence to determine the source of any conflict minerals used in our products. We may face difficulties in satisfying customers who may require that all of the components of our products are certified as conflict mineral free or free of numerous other hazardous materials.

We may fail to maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002, which could have an adverse effect on our financial results and the market price of our Ordinary Shares.

The Sarbanes-Oxley Act of 2002 imposes certain duties on us and our executives and directors. Our efforts to comply with the requirements of Section 404(a) of the Sarbanes-Oxley Act of 2002 governing internal controls and procedures for financial reporting, which started, in connection with our 2007 Annual Report on form 20-F, have resulted in increased general and administrative expense and a diversion of management time and attention, and we expect these efforts to require the continued commitment of significant resources. We may identify material weaknesses or significant deficiencies in our assessments of our internal controls over financial reporting. Failure to maintain effective internal controls over financial reporting could result in investigation or sanctions by regulatory authorities and could have a material adverse effect on our operating results, investor confidence in our reported financial information and the market price of our Ordinary Shares.

Risk Factors Related to Our Ordinary Shares

Because one of our shareholders, DBSI, holds approximately 25.1% of our outstanding shares, investors may not be able to affect the outcome of shareholder votes.

DBSI currently beneficially owns 9,5477,088 of our Ordinary Shares, or approximately 25.1% of our outstanding shares. For as long as DBSI, or any shareholder, holds a significant interest in our company, it may have the ability to exercise a controlling influence over our business and affairs, including any determinations with respect to potential mergers or other business combinations involving us, our acquisition or disposition of assets, our incurrence of indebtedness, our issuance of any additional Ordinary Shares or other equity securities, our repurchase or redemption of Ordinary Shares and our payment of dividends. Similarly, as long as DBSI has a controlling interest in our company, it will have the power to determine or significantly influence the outcome of matters submitted to a vote of our shareholders, including the power to elect all of the members of our board of directors (except external directors, within the meaning of Israeli law), or prevent an acquisition or any other change in control of us. Because the interests of our controlling shareholders may differ from the interests of our other shareholders, actions taken by it with respect to us may not be favorable to our other shareholders.

Our share price has been volatile in the past and may decline in the future.

Our Ordinary Shares have experienced significant market price and volume fluctuations in the past and may experience significant market price and volume fluctuations in the future in response to factors such as the following, some of which are beyond our control:

- Quarterly variations in our operating results;
- Operating results that vary from the expectations of securities analysts and investors;
- Changes in expectations as to our future financial performance, including financial estimates by securities analysts and investors;
- Announcements of technological innovations or new products by us or our competitors;
- Announcements by us or our competitors of significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
- Changes in the status of our intellectual property rights;
- Announcements by third parties of significant claims or proceedings against us;
- Additions or departures of key personnel;
- Future sales of our Ordinary Shares;
- Delisting of our shares from the NASDAQ Capital Market; and
- Stock market price and volume fluctuations.

Domestic and international stock markets often experience extreme price and volume fluctuations. Market fluctuations, as well as general political and economic conditions, such as a recession or interest rate or currency rate fluctuations or political events or hostilities in or surrounding Israel, could adversely affect the market price of our Ordinary Shares.

In the past, securities class action litigation has often been brought against companies following periods of volatility in the market price of its securities. We may in the future be the target of similar litigation. Securities litigation could result in substantial costs and divert management’s attention and resources both of which could have a material adverse effect on our business and results of operations.

In addition, to continue to be listed on the NASDAQ Capital Market, we need to satisfy a number of conditions, including a minimum closing bid price per share of $1.00. At times in the past we were not in compliance with this requirement, although we managed to regain compliance by a reverse stock split. If in the future, our share price drops again (for 30 consecutive days under a bid price per share of $1.00), we may be eventually delisted from NASDAQ and trading in our Ordinary Shares would be conducted on a market where an investor would likely find it significantly more difficult to dispose of, or to obtain accurate quotations as to the value of our Ordinary Shares.

Substantial future sales of our Ordinary Shares by our principal shareholders may depress our share price.

If our principal shareholders sell substantial amounts of their Ordinary Shares, including shares registered under effective registration statements and shares issuable upon the exercise of outstanding warrants, or if the perception exists that our principal shareholders may sell a substantial number of our Ordinary Shares, the market price of our Ordinary Shares may fall. Any substantial sales of our shares in the public market also might make it more difficult for us to sell equity or equity related securities in the future at a time and on terms we deem appropriate.

We do not intend to pay dividends.

We have never declared or paid cash dividends on our Ordinary Shares and do not expect to do so in the foreseeable future. The declaration of dividends is subject to the discretion of our board of directors and will depend on various factors, including our operating results, financial condition, future prospects and any other factors deemed relevant by our board of directors. You should not rely on an investment in our company if you require dividend income from your investment in our company. The success of your investment will likely depend entirely upon any future appreciation of the market price of our Ordinary Shares, which is uncertain and unpredictable. There is no guarantee that our Ordinary Shares will appreciate in value or even maintain the price at which you purchased your Ordinary Shares.

We may be classified as a passive foreign investment company, or PFIC, which would subject our U.S. investors to adverse tax rules.

U.S. holders of our Ordinary Shares may face income tax risks. We have been advised that we may have been a "passive foreign investment company" ("PFIC") for the 2018 taxable year. Our treatment as a PFIC could result in a reduction in the after-tax return to U.S. Holders (as defined below in Item 10E. "Additional Information – Taxation") of our Ordinary Shares and would likely cause a reduction in the value of such shares. A foreign corporation will be treated as a PFIC for U.S. federal income tax purposes if either (1) at least 75% of its gross income for any taxable year consists of certain types of "passive income," or (2) at least 50% of the average value of the corporation's gross assets produce, or are held for the production of, such "passive income." For purposes of these tests, "passive income" includes dividends, interest, gains from the sale or exchange of investment property and rents and royalties other than rents and royalties that are received from unrelated parties in connection with the active conduct of a trade or business. For purposes of these tests, income derived from the performance of services does not constitute "passive income." If we are treated as a PFIC, U.S. Holders of Ordinary Shares would be subject to a special adverse U.S. federal income tax regime with respect to the income derived by us, the distributions they receive from us, and the gain, if any, they derive from the sale or other disposition of their Ordinary Shares. In particular, dividends paid by us, if any, would not be treated as "qualified dividend income," eligible for preferential tax rates in the hands of non-corporate U.S. shareholders. Since PFIC status depends upon the composition of our income and the market value of our assets from time to time, even if we were not a PFIC in 2018, there can be no assurance that we will not become a PFIC in any future taxable year. U.S. Holders should carefully read Item 10E. "Additional Information – Taxation" for a more complete discussion of the U.S. federal income tax risks related to owning and disposing of our Ordinary Shares.

Risks Relating to Our Location in Israel

Political, economic and military instability in Israel may disrupt our operations and negatively affect our business condition, harm our results of operations and adversely affect our share price.

We are incorporated under the laws of, and our principal executive offices and manufacturing and research and development facilities are located in the State of Israel. As a result, political, economic and military conditions affecting Israel directly influence us. Any major hostilities involving Israel, a full or partial mobilization of the reserve forces of the Israeli army, the interruption or curtailment of trade between Israel and its present trading partners, or a significant downturn in the economic or financial condition of Israel could adversely affect our business, financial condition and results of operations.

Conflicts in North Africa and the Middle East, including in Egypt and Syria which border Israel, have resulted in continued political uncertainty and violence in the region. Efforts to improve Israel's relationship with the Palestinian Authority have failed to result in a permanent solution, and there have been numerous periods of hostility in recent years. In addition, relations between Israel and Iran continue to be seriously strained, especially with regard to Iran's nuclear program. Such instability may affect the local and global economy, could negatively affect business conditions and, therefore, could adversely affect our operations. To date, these matters have not had any material effect on our business and results of operations; however, the regional security situation and worldwide perceptions of it are outside our control and there can be no assurance that these matters will not negatively affect our business, financial condition and results of operations in the future.

Furthermore, we could be adversely affected by the interruption or reduction of trade between Israel and its trading partners. Some countries, companies and organizations continue to participate in a boycott of Israeli companies and others doing business with Israel or with Israeli companies. As a result, we are precluded from marketing our products to these countries, companies and organizations. Foreign government defense export policies towards Israel could also make it more difficult for us to obtain the export authorizations necessary for our activities. Also, over the past several years there have been calls in Europe and elsewhere to reduce trade with Israel. Restrictive laws, policies or practices directed towards Israel or Israeli businesses may have an adverse impact on our operations, our financial results or the expansion of our business.

Our results of operations may be negatively affected by the obligation of our personnel to perform military service.

Some of our employees in Israel are obligated to perform annual military reserve duty and are subject to being called for active duty under emergency circumstances. If a military conflict or war arises, these individuals could be required to serve in the military for extended periods of time. Our operations could be disrupted by the absence for a significant period of one or more of our executive officers or key employees or a significant number of other employees due to military service. Any disruption in our operations could adversely affect our business.

We may not be able to enforce covenants not-to-compete under current Israeli law.

We have non-competition agreements with most of our employees, many of which are governed by Israeli law. These agreements generally prohibit our employees from competing with us or working for our competitors for a specified period following termination of their employment. However, Israeli courts are reluctant to enforce non-compete undertakings of former employees and tend, if at all, to enforce those provisions for relatively brief periods of time in restricted geographical areas and only when the employee has unique value specific to that employer’s business and not just regarding the professional development of the employee. Any such inability to enforce non-compete covenants may cause us to lose any competitive advantage resulting from advantages provided to us by such confidential information.

We may become subject to claims for remuneration or royalties for assigned service invention rights by our employees, which could result in litigation and adversely affect our business.

A significant portion of our intellectual property has been developed by our Israeli employees in the course of their employment for us. Under the Israeli Patent Law, 5727-1967, or Israeli Patent Law, inventions conceived by an employee during the term and as part of the scope of his or her employment with a company are regarded as “service inventions,” which belong to the employer, absent a specific agreement between the employee and employer giving the employee service invention rights. The Israeli Patent Law also provides that if there is no such agreement between an employer and an employee, the Israeli Compensation and Royalties Committee, or C&R Committee, a body constituted under the Israeli Patent Law, shall determine whether the employee is entitled to remuneration for his inventions. The C&R Committee (decisions of which have been upheld by the Israeli Supreme Court) has held that employees may be entitled to remuneration for their service inventions despite having specifically waived any such rights. Further, the C&R Committee has not yet set specific guidelines regarding the method for calculating this remuneration or the criteria or circumstances under which an employee's waiver of his right to remuneration will be disregarded. We generally enter into intellectual property assignment agreements with our employees pursuant to which such employees assign to us all rights to any inventions created in the scope of their employment or engagement with us. Although our employees have agreed to assign to us service invention rights and have specifically waived their right to receive any special remuneration for such assignment beyond their regular salary and benefits, we may face claims demanding remuneration in consideration for assigned inventions. As a consequence of such claims, we could be required to pay additional remuneration or royalties to our current or former employees, or be forced to litigate such claims, which could negatively affect our business.

Service and enforcement of legal process on us and our directors and officers may be difficult to obtain.

Service of process upon our directors and officers and the Israeli experts named in this annual report, most of who reside outside the U.S., may be difficult to obtain within the U.S. Furthermore, since substantially most our assets, our directors and officers and the Israeli experts named in this annual report are located outside the U.S., any judgment obtained in the U.S. against us or these individuals or entities may not be collectible within the U.S.

