

MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

For the year ended November 30, 2019

Date of Report – March 13, 2020

The following Management Discussion and Analysis of C-COM Satellite Systems Inc. (“C-COM” or the “Company”) for the year ended November 30, 2019 should be read in conjunction with the financial statements and notes included in this annual report. All figures are presented in Canadian dollars in accordance with IFRS.

Forward Looking Statements

The Company cautions that the forward-looking statements in the following Management Discussion and Analysis are based on certain assumptions made by the Company that may prove inaccurate. Forward-looking statements include those identified by the expressions “anticipate”, “believe”, “plan”, “estimate”, “expect”, “intend”, and similar expressions to the extent that they relate to the Company or its management. Statements made in this Management Discussion and Analysis relating to: the Company’s intention to continue quarterly dividends; management’s beliefs about the sufficiency of cash resources; short and long term sources of funding for operations and innovation and development; the Company’s intention to continue developing and innovating for various markets and technologies; anticipated new products and technology including the types of products and technology, the expected features and performance of such products technology and the timing of their release; the ability of new projects to provide the Company with patentable technology; methods of selling of new products; the Company’s ability to maintain its perceived market advantages and future positioning of the Company in the markets in which it operates. These forward-looking statements are not historical facts, but reflect the Company’s current expectations and assumptions regarding future results or events. Assumptions made include results of research and development efforts, customer demand for the Company’s products or services, the Company’s ability to maintain and enhance customer relationships, as well as the Company’s ability to bring to market its products or services. Furthermore, the Company cautions that the forward-looking statements in the following Management Discussion and Analysis are based on current expectations as at March 13, 2020 that are subject to change and to risks and uncertainties. Actual results may differ due to facts such as customer demand, customer relationships, new service offerings, delivery schedules, revenue mix, competition, pricing pressure, foreign currency fluctuations, and uncertainty in the markets in which the company conducts business. Additional information identifying risks and uncertainties is contained in the Company’s filings with the various provincial securities regulators. Readers should not place undue reliance on the company’s forward-looking statements.

Overview

C-COM Satellite Systems Inc. is a leader in the development and deployment of commercial grade mobile auto-deploying satellite-based technology for the delivery of two-way high-speed internet, VoIP and video services into vehicles. C-COM has developed a unique proprietary mobile auto-deploying (iNetVu) antenna that allows the delivery of high-speed satellite-based internet services into vehicles while stationary virtually anywhere where one can drive. The iNetVu mobile antenna has also been adapted to be deployable from transportable platforms. The Company’s satellite-based products and services deliver high-quality, cost-effective solutions for both fixed and mobile applications throughout the world. More information is available at: www.c-comsat.com

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Selected Annual Information

	Year Ended November 30, 2019	Year Ended November 30, 2018	Year Ended November 30, 2017
Revenue	\$ 13,977,909	\$ 13,527,368	\$ 10,282,319
Net Income	\$ 2,843,092	\$ 2,299,501	\$ 1,035,744
Basic Earnings per Share	\$0.08	\$ 0.06	\$ 0.03
Diluted Earnings per Share	\$0.07	\$ 0.06	\$ 0.03
Total assets	\$23,