There is doubt as to the enforceability of civil liabilities under the Securities Act and the Securities Exchange Act in original actions instituted in Israel. However, subject to certain time limitations and other conditions, Israeli courts may enforce final judgments of U.S. courts for liquidated amounts in civil matters, including judgments based upon the civil liability provisions of those Acts.

The rights and responsibilities of our shareholders are governed by Israeli law and differ in some respects from those of a typical U.S. corporation.

We are incorporated under Israeli law and the rights and responsibilities of holders of our Ordinary Shares are governed by our articles of association and by Israeli law. These rights and responsibilities differ in some respects from the rights and responsibilities of shareholders in typical U.S. corporations. In particular, a shareholder of an Israeli company has a duty to act in good faith in exercising his or her rights and fulfilling his or her obligations toward the company and other shareholders and to refrain from abusing his power in the company, including, among other things, in voting at the general meeting of shareholders on certain matters. Israeli law provides that these duties are applicable to shareholder votes at the general meeting with respect to, among other things, amendments to a company’s articles of association, increases in a company’s authorized share capital, mergers and actions and transactions involving interests of officers, directors or other interested parties which require the shareholders’ approval. In addition, a controlling shareholder of an Israeli company or a shareholder who knows that he or she possesses the power to determine the outcome of a vote at a meeting of our shareholders, or who has, by virtue of the company’s articles of association, the power to appoint or prevent the appointment of an office holder in the company, or any other power with respect to the company, has a duty of fairness toward the company. However, Israeli law does not define the substance of this duty of fairness. There is little case law available to assist in understanding the implications of these provisions that govern shareholder behavior.

Israeli government programs and tax benefits may be terminated or reduced in the future, which could increase our tax expenses.

We participate from time to time in programs of the Israeli Innovation Authority (formerly the Office of the Chief Scientist) of the Israeli Ministry of Economy, or Innovation Authority, for which we receive funding for the development of technologies and products. We may benefit from certain Israeli government programs and tax benefits, particularly from tax exemptions and cash incentives, including “Approved Enterprise” status due to our manufacturing facilities in Israel. To be eligible for these programs and tax benefits or similar programs in the future, we must meet certain conditions, including making specified investments in fixed assets and equipment. For more information about these programs see Item 5. “*Operating and financial review and prospects – Research & Developments* – Israeli Innovation Authority.” If we fail to comply with these conditions, we may be required to pay additional penalties, make refunds and may be denied future benefits. From time to time, the government of Israel has discussed reducing or eliminating the benefits available under these programs, and therefore these benefits may not be available to us in the future at their current levels or at all.

As a foreign private issuer whose shares are listed on the NASDAQ Capital Market, we may follow certain home country corporate governance practices instead of certain NASDAQ requirements.

As a foreign private issuer whose shares are listed on the NASDAQ Capital Market, we are permitted to follow certain home country corporate governance practices instead of certain requirements of The NASDAQ Stock Market Rules. Among other things, as a foreign private issuer we may follow home country practice with regard to the composition of the board of directors, director nomination procedure, and quorum at shareholders' meetings. In addition, we may follow our home country law, instead of the NASDAQ Stock Market Rules, which require that we obtain shareholder approval for certain dilutive events such as for the establishment or amendment of certain equity based compensation plans, an issuance that will result in a change of control of the company, certain transactions other than a public offering involving issuances of a 20% or more interest in the company, and certain acquisitions of the stock or assets of another company. A foreign private issuer that elects to follow a home country practice instead of NASDAQ requirements must submit to NASDAQ in advance a written statement from an independent counsel in such issuer's home country certifying that the issuer's practices are not prohibited by the home country's laws. In addition, a foreign private issuer must disclose in its annual reports filed with the SEC each such requirement that it does not follow and describe the home country practice followed by the issuer instead of any such requirement. Accordingly, our shareholders may not be afforded the same protection as provided under NASDAQ's corporate governance rules.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

We were incorporated under the laws of the State of Israel on December 8, 1970. We are a public limited liability company under the Israeli Companies Law 1999-5759, or the Israeli Companies Law, and operate under this law and associated legislation. Our registered offices and principal place of business are located at 7 Giborei Israel Street, Netanya 4250407, Israel, and our telephone number is: +972-9-892-1111. Our website address is www.rada.com. The information on our website is not incorporated by reference into this annual report.

We develop, manufacture and sell defense electronics, including avionics solutions (including avionics for unmanned aerial vehicles and airborne inertial navigation systems), airborne data/video recording and management systems and tactical land-based radars for defense forces and for border protection systems. In addition, while we continue to sell and support our legacy commercial products and services, in 2016 we decided to actively pursue the sale of our Chinese subsidiary**,** Beijing Hua Rui Aircraft Maintenance and Service, Co., Ltd., known as CACS, which is the main platform of our test and repair shop activity. On December 2018, we signed an agreement to sell CACS, which sale is expected to close later in 2019. The results presented in this annual report were adjusted to present CACS' results in a separate line as "Discontinued Operations."

In March 2018, we announced the formation of a joint venture company with SAZE Technologies LLC of Silver Spring, MD. The new company, RADA Technologies LLC, or RTL is based in Silver Spring, MD and is focused on the adaption of our tactical radar technology for the U.S. market. Initially, the joint venture will adapt our technology to meet U.S. customer requirements, certifying the radars to U.S. standards, establishing production capabilities and providing infrastructure for maintenance and support.

B. Business Overview

Industry Overview

Our activity is primarily focused on the defense electronics market. This is a growing market and is currently a large part of the defense industry. The defense electronics market reflects two contradictory trends, the proliferation of defense electronics, which has been offset by the significant reduction in the price of electronic systems which is reducing the dollar value of the market. Today, new military vehicles of all kinds are equipped with significantly more electronic systems than they used to carry in the past. The increasing usage of advanced electronics in modern vehicles, including upgrades of existing technology and the growing use of unmanned vehicles of all kinds, have provided significant growth to the market.

Today's advanced defense electronics systems typically incorporate components that are derived from the industrial or the consumer electronics markets, especially from the telecom and automotive markets. Most of the defense electronics systems are built with commercial components and even with sub-systems, which reduce the overall price, and at the same time generate complex obsolescence issues.

Purchasers of defense electronics products are either governments or major integrators. Engagement in business relationships with these customers is complex, has a long sales cycle and requires long-term commitments for future support of delivered hardware. Production batches of such products are usually small.

Suppliers of defense electronic systems are either providers of sub-systems to major integrators and platform manufacturers or are providers of integrated systems to the industry or to the armed forces. These companies are typically very large and have diversified product offerings.

New products in the defense electronic market are usually developed utilizing internal and customer sponsored research and development funds and are tailored to specific customer needs. In many cases, the customer who pays for the design and adaptation, limits the use of intellectual property that was funded by it for other applications, due to either commercial or security reasons.

Products and Services

We primarily sell state-of-the-art defense electronics products. We may also provide end-to-end solutions for one or more systems or sub-systems. Our current product lines are:

- Military Avionics (Data/video recorders, core avionics for aircraft and UAVs) and airborne Inertial Navigation Systems;
- Tactical Radars for defense forces and border protection systems (land based).

While we continued to support our legacy commercial aviation test stations, in 2016 we decided to sell CACS, our main platform for our test and repair shop activity. We signed an agreement to sell CACS in December 2018.

Military Avionics

We are active in the field of mission data & video recording, management, and post-mission analysis and debriefing for fighter and trainer aircrafts. Over the past 25 years we have developed, fielded and supported a wide range of solid-state digital recorders, cameras and debriefing systems for aerospace and military applications, including:

- Flight data recorders, or FDR, for fighter aircraft;
- Digital video/audio/data recorders, or DVDR (with data transfer functions);
- High-rate (no compression) data recorders, or HRDR, for aircraft and airborne pods;
- Video recorders and airborne data servers, or VRDS, the latest approach to avionic data management;
- HD-DVDR, high definition digital video/audio/data recording for fighter and trainer aircrafts.

A wide range of head-up-displays color video cameras, or HCVC, for fighter aircraft; and

A variety of ground debriefing solutions, or GDS.

Featuring state-of-the-art technologies, our digital recorders are designed for military applications. Our high-performance recorders provide simultaneous, high-capacity video (both analog and digital/HD), audio and data recording, high throughput and mass storage handling capabilities, supporting rapid dissemination and real-time playback. Our video recorders implement MPEG-2 and/or MPEG-4 (H.264) compression formats, supporting up to 128GB of solid-state memory, facilitating continuous recording over extended mission durations. Recent upgrades to our recorders provide the ability to record high-definition video formats such as HD-SDI.

Our GDS feature synchronized video, audio, data, and air combat maneuvering debriefing. GDS vary from personal, laptop-size debriefing units, through robust desktop multi-channel systems supporting the mission debriefing of four-aircraft formations up to large-scale simultaneous debriefing systems. These network-based systems support large numbers of participants operating from different locations, and provide advanced data management features.

We have been a developer and manufacturer of core avionics systems for over 30 years. We currently offer a wide spectrum of military avionics systems designed for integration in new and upgraded military aircraft and UAVs worldwide. Our avionics solutions range from fully integrated avionics suites, through core avionics subsystems, to tailor-made “built-to-spec” units, backed by our teams of experts dedicated to providing global technical and maintenance support.

Our avionics systems are easily adapted to western, eastern, and indigenous-origin platforms of all kinds. In particular, our avionics for UAVs are extremely compact through modern board connectivity solutions, use of innovative conductive cooling techniques, withstand extreme environmental conditions and are very reliable and affordable.

We offer the following avionics solutions:

- Mission data recorders and debriefing solutions (as described above);
- Weapon management systems;
- Data interface and processing computers;
- HUD video cameras;
- Avionics for UAVs (Interface control processors, engine control computers, Payload management computers and others);
- R-100F: FOG-based, navigation-grade embedded GPS-INS for fighters and helicopters;
- R-200M: Compact, MEMS-based, multiple-sensor aided INS for UAVs and backup INS for manned aircraft;
- MAVINS – Modular Avionics and MEMS-Based INS: A specially-designed, compact integrated solution for UAVs.

Our airborne products and system solutions are fully qualified and operated by leading air forces and prime integrators worldwide, such as the Israeli Air Force, or IAF, Lockheed Martin, Boeing Company, HAL, Embraer, IAI, Rafael, the Chilean Air Force, Indra Systemas S.A., and many others. Our units are installed onboard F-16, F-15, T-6, A-4, Jaguar, MiG-27, Su-30MKI, Dhruv Helicopter, MiG-29, Super-Tucano and other aircraft, and onboard a continuously-growing number of UAVs.

Tactical Radars for Defense Forces and Border Protection Systems (land based).

We develop advanced ground-based radars for tactical applications such as defense forces protection and border protection. Our pulse Doppler, software-defined radars are solid-state, fully digital, incorporate active electronically scanned array, or AESA antenna, are compact, mobile and highly reliable, provide hemispheric spatial coverage and multi-mission capabilities, operate on-the-move, or OTM, and demonstrate unprecedented performance-to-price ratio.

The conflicts in which modern armies are engaged in recent years dictate the needs for instantaneous and real-time intelligence, minimal cycle time for target acquisition, highly accurate weapons with minimal collateral damage and discrimination between hostiles and civilians. Our tactical radars, which move with the maneuvering combat units in the field and operate OTM, provide the real-time knowledge of whether and from where they are threatened, detect all relevant threats, whether unfriendly fire or drones/UAVs/fighters/helicopters from any angle (including very high angles), discriminate among threats and provide the needed intelligence for any course of action, whether counter-fire or avoidance. The performance-over-price ratio of our radars makes them ideal solutions to the current needs and requirements of the maneuver forces.

We have developed various radar hardware platforms: the compact hemispheric radar, or CHR, and the enhanced CHR, or eCHR, which are tailored for use in combat vehicles and short-range protection applications; and a family of multi-mission hemispheric radars, or MHRs, which are tailored for use in force and border protection applications. We offer the MHR and the improved and enhanced MHR, or ieMHR; all share the same basic characteristics, but differ in range, size, weight, and price. For each radar platform we implement several operational missions by changing the radar operational parameters.

The current operational missions of the CHR and eCHR are the following:

The RPS-10/60 radar sensors for active protection systems, or APS, detect all relevant threats that may be fired at combat vehicles, including RPGs, anti-tank guided missiles (ATGMs) and projectiles and provide 360° hemispheric coverage. The system delivers threat data to the APS, enabling it to neutralize threats.

The RPS-12/62 short-range hemispheric air surveillance radar system can detect, classify and track aerial vehicles, with emphasis on small UAVs. Mobile or stationary, the system can be integrated with any C4I system and other radars and sensors, and can operate either as a stand-alone, or as part of a large-scale surveillance system.

The RPS-14/64 radar system for perimeter and border protection can detect, identify, and track aerial and surface intruders including slow and small aircraft, vehicles, vessels, and pedestrians at tactical ranges. The RPS-14 can operate either as a stand-alone, or as part of a large-scale surveillance system.

The RPS-15/65 comprehensive hostile fire management system for combat vehicle detects, tracks, classifies and locates direct and elevated threats fired at combat vehicles, allowing the mobile force to successfully complete its mission while operating in a hostile environment.

The current operational missions of the MHR family of radar platforms are the following:

The RPS-40/70/80 hostile fire detection radar systems detect, track, classify and locate direct and elevated threats fired at stationary or mobile forces. They compute the Point-of-Origin (POO) and Point-of-Impact (POI) of the threats, which may be rockets, artillery, mortars, ATGMs, RPGs, and more other threats. The systems can be integrated with any protection and Command, Control, Communications, Computers and Intelligence (C4I) system and be installed at stationary bases and posts, or onboard fighting vehicles.

The RPS-42/72/82 tactical hemispheric air surveillance radar systems can detect, classify and track all types of aerial vehicles, including fighters, helicopters, UAVs, transport aircraft, etc. at tactical ranges. Mobile or stationary, the systems can be integrated with any C4I system and other radars and sensors, and can operate either as a stand-alone, or as part of a large-scale surveillance system.

The RHS-44/74/84 radar systems for border protection can detect, identify, and track aerial and surface border intruders including slow and small aircraft, vehicles, vessels, and pedestrians at tactical ranges. The systems can operate either as a stand-alone, or as part of a large-scale surveillance system.

Among our customers and users of our radar systems are leading defense forces and defense contractors worldwide, including the Israeli MOD, IMI (an Elbit Systems subsidiary), Artis, Lockheed Martin, Boeing, Leonardo DRS, SAZE, the U.S. Marine Corps and Navy, the U.S. Air Force, Indian Security Forces, MBDA, Rheinmetall, Rafael and other prime integrators and end-users. Some of our customers have purchased a small number of radars for evaluation and integration in their air defense and/or other systems. These initial purchases may turn into larger production orders upon evaluation.

Business Development, Sales and Marketing

Strategy

Our business development strategy is based on the following principles:

- Becoming a reliable and trusted supplier of sensors and sub-systems to defense system integrators and major platforms manufacturers with global sales, such as Lockheed Martin, Boeing, Elbit, IAI, Rafael, Leonardo DRS, Embraer, HAL and others.

- Establishing strategic joint venture companies in the primary target markets (i.e. U.S.) for local presence, direct market development, localization of the technology, production and customer support.

Expanding our global business development efforts and potential customer base, by engaging business development consultants and service providers in the countries and territories in which our products may be used, and actively managing this global network; and

Establishing strategic partnerships with leading integrators in the prime target markets for tactical radars, i.e. U.S. Europe, India; such partnerships may involve indigenization and localization of our technologies to enable sales in significant quantities in these markets.

Strategic Relationships and Customers

As part of our strategy, we have established a number of strategic relationships with leading global defense contractors and several air forces. We have focused our marketing and sales efforts to support these relationships.

Lockheed Martin. Lockheed Martin is the manufacturer of the F-16 aircraft, one of the most popular fighter aircraft in the western world today. We are supplying the DVDR, HD-DVDR and GDS for new F-16 aircraft production and for F-16 upgrade programs led by Lockheed Martin. In 2015, Lockheed Martin ordered a single radar system for integration in their internally funded high energy laser research and development program.

IMI Systems. IMI (a subsidiary of Elbit Systems) is a world leader in the field of APS for land platforms and is the developer and manufacturer of the “Iron Fist” APS. We are teamed with IMI on the integration and production of our RPS-10 radars as part of their “Iron Fist” APS solution for local and global customers. During 2016 there was a global increase in the interest of major forces in APS. As a result, in 2017 and 2018 we engaged in extensive efforts with IMI to integrate, test and provide its “Iron Fist” APS to customers in Europe and North America, along with our on-going support. We have sold dozens of CHR radars to IMI to support these activities. We anticipate that these testing efforts will mature into acquisition programs.

Boeing Defense, Space and Security. Boeing, a provider of air defense and high-energy laser systems, acquired our MHR in 2013 for evaluation of its use as part its directed energy tactical systems, and in 2017 has acquired our ieMHR to be integrated into critical infrastructure surveillance solutions. We also provide Boeing with recorders and debriefing stations for the T-45 VMTS and have received follow-on orders from Boeing.

Leonardo DRS. DRS is a major player in the defense electronics market in North America, with a focus on tactical systems and radars. In 2017, we signed a cooperation agreement with DRS to market and sell our tactical radars in the North American market for counter-UAV, short-range air defense, and other solutions. DRS has acquired a few MHR radars and is actively promoting our radars as part of their system solutions. In 2018, DRS was selected by the US Army as the mission equipment package provider for the Army’s IMSHORAD program, which includes our MHR radars as onboard search sensors. This program has the potential for sale of 144 vehicles, each with 4 MHR radars on board.

SAZE Technologies LLC. SAZE is the first customer and user of our MHR radars, and provided support and market access to various radar programs and demonstrations that we were involved with. We and SAZE established a joint venture company, RADA Technologies LLC, based in Silver Spring Maryland, in order to seek special security agreements and to perform market development, localization of the technology, customer support, production and maintenance in the U.S. We are in the process of recruiting personnel for the joint venture and are engaged in the build-up of our production capability in the US in 2019.

European Air Defense Integrators. Two major European air defense integrators have purchased radars for integration and testing. We have signed a value-added representation agreement with one of the integrators for certain countries where it has a dominant position in sales of air defense and other solutions.

Rafael Advanced Defense Systems Ltd. Rafael is a world leader in the development and supply of missiles, smart weapons and pods of various types. Rafael has become a strategic customer of ours as a result of our development and production of a few advanced built-to-specification products in recent years. Recently, Rafael selected the MHR as the radar for the “Drone Dome” system that is designed to counter UAVs and drones and is purchasing radars from us for their customers.

Military Forces. We are the sole providers of digital recorders and debriefing solutions to an air force in Latin America. We are the primary provider of recorders and debriefing solutions to a major Asian air force. Our tactical radars for air defense are under evaluation by a Far-East country's army that has acquired f a few units, while two other Asian forces have purchased radars for air surveillance and counter-mortar applications. Our tactical radars are used by the U.S. Navy and Marines as part of their ground-based air defense advanced technology development program. We believe that these strategic relationships with military forces provide us with the potential for prolonged cooperation.

Israel Aerospace Industries. We actively supply avionics and test equipment to four different divisions of IAI, and in particular to the LAHAV and MALAT divisions, who are major aircraft integrators and utilize our products and services for repeated follow-on orders.

Hindustan Aeronautics Ltd. HAL is the major aerospace integrator in India. We are currently cooperating with four divisions of HAL and supply DVDRs, HCVCs, GDS, support equipment and other services in growing numbers.

Embraer S.A. The Military Aircraft Division of the Brazilian aircraft manufacturer is a strategic customer. In addition to supplying avionics such as DVDR, INS and HCVC to Embraer, we are participating to a greater degree in Embraer's programs through the development and supply of avionic units per their specifications and their training and support activities.

Business Development and Marketing

Our Chief Executive Officer, Mr. Dov Sella, together with Mr. Gil Schwartz, our VP Business Development & Marketing and Mr. Ronen Ofek, our VP Business Development for Israel, lead our business development and marketing efforts from Israel. Mr. Bill Watson, Ms. Charlene Caputo and Mr. Max Cohen are responsible for our business development and marketing efforts in North America. We currently employ twelve additional professionals (seven of whom are part-time consultants) in business development and the sales of our products. Our program managers, chief technology officer, VP Products and our engineering departments support our marketing and sales efforts with respect to proposal preparations and products demonstrations. In addition, we have business development consultants in Europe, South America and Asia who receive success fees for sales generated by them. Our U.S. JV is gradually taking over the business development role in the North-American market and works directly and in cooperation with our US partners on the exploitation of the large U.S. opportunities. Four of our seven part-time consultants are supporting this activity.

The Israeli Ministry of Defense has historically supported, and continues to support, our marketing efforts through its defense export assistance branch and through various projects for the IDF and its related divisions. There is no guarantee that this type of assistance will be available to us in the future.

We take part and present our tactical radars at the major land systems exhibitions on a regular basis, such as the (AUSA) Annual Meetings, D.C., Eurosatory in Paris, DSEI in London, and in regional exhibitions such as Seoul Aerospace & Defense, MSPO in Poland, DefExpo in India and others.

Fixed Price Contracts

Some of our contracts are fixed-price contracts, under which the price is not subject to adjustment by reason of the costs incurred in the performance of the contracts, as long as the costs incurred and work performed fall within governmental guidelines. Under our fixed-price contracts, we assume the risk of increased or unexpected costs that may reduce our profits or even generate losses. This risk can be particularly significant under fixed-price contracts for research and development involving new technologies.

Our books and records may be subject to audits by the Israeli Ministry of Defense and other governmental agencies, including the U.S. Department of Defense. These audits may result in adjustments to contract costs and profits.

Principal Customers

Generally, we complete a few major transactions each year, each in an amount comprising more than 10% of our revenues for such year. As a result, each year a significant portion of our revenues is derived from a small number of customers. The following table sets forth our principal customers in 2016, 2017 and 2018:

	Percentage of Revenues		
	2016	2017	2018
Israel Aerospace Industries	20%	7 %	7 %
Ministry of Defense (Israel)	17%	9 %	5 %
RAFAEL	16%	2 %	11 %
Embraer S.A.	13%	3 %	4 %
Hindustan Aeronautics Ltd	11%	5 %	11 %
Lockheed Martin Corporation	6 %	13 %	6 %
Leonardo DRS	1 %	35 %	4 %
Customer in Israel	-	-	12 %
SAZE Technologies LLC	-	3 %	12 %

Although we continually strive to increase the number of our customers, we anticipate that a significant portion of our future revenues will continue to be derived from a small number of customers. Because of our dependency on a small number of customers and on government contracts, we are subject to business risks, including changes in governmental appropriations and changes in national defense policies and priorities. Although many of the programs in which we participate as a contractor or subcontractor may extend for several years, our business is dependent upon annual appropriations and funding of new and existing contracts. Most of the contracts are subject to termination for the convenience of the customer, pursuant to which the customer pays only for reimbursement of costs incurred and the applicable profit on work performed. The Israeli government or any other government may discontinue funding purchases of our products over the long term.

Geographical Markets

We sell our products to various air forces and companies worldwide. The following table presents our revenues by geographical markets for the periods indicated:

	2016	2017	2018
Israel	57 %	24 %	37 %

South and Latin America	10	%	2	%	4	%
Asia	19	%	17	%	11	%
North America	13	%	55	%	42	%
Europe	1	%	1	%	6	%
Australia	-		1	%	-	%

Competition

The markets for our products are highly competitive. Our principal competitors on the avionics and recorders include Elbit Systems Ltd., Honeywell International Inc., IAI, Northrop Grumman Corporation, Sagem Avionics LLC., Thales Group and Zodiac Aerospace Group. Our principal competitors on tactical radars are IAI (through its subsidiary, Elta), SRC Inc., SAAB, Thales and Leonardo Selex. We expect to continue to face competition from these and other competitors. Currently, all of our competitors are larger and have substantially greater resources than us, including financial, technological, marketing and distribution capabilities, and enjoy greater market recognition than we do. These competitors may be able to achieve greater economies of scale and may be less vulnerable to price competition than us. We may not be able to offer our products as part of integrated systems to the same extent as our competitors or successfully develop or introduce new products that are more cost effective or offer better performance than those of our competitors. Failure to do so could adversely affect our business, financial condition and results of operations.

Government Regulations

Israel's defense export policy regulates the sales of our systems and products. Current Israeli policy encourages export to approved customers of defense systems and products, such as ours, as long as the export is consistent with Israeli government policy.

A license is required to initiate marketing activities. We are also required to obtain a specific export license for any hardware exported from Israel. We are regulated by an Israeli law regulating export of "dual use" items (items that are typically sold in the commercial market, but that also may be used in the defense market) and the Defense Export Control Law and its supplemental regulations. Those laws and regulations govern the enforcement of export control and defined certain new areas of licensing, particularly with respect to transfer of technology. It is not certain that we will receive all the required permits and licenses for which we may apply in the future. Our participation in governmental procurement processes in Israel and other countries is subject to specific regulations governing the process of procuring defense contracts. Furthermore, solicitations for procurements by governmental purchasing agencies in Israel and other countries are governed by laws, regulations and procedures relating to procurement integrity, including avoiding conflicts of interest and corruption in the procurement process.

In addition, antitrust laws and regulations in Israel and other countries often require governmental approvals for transactions that are considered to limit competition. Such transactions may include cooperative agreements for specific programs or areas, as well as mergers and acquisitions.

Proprietary Information

We generally do not consider patent protection significant to our current operations and rely upon a combination of security devices, trade secret laws and contractual restrictions to protect our rights in our products. Our policy is to require employees and consultants to execute confidentiality agreements upon the commencement of their relationships with us. These measures may not be adequate to protect our technology from third-party infringement, and our competitors might independently develop technologies that are substantially equivalent or superior to ours. Additionally, our products may be sold in foreign countries that provide less protection for intellectual property rights than that provided under U.S. or Israeli laws.

The Israeli government usually retains certain rights in technologies and inventions resulting from our performance as a prime contractor or subcontractor under Israeli government contracts and may generally disclose such information to third parties, including other defense contractors. When the Israeli government funds research and development, it may acquire rights to proprietary data and title to inventions; we may retain a non-exclusive, royalty-free license for such inventions. However, if the Israeli government purchases only the end product, we may retain the principal rights and the government may use the data and take an irrevocable, non-exclusive, royalty-free license.

Manufacturing and Quality Control

Our production plant is located in Beit She'an, Israel. The plant is equipped to handle most of our manufacturing processes and testing requirements. For some processes we utilize outsourced resources. This structure allows us flexibility and versatility. To support the growth in radar production, we are in the process of establishing a supply chain of board assembly providers and chassis/casting providers, while final assembly, calibration and testing is kept internally. We are also in process of physically duplicating our Israeli assembly facilities in the U.S. and adapting them for the U.S. market. These efforts are currently planned to be completed in 2019.

We place great emphasis on quality control in our production processes. Commencing with customer requirements and expectations, via raw material inspection through completion, specifications are repeatedly checked. We maintain a quality assurance team that participates in every stage of the design and manufacturing of the products. Our quality management system is certified by the Standards Institute of Israel, or SII, pursuant to ISO 9001:2015 for hardware design and production and ISO 90003:2014 for software design. SII performs quality system audits twice a year and various customers perform audits four to six times a year. Our environmental management system is certified by SII to ISO 14001:2004. Our quality management system is also certified according to AS-9100D, a quality management system for aerospace requirements.

According to the standard warranty incorporated in most of our sales contracts, we warrant that our products will be free from defects in design, materials or workmanship, and guarantee repair or replacement of defective parts typically for periods between one to two years following delivery of a product to a customer. We also provide maintenance services to customers who sign maintenance contracts.

Source and Availability of Raw Materials

We acquire most of the components for the manufacturing of our products from suppliers and subcontractors, most of whom are located in Israel and the U.S. Some of these suppliers are currently the sole source of one or more components upon which we are dependent. Since many of our purchases require long lead-times, a delay in supply of an item can significantly delay the delivery of a product. To date, we have not experienced any particular difficulties in obtaining timely deliveries of necessary components. We depend on a limited number of suppliers of components for our products and if we are unable to obtain these components when needed, we would experience delays in manufacturing our products and our financial results could be adversely affected.

C. Organizational Structure

We indirectly own 75% of RADA Technologies LLC which is primarily engaged in the localization, sales and marketing of our Tactical Radars in the U.S. Our Chinese subsidiary**,** Beijing Hua Rui Aircraft Maintenance and Service, Co., Ltd., known as CACS, is the main platform for our test and repair shop activity. On December 2018, we signed an agreement to sell CACS, which sale is expected to close later in 2019.

D. Property, Plants and Equipment

We own a 30,000 square feet industrial building in Beit She’an, Israel. The building, which includes manufacturing facilities and warehouse space, is situated on land leased from the Israel Land Authority for a period of 49 years ending in 2034. The plant has sufficient capacity to meet our current requirements.

Our executive offices, sales and marketing and research and development facilities are located in a 17,782 square feet office facility in Netanya, Israel. The lease for this facility expires in January 2022. The aggregate annual rent for our offices in Israel was approximately $370,000 in 2018.

Our U.S. joint venture leases 1,522 square feet of office space in Silver Spring, MD. The lease for this facility expires in April 2019. RTL is currently in final negotiations to lease approximately 25,000 square feet in Germantown MD. The aggregate annual rent for our offices in Maryland was approximately $31,700 in 2018.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

A. Operating Results

The following discussion of our results of operations should be read together with our consolidated financial statements and the related notes, which appear elsewhere in this annual report. The following discussion contains forward-looking statements that reflect our current plans, estimates and beliefs and involve risks and uncertainties. Our actual results may differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to such differences include those discussed below and elsewhere in this annual report.

Overview

We develop, manufacture and sell defense electronics including tactical land radars for force and border protection applications, military avionics systems for manned and unmanned aircraft and inertial navigation systems, or INS. We have a Chinese subsidiary**,** Beijing Hua Rui Aircraft Maintenance and Service, Co., Ltd., known as CACS. CACS was established with a Chinese third party. We owned 80% of CACS and the Chinese third party owned the remaining 20% equity interest. In October 2018, a transaction with non-controlling interest occurred and as a result, as of December 31, 2018, we owned 100% of CACS. In December 2018 we signed an agreement to sell our entire shareholdings in CACS. Our U.S. subsidiary, RTL, is focused on adapting our tactical radar technology for the U.S. market by altering its technology towards US customer requirements, certifying the radars to US standards, building production capabilities and providing a maintenance and support infrastructure.

General

Our consolidated financial statements appearing in this annual report are prepared in dollars and in accordance with U.S. GAAP. Transactions and balances originally denominated in dollars are presented at their original amounts. Transactions and balances in other currencies are re-measured into dollars in accordance with the principles set forth in the Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC 830. The majority of our sales are made outside of Israel and a substantial part of them are in dollars. In addition, a substantial portion of our costs are incurred in dollars. Since the dollar is the primary currency of the economic environment in which we operate, the dollar is our functional and reporting currency and, accordingly, monetary accounts maintained in currencies other than the dollar are re-measured using the foreign exchange rate at the balance sheet date. Operational accounts and non-monetary balance sheet accounts are measured and recorded at the exchange rate in effect at the date of the transaction. All monetary balance sheet accounts have been re-measured using the exchange rates in effect at the balance sheet date. Statement of operations amounts have been re-measured using the average exchange rate for the period. The financial statements of our foreign subsidiary, whose functional currency is not the dollar, have been translated into dollars. All balance sheet amounts have been translated using the exchange rates in effect at balance sheet date. Statement of operation amounts have been translated using the average exchange rate prevailing during the year. Such translation adjustments are reported as a component of accumulated other comprehensive income (loss) in shareholders’ equity.

Discussion of Critical Accounting Policies and Estimations

Our critical accounting policies, including the assumptions and judgments underlying them, are disclosed in the notes to our consolidated financial statements. These policies have been consistently applied in all material respects. While the estimates and judgments associated with the application of these policies may be affected by different assumptions or conditions, we believe the estimates and judgments associated with the reported amounts are appropriate under the circumstances. We believe the following accounting policies are the most critical in fully understanding and evaluating our financial condition and results of our operations under U.S. GAAP.

Revenue Recognition. We account for revenue recognition when (or as) it satisfies performance obligations by transferring promised goods or services to its customers in an amount that reflects the consideration the Company expects to receive. In order to achieve that core principle, we apply the following five-step approach: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when a performance obligation is satisfied.

The Company generally satisfies performance obligations at a point in time, once the customer has obtained the legal title to the items purchased or service provided. Revenues from long-term and short-term fixed price contracts are usually recognized over time based on the cost-to-cost input method that best depicts the transfer of control over the performance obligation to the customer. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined.

We also generated revenues from repair services using our automated test equipment, mainly through CACS. We signed an agreement to sell our interest in CACS in 2018 (classified as a discontinued operation) and expect that the transaction will close later this year. Revenues from services are recognized when the service is performed.

Impairment of Long-Lived Assets. We are required to assess the impairment of long-lived assets whenever events or changes in circumstances indicate that the carrying value may not be recoverable. We assess the impairment of our assets based on a number of factors, including any significant changes in the manner of our use of the respective assets or the strategy of our overall business and significant negative industry or economic trends. Upon determination that the carrying value of a long-lived asset may not be recoverable, based upon a comparison of expected undiscounted future cash flows to the carrying amount of the asset, an impairment charge is recorded in the amount of the carrying value of the asset exceeds its fair value. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. As of December 31, 2017, and 2016, no impairment losses were identified.

Accounting for income taxes. On January 1, 2007, we adopted FASB ASC 740-10 "*Income Taxes,*" which contains a two-step approach to recognizing and measuring uncertain tax positions accounted for in accordance with ASC 740-10. The first step is to evaluate the tax position taken or expected to be taken in a tax return by determining if the weight of available evidence indicates that it is more likely than not that, on an evaluation of the technical merits, the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement ASC 740-10. We provided a valuation allowance in respect to the deferred tax assets resulting from operating loss carryforwards and other temporary differences. Our management currently believes that since our company has a history of losses, it is more likely than not that the deferred tax regarding the loss carryforwards and other temporary differences will not be realized in the foreseeable future.

Inventory valuation. The majority of our inventory consists of work in progress, raw materials and components. Inventories are valued at the lower of cost or market. Cost of finished goods is determined on the basis of direct manufacturing costs plus allocable indirect costs representing allocable operating overhead expenses and manufacturing costs. Raw material is valued using the "FIFO" method. We assess the valuation of our inventory on a quarterly basis and periodically write down the value for different finished goods and raw material items based on their potential utilization. If we consider specific inventory to be damaged, we write such inventory down to zero. Inventory write-offs are provided to cover risks arising from slow-moving items, discontinued products, and excess inventories. The process for evaluating these write-offs often requires us to make subjective judgments and estimates concerning the future utilization of the inventory items. Inventory write-offs were $39,000, $122,000 and $144,000 for the years ended December 31, 2018, 2017 and 2016, respectively.

Allowance for doubtful accounts. Our trade receivables are derived from sales to customers all over the world. We perform ongoing credit evaluations of our customers. In certain circumstances, we may require letters of credit or prepayments. We maintain an allowance for doubtful accounts for estimated losses from the inability of our customers to make required payments that we have determined to be doubtful of collection. We determine the adequacy of this allowance by regularly reviewing our accounts receivable and evaluating individual customers' receivables, considering customers' financial condition, credit history and other current economic conditions. If a customer's financial condition were to deteriorate which might impact its ability to make payment, then additional allowances may be required. Provisions for doubtful accounts are recorded in general and administrative expenses. Our allowance for doubtful accounts was $2,000, $14,000 and $14,000 for the years ended December 31, 2018, 2017 and 2016, respectively.

Stock-based compensation. We account for stock-based compensation in accordance with the provisions of ASC 718, "Compensation - Stock Compensation." Under the fair value recognition provisions of ASC 718, stock-based compensation cost is estimated at the grant date based on the fair value of the award and is recognized as expense ratably over the requisite service period of the award. We estimate the fair value of stock options granted using the Black-Scholes-Merton option-pricing model. Effective as of January 1, 2017, we adopted a change in accounting policy in accordance with ASU 2016-09, "Compensation Stock Compensation (Topic 718)" ("ASU 2016-09") to account for forfeitures as they occur.

The fair value of an award is affected by our stock price on the date of grant and other assumptions, including the estimated volatility of our stock price over the term of the awards and the estimated period of time that we expect employees to hold their stock options.

*Discontinued Operations***.** Under ASC 205-20, "Presentation of Financial Statements - Discontinued Operation" when a component of an entity, as defined in ASC 205-20, has been disposed of or is classified as held for sale, the results of its operations, including the gain or loss on its component are classified as discontinued operations and the assets and liabilities of such component are classified as assets and liabilities attributed to discontinued operations; that is, provided that the operations, assets and liabilities and cash flows of the component have been eliminated from the company's consolidated operations and the company will have no significant continuing involvement in the operations of the component. Subsequent to our determination to sell our interest in CACS, CACS' results are accounted as discontinued operation and appear in this annual report in a separate line item as "Discontinued Operations." As of December 31, 2018, a provision of $159,000 was accrued for the sale of CACS.

Explanation of Key Income Statement Items

Revenues. Our revenues are mainly derived from sales of defense electronics and their supporting ground systems.

Cost of Revenues. Cost of revenues consists primarily of salaries, raw materials, subcontractor expenses, related depreciation costs, inventories write-downs and overhead allocated to cost of revenues activities.

Research and Development Expenses, net. Research and development expenses consist primarily of salaries for research and development personnel, use of subcontractors and other costs incurred in the process of developing product prototypes.

Marketing and Selling Expenses. Marketing and selling expenses consist primarily of salaries for marketing and business development personnel, marketing activities, public relations, promotional materials, travel expenses, trade show exhibit expenses, and success fees to business development consultants.

General and Administrative Expenses. General and administrative expenses consist primarily of salaries and related expenses for executive, accounting, legal, administrative personnel, professional fees, provisions for doubtful accounts and other general corporate expenses.

Financial Expenses, Net. Financial expenses consist of interest and bank expenses, interest on convertible note and loans, amortization expenses of discount on convertible note, deferred charges and currency re-measurement losses. Financial income consists of interest on cash and cash equivalent balances and currency re-measurement gains.

Results of Operations

The following table presents certain financial data expressed as a percentage of total revenues for the periods indicated:

	Year Ended December 31,		
	2016	2017	2018
Revenues	100 %	100 %	100 %
Cost of revenues	88.7 %	68.4 %	63.9 %
Gross profit	11.3 %	31.6 %	36.1 %
Research and development, net	5.9 %	6.0 %	11.0 %
Marketing and selling	17.7 %	8.2 %	10.2 %
General and administrative	14.1 %	9.8 %	14.3 %
Net loss from sale of fixed assets	0 %	0 %	0.4 %
Operating income (loss)	(26.5)%	7.6 %	0.2 %
Financial (expenses) income, net	(11.9)%	(0.6)%	0.4 %
Net income (loss) from continuing operations	(38.4)%	7.0 %	0.6 %
Net income (loss) from discontinued operations	0.1 %	1.9 %	(1.4)%
Net income (loss)	(38.3)%	8.9 %	(0.8)%
Net income (loss) attributable to non-controlling interest	0.0 %	0.3 %	(1.4)%
Net income (loss) attributable to RADA Electronic Industries' shareholders	(38.3)%	8.6 %	0.6 %

Year Ended December 31, 2018 Compared with Year Ended December 31, 2017

Revenues. Our revenues increased by 7% to $28.0 million in 2018 from $26.2 million in 2017 mainly due to the increase in sales of our radars.

Cost of Revenues. Cost of revenues were $17.9 million in both 2018, and 2017.

Gross Profit. Our gross profit increased by 22% to $10.1 million in 2018 from $8.3 million in 2017. Our gross profit margin was approximately 36.1% in 2018 and 31.6% in 2017. The increase in our gross profit and gross profit margin in 2018 was mainly attributable to the increase in revenues and especially to the higher gross margin generated from the sale of radars.

Research and Development Expenses, Net. Our research and development expenses, net increased by 96.3% to $3.1 million in 2018 from $1.6 million in 2017. The increase in expenditures is a result of our strategy to achieve and maintain a technological edge for our products in the market.

Marketing and Selling Expenses. Marketing and selling expenses increased by 33.8% to approximately $2.9 million in 2018 from $2.1 million in 2017. We increased our level of marketing and selling expenses primarily due to our efforts to sell our radar products, mainly reflected in the costs incurred as part of our participation in field demonstrations requested by our potential customers as well as because of the costs associated with establishing our joint venture in the U.S.

General and Administrative Expenses. General and administrative expenses increased by 55.8% to approximately $4.0 million in 2018 from $2.6 million in 2017. The increase is attributable mainly to the establishment of our joint venture in the U.S. as well as to the increase in the non-cash expense associated with employee option compensation.

Financial Expenses (Income), Net. We incurred financial expenses of $0.2 million in 2017 while we had $0.1 million of financial income in 2018. The decrease in financial expenses is attributed mainly to the lower level of borrowings in 2018 as result of the conversion of a convertible loan into equity and the repayment of bank credits, during 2017. As a result of our improved financial condition, we were able to record net interest income on our cash and cash equivalents in 2018. Our non-cash financial expense resulting from the amortization of the discount on a convertible loan and loans from shareholders was $0 in 2018 compared to $0.103 million in 2017.

Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

Revenues. Our revenues increased by 104% to $26.2 million in 2017 from $12.8 million in 2016, mainly due to the increase in sales of our radars.

Cost of Revenues. Cost of revenues increased by 57% to $17.9 million in 2017 from $11.4 million in 2016. The increase in our cost of revenues is attributable to the increase in revenues**.**

Gross Profit. Our gross profit increased by 473% to $8.3 million in 2017 from $1.4 million in 2016. Our gross profit margin was approximately 31.6% in 2017 and 11.2% in 2016. The increase in our gross profit and gross profit margin in 2017 was mainly attributable to the increase in revenues and especially to the higher gross margin generated from the sale of our radars.

Research and Development Expenses, Net. Our research and development expenses increased by 107.8% to $1.6 million in 2017 from $0.8 million in 2016. The increase in expenditures is a result of our strategy to achieve and maintain a technological edge for our products in the market.

Marketing and Selling Expenses. Marketing and selling expenses decreased by 5.8% to approximately $2.1 million in 2017 from $2.3 million in 2016. We maintained a similar level of marketing and selling expenses primarily with respect to our efforts to sell our radar products.

General and Administrative Expenses. General and administrative expenses increased by 41% to approximately $2.6 million in 2017 from $1.8 million in 2016. The increase is attributable mainly to the increase in the non-cash expense associated with employee option compensation.

Financial Expenses, Net. Our financial expenses, net, decreased by 90% to $0.2 million in 2017 compared to $1.5 million in 2016. The decrease is mainly attributable to our lower level of debt in 2017. The financial expense resulting from the amortization of the discount on a convertible loan and loans from shareholders was $0.103 million in 2017 compared to $1.1 million in 2016. The convertible loan was converted into equity in 2017. As were all loans from shareholders. Our interest expense, net, was $0.164 million in 2017 compared to $0.3 million in 2016.

Our Location in Israel

We are incorporated under the laws of the State of Israel, and our principal executive offices and principal manufacture, research and development facilities are located in Israel. See Item 3D *"Key Information – Risk Factors – Risks Relating to Our Location in Israel"* for a description of governmental, economic, fiscal, monetary or political polices or factors that have materially affected or could materially affect our operations.

Corporate Tax Rate

Israeli companies were generally subject to corporate tax at a rate of 23% in 2018. The corporate tax as of January 1, 2019 is 23%.

As of December 31, 2018, our net operating loss carry forward for Israeli tax purposes was approximately $62 million, including capital loss carry forwards of approximately $3.8 million.

Trade Relations

Israel is a member of the United Nations, the International Monetary Fund, the International Bank for Reconstruction and Development, and the International Finance Corporation. Israel is a member of the World Trade Organization and is a signatory to the General Agreement on Tariffs and Trade. Israel is a member of the Organization for Economic Co-operation and Development, or the OECD, an international organization whose members are governments of mostly developed economies. The OECD’s main goal is to promote policies that will improve the economic and social well-being of people around the world. In addition, Israel has been granted preferences under the Generalized System of Preferences from the U.S., Australia, Canada and Japan. These preferences allow Israel to export the products covered by such programs either duty-free or at reduced duties.

Israel and the E.U. concluded a Free Trade Agreement in July 1975 that confers some advantages with respect to Israeli exports to most European countries and obligates Israel to lower its tariffs with respect to imports from these countries over a number of years. In 1985, Israel and the U.S. entered into an agreement to establish a Free Trade Area. The Free Trade Area has eliminated all tariff and some non-tariff barriers on most trade between the two countries. On January 1, 1993, an agreement between Israel and the European Free Trade Association, known as the “EFTA,” established a free-trade zone between Israel and the EFTA nations. In November 1995, Israel entered into a new agreement with the E.U., which includes a redefinition of rules of origin and other improvements, such as allowing Israel to become a member of the Research and Technology programs of the E.U.

Impact of Currency Fluctuation and of Inflation

A significant portion of the cost of our Israeli operations, primarily personnel and facility-related, is incurred in NIS. Therefore, our NIS related costs, as expressed in dollars, are influenced by the exchange rate between the dollar and the NIS. In addition, if the rate of inflation in Israel will exceed the rate of devaluation of the NIS in relation to the dollar, or if the timing of such devaluations were to lag considerably behind inflation, our cost as expressed in dollars may increase. NIS linked balance sheet items, may also create foreign exchange gains or losses, depending upon the relative dollar values of the NIS at the beginning and end of the reporting period, affecting our net income and earnings per share. Although we may use hedging techniques, we may not be able to eliminate the effects of currency fluctuations. Therefore, exchange rate fluctuations could have a material adverse impact on our operating results. The caption "Financial expenses, net" in our consolidated financial statements includes the impact of these factors as well as traditional interest income or expense.

The following table sets forth, for the periods indicated, (i) depreciation or appreciation of the NIS against the most important currency for our business, the dollar, until December 31 each year and the year before, and (ii) inflation as reflected in changes in the Israeli consumer price index.

	Year Ended December 31,				
	2014	2015	2016	2017	2018
NIS vs. U.S. Dollar	12 %	0 %	(1.0)%	(9.8)%	3.19%
Israeli Consumer Price Index	(0.2)%	(1.0)%	(0.2)%	1.5 %	0.8 %

Since exchange rates between the NIS and the dollar fluctuate continuously, exchange rate fluctuations, particularly larger periodic devaluations, may have an impact on our profitability and period-to-period comparisons of our results. We cannot assure you that in the future our results of operations may not be materially adversely affected by currency fluctuations.

Recently Issued Accounting Standards

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which will require lessees to recognize assets and liabilities for leases with lease terms of more than 12 months. Consistent with current GAAP, the recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will depend on its classification as a finance or operating lease. However, unlike current GAAP, which requires only capital leases to be recognized on the balance sheet, the new guidance will require both types of leases to be recognized on the balance sheet. A modified retrospective transition approach is required, applying the new standard to all leases existing at the date of initial application. An entity may choose to use either (1) its effective date or (2) the beginning of the earliest comparative period presented in the financial statements as its date of initial application. If an entity chooses the second option, the entity must recast its comparative period financial statements and provide disclosures required by the new standard for the comparative periods.

The Company will adopt the new standard effective January 1, 2019 using the modified retrospective approach. Consequently, financial information will not be updated and disclosures required under the new standard will not be provided for dates and periods before January 1, 2019. The standard provides a number of optional practical expedients in transition. The Company is electing the ‘package of practical expedients’, which permits it not to reassess under the new standard its prior conclusions about lease identification, lease classification and initial direct costs. The adoption of this new standard will affect the Company’s consolidated balance sheets by recognizing new right-of-use (“ROU”) assets and lease liabilities for operating leases. The impact on the Company’s results of operations and cash flows is not expected to be material. Adoption of the standard will result in the recognition of additional ROU assets and lease liabilities for operating leases of approximately $2,032 as of January 1, 2019. The Company elects to account for a lease component of a contract and its associated non-lease components as a single lease component, therefore the ROU and lease liabilities estimate includes non-cancelable operating lease agreements, parking spaces and management fees.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, which requires companies to include amounts generally described as restricted cash and restricted cash equivalents in cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The Company adopted the new standard effective January 1, 2018 using the retrospectively method. The adoption of this new guidance had an immaterial impact on the Company's consolidated financial statements. Restricted cash is invested in short-term bank deposits (for three months), which are mainly used as security for the Company's guarantees to customers and lines of credits with banks.

On January 1, 2018, the Company adopted the requirements of ASU 2014-09, "Revenue from Contracts with Customers (Topic 606), using the modified retrospective method for contracts that were not completed as of January 1, 2018. Under the modified retrospective method, the Company recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of retained earnings. This adjustment did not have a material impact on the Company's consolidated financial statements. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under Revenue Recognition ("Topic 605").

In May 2017, the FASB issued ASU 2017-09, "Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting." ASU 2017-09 was issued to provide clarity and reduce both 1) diversity in practice and 2) cost and complexity when applying the guidance in Topic 718 to a change in the terms or conditions of a share-based payment award. ASU 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting under Topic 718. The amendments in ASU 2017-09 are effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. The Company adopted ASU 2017-09 effective January 1, 2018. The adoption of this new guidance had no material impact on the Company's consolidated financial statements.

B. Liquidity and Capital Resources

We have historically met our financial requirements primarily through cash generated by operations, funds generated by our public offerings, private placements of our Ordinary Shares and debt securities, loans from our principal shareholders, short-term loans and credit facilities from banks, research and development grants from the government of Israel and the Israel-U.S. Binational Industrial Research and Development Foundation, investment grants for approved enterprise programs and marketing grants from the government of Israel.

We had working capital of $37.8 million as of December 31, 2018 compared with working capital of $25.6 million at December 31, 2017. Cash and cash equivalents were $20.8 million as of December 31, 2018 compared to $12.4 million as of December 31, 2017.

As of December 31, 2018, our banks provided $0.37 million of guarantees on our behalf, mainly to our customers and suppliers in the ordinary course of business. The guarantees are secured by a first priority charge on our restricted cash total $0.42 million as of December 31, 2018.

On May 15, 2016, our shareholders approved the sale to DBSI of 8,510,638 of our Ordinary Shares in consideration for approximately $4 million, reflecting a price per share of $0.47. In addition, we issued to DBSI warrants to purchase: (i) an additional 4,255,319 Ordinary Shares at an exercise price per share of $0.47 (resulting in an aggregate exercise price of $2 million), exercisable for a period of 24 months following the date of the initial investment and (ii) warrants to purchase an additional 3,636,363 shares at an exercise price per share of $0.55 (resulting in an aggregate exercise price of $2 million), exercisable for a period of 48 months following the date of the initial investment.

DBSI also granted our company an option, exercisable by either us or DBSI, for us to obtain a three -year loan in the principal amount of up to $3.175 million solely for the purpose of the repayment of the outstanding shareholders' debt. We exercised such option in June 2016 and used the funds to fully repay our outstanding shareholders' debt.

During the term of the loan, which had a three-year term, DBSI had the right, but not the obligation, at its sole discretion, to convert the then remaining convertible loan amount into Ordinary Shares at a price per share equal to the lower of: (i) $2.40, or (ii) a five percent (5%) discount to the FMV (the average of the closing prices of our Ordinary Shares over the 5 consecutive trading days ending on the last trading day prior to the date of conversion), but in no event less than $0.47. In August 2017, DBSI converted the entire principal of the loan and acquired 1,322,917 Ordinary Shares, reflecting a conversion price of $2.40 per share.

DBSI's exercise of warrants has resulted in proceeds to our company of $1.25 million in 2016, $1.95 million in 2017 and $0.8 million in 2018. There are no outstanding warrant held by DBSI.

In connection with the 2016 DBSI transaction, we issued warrants to purchase 255,319 Ordinary Shares to each of Legos Advisors Ltd. and Mr. Avi Geffen as commission and finder's fees. All of these warrants were exercised in 2017 for total consideration of $0.24 million.

On November 15, 2016, we completed a $2 million registered direct offering of 1,904,762 Ordinary Shares at a price per share of $1.05 to The Phoenix Insurance Company Ltd. and its affiliate, Shotfut-Menayot-Israel-HaPhoenix Amitim Ltd. At the same time, DBSI invested an additional $1 million in our company through the exercise of 2,127,660 warrants.

On August 20, 2017, we sold 4,604,500 of our Ordinary Shares to Israeli institutional investors, at a price of $2.15 per share pursuant to our shelf registration statement.

On November 13, 2018, one of our consultants exercised 111,000 warrants and was issued 62,601 Ordinary Shares in a cashless exercise.

On December 6, 2018 we completed a $12.5 million registered direct offering of 4,545,454 Ordinary Shares at a price per share of $2.75, of which $10 million was invested by Psagot and $2.5 million by The Phoenix, two Israeli institutional investors. In addition, on January 16, 2019 we issued 545,454 Ordinary Shares to DBSI in a private placement for approximately $1.5 million, reflecting a price per share of $2.75.

We made capital expenditures of $ 1 million in the year ended December 31, 2018, primarily for machinery and equipment**.** We currently do not have any significant capital spending or purchase commitments.

Cash Flows

The following table summarizes our cash flows for the periods presented:

	Year ended December 31,		
	2016	2017	2018
	(U.S. dollars in thousands)		
Net cash provided by (used in) operating activities from continuing operations	(4,919)	1,722	(3,858)
Net cash used in investing activities from continuing operations	(336)	(1,806)	(948)
Net cash provided by financing activities from continuing operations	5,442	11,292	12,798
Net cash provided by (used in) operating activities from discontinued operations	298	(644)	1,186
Net cash used in investing activities from discontinued operations	(34)	(101)	(2)
Effect of exchange rate changes on cash and cash equivalents	(133)	(138)	(420)
Increase (decrease) in cash and cash equivalents and restricted cash	318	10,325	8,756
Cash and cash equivalents and restricted cash at beginning of the year	2,363	2,681	13,006
Cash and cash equivalents and restricted cash at end of the year	2,681	13,006	21,762
Less cash and cash equivalents of discontinued operation at the end of the year	1,159	267	526
	1,522	12,739	21,236

Continuing Operations:

Net cash used in operating activities was $3,858,000 in 2018. This was primarily due to depreciation and amortization expenses of $799,000, share based non-cash compensation to employees of $898,000, an increase in trade receivables of $6,096,000, an increase in inventories of $3,865,000 and a net loss of $223,000. This was offset by an increase in trade payables of $ 2,610,000 and an increase in other accounts payables of $1,693,000. Net cash provided by operating activities was $1,722,000 in 2017. This was primarily due to depreciation and amortization of $638,000, share based non-cash compensation to employees of $559,000, an increase in trade receivables of $2,280,000 and an increase in inventories of $890,000. This was offset by our net income of $2,342,000 and a decrease in costs and estimated earnings in excess of billings of $809,000. Net cash used in operating activities was $4,919,000 in 2016. This was primarily due to our loss of $4,907,000 in 2016, an increase in inventories of $1,503,000 and an increase in trade receivables of $1,360,000. This was offset by a decrease in costs and estimated earnings in excess of billings of $403,000.

Net cash used in investing activities was $948,000 in 2018, primarily due to the investment of $899,000 in property, plant and equipment and construction-in-process of production infrastructure of $308,000. Net cash used in investing activities was approximately $1,806,000 in 2017, primarily due to the investment of $1,041,000 in property, plant and equipment and construction-in-process of production infrastructure of $736,000. Net cash used in investing activities was approximately $336,000 in 2016, primarily due to change in restricted deposits, net of $75,000 which was offset by the investment of $411,000 in property, plant and equipment.

Net cash provided by financing activities was $12,798,000 in 2018, reflecting the issuance of Ordinary Shares in a registered direct offering that provided us with net proceeds of $12,252,000, Net cash provided by financing activities was $11,292,000 in 2017, due to issuance of Ordinary Shares and exercise of warrants. This was offset by a decrease in short-term bank credit of $575,000. Net cash provided by financing activities was $5,442,000 in 2016, reflecting net proceeds of $7,096,000, mainly from our transactions with DBSI and The Phoenix Insurance Company Ltd. and its affiliate, offset by net repayment of $2,988,000 of shareholders loans and a decrease in short-term bank credit of $1,841,000.

Discontinued Operations:

Net cash provided by operating activities from discontinued operations was $1,186,000 in 2018. This was primarily due to a decrease in trade receivables of $645,000. Net cash used in operating activities from discontinued operations was $644,000 in 2017. This was primarily due to an increase in trade receivables of $956,000. This was offset by depreciation of $ 391,000. Net cash provided by operating activities from discontinued operations was $298,000 in 2016. This was primarily due to a decrease in inventories of $29,000 and a decrease in trade receivables of $148,000. This was offset by an increase in trade payables of $44,000.

Net cash used in investing activities from discontinued operations was $2,000 in 2018, due to investment of $2,000 in property, plant and equipment. Net cash used in investing activities from discontinued operations was $101,000 in 2017, due to investment of $101,000 in property, plant and equipment. Net cash used in investing activities from discontinued operations was $34,000 in 2016, due to investment of $34,000 in property, plant and equipment.

As a result of the foregoing, at December 31, 2018, we had working capital of $37,840,000 and cash and cash equivalents of $ 20,814,000 as compared to working capital of $25,641,000 and cash and cash equivalents of $12,417,000, at December 31, 2017.

We expect to fund our short-term liquidity needs in 2019, including our obligations under, contractual agreements and any other working capital requirements, from our cash and cash equivalents, and operating cash flow. We project that our current cash and cash equivalents and our expected cash flow from operations, will be sufficient to meet our cash requirements in 2019.

C. Research and Development, Patents and Licenses

Research and Development

Our research and development activities focus on improvements to our existing products, the development of complementary products that would provide continued support for our current customers and would improve our capability to market our products to new customers and keep a competitive edge over our main competitors. In 2018, 2017 and 2016 we incurred $3.1 million, $1.6 million and $0.8 million, respectively, of research and development expenses, net. The majority of these expenses are attributable to the development of our radars. In 2019, we intend to continue and expand our investment in the research and development of new products. As of December 31, 2018, we employed 41 engineers (including 2 sub-contractors) in research and development who concentrate mainly on research and development activities.

The Israel Innovation Authority, or the IIA, encourages research and development by providing grants to Israeli companies, pursuant to the Law for the Encouragement of Industrial Research and Development, 1984, as amended. The terms of such grants prohibit the manufacture of the developed products outside of Israel and the transfer of technologies developed using the grants to any person without the prior written consent of the IIA. During recent years, we developed a new radar sensor for APS, partly financed by the IIA. We received royalty bearing grants of $1.138 million from the IIA. Pursuant to applicable Israeli law, we are currently required to pay royalties at the rate of 3% of sales of products developed with certain grants received from the IIA, up to 100% of the amount of such grants, adjusted by the exchange rate with the dollar. As of December 31, 2018, our total obligation for royalty payments, net of royalties paid or accrued was zero.

D. Trend Information

In 2018, our revenues increased by approximately 7% compared to our revenues in 2017.

Our future revenues will, in great measure, be dependent upon the success of our sales and marketing strategy. We are currently focusing our sales efforts on:

Military avionics and inertial navigation systems; and

Tactical radar systems for force and border protection solutions.

We cannot provide any assurances that we will be successful in meeting our targets in the future. As a result of the unpredictable business environment in which we operate, we are unable to provide any specific guidance as to sales and profitability trends. However, on February 4, 2019 we provided revenues guidance for 2019 of $40 million. If we are unsuccessful in our sales efforts, it is unlikely that we will be able to achieve profitability in the future and we will require additional capital.

E. Off-Balance Sheet Arrangements

We are not a party to any material off-balance sheet arrangements. In addition, we have no unconsolidated special purpose financing or partnership entities that are likely to create material contingent obligations.

F. Tabular Disclosure of Contractual Obligations

The following table summarizes our minimum contractual obligations and commercial commitments, as of December 31, 2018 and the effect we expect them to have on our liquidity and cash flow in future periods.

Contractual Obligations	Payments due by Period (U.S. dollars in thousands)				
	Total	Less than 1 year	1-3 Years	3-5 Years	More than 5 years
Long-term debt obligations	-	-	-	-	-
Operating lease obligations	2,123	838	707	578	-
Total	2,123	838	707	578	-

We have long-term liabilities for severance pay for certain employees that are calculated pursuant to Israeli law generally based on the most recent salary of the employees multiplied by the number of years of employment, as of the balance sheet date. Under Israeli law, employees are entitled to one month's salary for each year of employment or a portion thereof upon termination of employment in certain circumstances, including the retirement or death of an employee or the termination of employment of an employee without due cause. As of December 31, 2018, our severance pay liability was $0.7 million.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

Set forth below are the name, age, principal position and a biographical description of each of our directors and executive officers:

Name	Age	Position
Yossi Ben Shalom (2)	62	Executive Chairman of the Board of Directors
Nir Cohen	46	Director
Prof. Alon Dumanis (1)(2)	68	Director
Ben Zion Gruber	60	Director
Israel Livnat (2)	68	Director
Tal Misch Vered(1)	51	External Director
Elan Sigal (1)	51	External Director
Kineret Ya'ari	35	Director
Guy Zur	57	Director
Dov Sella	63	Chief Executive Officer
Avi Israel	54	Chief Financial Officer
Oleg Kiperman	65	Chief Technology Officer
William Watson	55	Chief Executive Officer of RADA Technologies LLC (RTL)
Max Cohen	46	Executive Vice President for the US market

(1) Member of the Audit and Compensation Committee
(2) Member of the Business Development Committee

Messrs. Yossi Ben Shalom, Nir Cohen, Israel Livnat, Ben Zion Gruber, and Alon Dumanis, Ms. Kineret Ya'ari and Mr. Guy Zur will serve as directors until our 2019 annual general meeting of shareholders. Ms. Misch and Mr. Sigal serve as our external directors and each currently holds office for three-year terms until October 21, 2021, and August

30, 2019, respectively. On February 21, 2018, Mr. Herzle Bodinger retired as a member of our Board of Directors for personal reasons and on October 21,2018, Ms. Nurit Mor retired as a member of our Board of Directors

Yossi Ben Shalom was appointed as a director of RADA effective as of May 18, 2016 and has served as the Chairman of our Board of Directors since June 14, 2016. Mr. Ben-Shalom was Executive Vice President and Chief Financial Officer of Koor Industries Ltd. from 1998 through to 2000. Before that, Mr. Ben-Shalom served as Chief Financial Officer of Tadiran Ltd. Mr. Ben-Shalom was an active director on numerous boards of directors, including: NICE Systems Ltd. (NASDAQ: NICE) (computer telephony); Machteshim Agan (chemistry); and Investec Bank. He also participated in the creation of TDA VC fund (a joint venture between Templeton and Tadiran) and was an active Chairman of Scopus – a technology company with sales of over $30 million. Yossi is a co-founder of DBSI Investments Ltd. As such, he currently serves as the Chairman of Pointer Telocation Ltd. (NASDAQ: PNTR) and Chairman of Shagrir Group Car Services Ltd. (TASE: SHGR). Mr. Ben-Shalom also serves as a director of Taldor Computer Systems (1986) Ltd. (TASE: TALD) and several other privately held companies. Mr. Ben-Shalom holds a B.A. degree in Economics and an M.A. degree in Business Management from Tel Aviv University.

Nir Cohen has served as a director of RADA since May 18, 2016. Mr. Cohen serves as Chief Financial Officer of DBSI Investments Ltd. and of its affiliate – Shiraz DS Investments Ltd. As the CFO of both DBSI and Shiraz, Mr. Cohen serves as a director in several public companies: Taldor Computer Systems (1986) Ltd. (TASE: TALD); Pointer Telocation Ltd. (NASDAQ: PNTR); and Shagrir Group Vehicle Services Ltd. (TASE: SHGR). Before joining DBSI, Mr. Cohen served as partner and CFO of Argoquest Holdings, LLC, a privately held U.S.-based investment company specializing in high-tech investments. Prior to joining Argoquest, Mr. Cohen served as a senior associate at Kesselman & Kesselman, an Israeli affiliate of the global accounting firm PricewaterhouseCoopers (PwC). Before joining PwC, Mr. Cohen worked as an auditor for the accounting firm KPMG in Israel. Mr. Cohen holds a B.A. degree in Accounting and Business Management from the College of Management and is a Certified Public Accountant in Israel.

Prof. Alon Dumanis has served as a director of RADA since 2015. Until December 31, 2015, Prof. Dumanis was the Chief Executive Officer of Dumanis Investments Ltd and its affiliates. He is currently chairman of Aposense (TASE-APOS), Managing Partner of Augmentum Ltd., CEO of ACS Air-Cyber Solutions Ltd. and advisory board member of Parazero Ltd. Prof. Dumanis was for 15 years (until 2015) the Chief Executive Officer of Docor International Management Ltd. and the General Manager of Crecor B.V. and Docor International B.V., Dutch investment companies, subsidiaries of The Van-Leer Group Foundation. He was the chairman of Van Leer Xenia (Jerusalem Technology Incubator), XSight Systems, Softlib, DNR Imaging, Clariton Networks, Bondx, and a member of the board directors of Spectronix (TASE-SPCT), Collplant (TASE-CLPT), and a member of the board of directors of other high-tech and bio tech companies in Docor’s investment portfolio. Prof. Dumanis is a former member of the board of directors of El Al Israel Airlines (TASE-LY), Tadiran Communications (TASE-TDCM), Nova Measuring Instruments (NASDAQ-NVMI), Protalix Biotherapeutics (NYSE-PLX) and Inventech Investments Co. Ltd. (TASE-IVTC). Previously, Prof. Dumanis was the Head of the Material Command in the Israel Air Force at the rank of Brigadier General. Prof. Dumanis holds a Ph.D. in Aerospace Engineering from Purdue University, West Lafayette, Indiana, USA. Prof. Dumanis is currently a faculty member in Azrieli Jerusalem College of Engineering Jerusalem and serves as the head of the Technological Entrepreneurship graduates’ program. He has managed multi-billion-dollars R&D programs, engineering, security, information technology, logistics and Acquisition, Air-Force infrastructure programs and other projects. He was a member of various notable steering committees for the Minister of Defense and the Israel Defense Forces, Chief of General Staff, for national level strategy, technological road mapping and information technology. Prof. Dumanis has received prizes, honors and awards including the Purdue University “Outstanding Aerospace Engineer of 2001 Award”. He is a chairperson and member of several national steering committees and is the author of many papers published locally and internationally in a number of domains including technology and management. Prof. Dumanis also holds a Doctorate of Philosophy degree in Aerospace Engineering from Purdue University.

Ben Zion Gruber has served as a director of RADA since June 2002. Mr. Gruber is a founder and manager of several real estate and construction companies and an entrepreneur involved in several hi-tech companies. Mr. Gruber is a Br. General (Res.) of the IDF serving today as deputy commander of an armored division. Mr. Gruber is a member of the Board of Employment Service of the government of Israel. He also serves on the board of R. Riskin Ohr Tora institutions and the board of Har Etzyun Yeshiva, board of Hertzog College, Association of Friends of Kefar Shaul Hospital. Mr. Gruber serves on the Ethics Committees of the Eitanim and Kefar Shaul Hospitals as well as a director of several other charitable organizations. Mr. Gruber holds a B.Sc. degree in Engineering of Microcomputers from JCT Jerusalem College of Technology. In addition, Mr. Gruber is a graduate of a summer course in Business

Administration at Harvard University, as well as several other courses and training in management, finance and entrepreneurship.

Israel Livnat has served as a director of RADA since May 18, 2016. Mr. Livnat was the founder and Chairman of Anteo WW AG, which developed a software platform for physical-security, cyber-security safety and other business continuity applications. Mr. Livnat serves as a director on the board of Mobilicom Ltd., a provider of advanced communication solutions. He serves also as Director at Urban Aeronautics Leader in developing a compact VTOL vehicle with no exposed rotors that is tailored to meet FAA requirements for powered lift vehicles and is also capable of flying and operating inside complex urban and natural environment. Mr. Livnat was the President of the Security Group at Nice Systems Ltd. from May 2006 until August 2011. Prior to joining NICE and from 2001, he served as the President and CEO of Elta Systems Ltd., the leading defense company in Israel for radar, signal intelligence and communication systems. Prior to his position with Elta, Mr. Livnat headed the MLM division of Israeli Aircraft Industries, leading the development of the Arrow weapons system, the Israeli Shavit satellite launcher and other airborne command and control systems. Before that he was VP Engineering of the MLM division and director for hardware engineering at Daisy Systems of Mountain View, California, a leading developer of hardware and software for large computer-embedded systems. Mr. Livnat holds a B.Sc. degree and a M.Sc. degree in Electrical Engineering from the Technion-Israel Institute of Technology, and an Executive MBA degree from Stanford University, California. He was awarded the prestigious Israeli Industry Prize for 2004.

Tal Misch Vered has served as an external directors of RADA since October 2018 Ms. Misch has served as an external director of Telsys Ltd., an Israeli company whose shares are traded on the TASE (since 2016), A.D.O. group, an Israeli company whose shares are traded on the TASE (since 2018), the company for the Management of the Provident Fund of Ovdei Hamedina (since 2016), a government fund, Mardechai Aviv Building Industries (1973) Ltd., an Israeli public company whose shares are traded on the TASE (since 2016), Medi Power (Overseas) Ltd., an Israeli company whose shares are traded on the TASE (since 2015), and Opal Balance Ltd., an Israeli company whose shares are traded on the TASE (since 2012). In addition, Ms. Misch served as a director of Roots Sustainable Agricultural Technologies Ltd. an Israeli company whose shares are traded in Australia (since 2017-2018), Semicom Industries Ltd. an Israeli public company (from 2013 to 2014), Arazim Investments Ltd. an Israeli public company (from 2011 to 2014), Ligad Investment and Building Ltd., an Israeli public company (from 2012 to2013), Karden Automobiles Ltd., an Israeli public company (from 2004 to2005) and Keshet Broadcast Ltd., an Israeli private company (from 2003 to 2004). Between 2006 and 2014, Ms. Misch served as the co-CEO of Gmul Residential Real Estate Ltd, an Israeli public company. Prior to that, from 2004 to 2007 Ms. Misch served as the CFO of Gmul Investment Ltd. an Israeli public company. Prior to that, Ms. Misch served in various managerial and professional positions, including as a certified public accountant in Broyde KPMG & Co. Ms. Misch is a CPA and a member of the Israeli Accountants Council as well as a licensed real estate appraiser. Ms. Misch has a B.A. degree in Economics and Accounting, and an M.A. degree in Philosophy, Science and Digital Culture, from Tel Aviv University.

Elan Sigal has served as an external director of RADA since August 2013. From January 2013 to August 2017, Mr. Sigal served as the Chief Financial Officer of Landa Corporation (Israel), an Israeli company that develops printing systems with proprietary nanography technology for the commercial market. Between January 2008 and December 2012, Mr. Sigal was the Chief Financial Officer of Objet Geometries Ltd., an Israeli company that is engaged in the design, development and manufacture of 3D printers. Between 2004 and December 2007, Mr. Sigal served as the Chief Financial Officer of our company. From May 2000 to December 2003, Mr. Sigal worked as a management consultant in the London office of McKinsey & Co., a leading global management consulting firm. For ten years Mr. Sigal served as a fighter pilot in the Israeli Air Force. Mr. Sigal holds a B.A. degree in Economics from Tel Aviv University.

Kineret Ya'ari has served as a director of RADA since May 18, 2016. Mrs. Ya'ari serves as an analyst and economist at DBSI Investments Ltd. Mrs. Ya'ari also serves as a director of Taldor Computer Systems (1986) Ltd. (TASE: TALD) and Shagrir Group Vehicle Services Ltd. (TASE: SHGR). Before joining DBSI Investments, Mrs. Ya'ari served as a senior business analyst at Giza-Singer-Even, a financial advisory and investment banking firm in Israel. Mrs. Ya'ari holds a B.A. degree in Economics and Management and an M.B.A. degree in Accounting and Finance from Tel Aviv University.

Guy Zur has served as a director of RADA since March 27, 2017. Mr. Zur joined the IDF in 1980 and served in the military until 2016 in a variety of positions retiring with the rank of Major General. Mr. Zur served as the commander of the Ground Forces from 2013 until 2016. Between 2010 and 2013, Mr. Zur served as the Head of the IDF Planning Division. Between 2007 and 2010, Mr. Zur served as the commander of the National Training Center for Ground Trainings (NTC). Mr. Zur is currently the CEO of some Taavura Group subsidiaries, one of the largest logistics and transportation conglomerates in Israel, as well as a technology entrepreneur. Mr. Zur holds an M.B.A. degree from

Be’er Sheva University, a Bc.S. degree in Mechanical Engineering from Tel Aviv University, and is an alumnus of the Royal College of Defense Studies, London.

Dov Sella has served as our Chief Executive Officer since November 2016 and previously, since July 2007, served as our chief business development officer. Prior to that and from January 2003, Mr. Sella served as our chief operating officer. Mr. Sella has over 20 years of senior management and product development experience. From 1982 until 1997, Mr. Sella worked for Elbit Systems Ltd., a leading Israeli defense contractor. Among his positions at Elbit, he served as director of programs, director of avionics engineering and director of business development. Between 1997 and 2000, Mr. Sella served as executive vice president and vice president of business development and vice president of research and development of UltraGuide Ltd., a medical devices start-up. During the three years prior to joining our company, Mr. Sella was the president of NeuroVision Inc., a medical technology start-up. Mr. Sella has a B.Sc. degree (cum laude) in Computer Engineering from the Technion - Israeli Institute of Technology. Mr. Sella served as a fighter aircraft navigator in the IAF.

Avi Israel has served as our Chief Financial Officer since November 2017. Prior to that and since 2014, Mr. Israel has served as the CEO of Logisticare Ltd., a leading Israeli private company providing third-party logistics and supply chain services. Between 2010 and 2013, Mr. Israel served as the CEO of Brimag Communication Ltd., the Israeli importer and distributor of mobile phones and other cellular products manufactured by LG Electronics. Prior to that and since 2004, Mr. Israel served in several positions (including Deputy CEO and Finance Director) of Telit Communications PLC., an IoT (Internet of Things) company listed on AIM in London. Between 1996 and 2004, Mr. Israel served in several positions in the Formula Systems Group, as the VP M&A in charge of the international operations of Matrix Ltd. (TASE: MTRX), one of Israel's largest software solutions companies, as well as the CFO of New Applicom Ltd., an Israeli software company that merged with Matrix. Prior to that and since 1992, Mr. Israel acted as the CFO of Burford International Application Ltd in the United Kingdom. Between 1989 and 1992, Mr. Israel was a certified public accountant with Almagor & Co, (today Deloitte Israel). Mr. Israel also served between the years 2011-2017 as an external director of Analyst Portfolio Management Ltd. and between 2004 and 2010 as an external director of Semicom Industries Ltd. Currently, Mr. Israel is also an external director of Or Shay Ltd., whose bonds are traded on the TASE. Mr. Israel has a B.A. degree in Economics and Accounting and an M.B.A. degree, both from Bar-Ilan University in Israel. Mr. Israel is a CPA and a member of the Israeli Accountants Council.

Oleg Kiperman has served as our chief technology officer since July 2007. Mr. Kiperman joined us in 1984 as project manager of several embedded avionics development programs and in 2000 was named as our director of engineering. From 1982 until 1984, Mr. Kiperman served as a hardware development team leader at Tadiran Ltd. developing digital communication systems. From 1977 until 1982, Mr. Kiperman served as a senior engineer in the IAF Weapons Control Branch. Mr. Kiperman holds a B.Sc. degree in Electrical Engineering from the Technion - Israeli Institute of Technology.

William Watson has served as the Chief Executive Officer of RADA Technologies LLC (RTL) since March 2018. Mr. Watson has over 30 years of experience in product and business development experience in the defense market. Prior to joining RADA, Mr. Watson was responsible for worldwide sales and business development for L3 Technologies, GCS between 2017 and 2018. Mr. Watson also developed a worldwide sales team for Safran Vectronix in 2015-2016. Prior he spent 27 years with DRS Technologies, a major US defense contractor, in a variety of roles including P&L responsibilities as VP, Radar & Communication Systems; and also VP, Naval C4 Systems. During his tenure with DRS, Mr. Watson also held leadership positions in Program Management, Engineering and Business Operations. Mr. Watson has an M.B.A. degree in Business Administration and Management from Long Island University (C.W. Post) and also a Bachelor of Engineering degree (BEng) in Mechanical Engineering from the State University of New York (Stony Brook).

Max Cohen has served as our Executive Vice President for the US market, since May 2018. In August 2018, Mr. Cohen relocated to the U.S. Mr. Cohen retired from the Israeli Defense Forces (IDF) in March 2018 as a Lieutenant Colonel (LTC) after 26 Years of service. Since his retirement, Mr. Cohen together with his partners, founded FLYON Aerosystems Ltd., a start-up company engaged in the development of a new commercial flying platform. Mr. Cohen initiate and led major program during his services in the IDF. From 2004 until 2017 as the head of the Sky Picture Department in the IAF, Mr. Cohen led the development of the air picture command and control systems (C2) and the air picture Radars. During this period Mr. Cohen initiated a comprehensive national program to deal with the emerging threat of the quadcopters. Mr. Cohen has a BSc in Electrical and Computer Engineering from Ben-Gurion University during which he published two papers on multispectral imaging at the SPIE - the international society for optics and photonics. He also finished all the required courses for a MSc degree in electrical engineering from Tel-Aviv University.

B. **Compensation**

The following table includes information for the year ended December 31, 2018 concerning the five (5) most highly compensated executive officers of our company, (the figures below reflect the applicable cost of employment on an annual basis):

Dov Sella[1]	Oleg Kiperman	Bill Watson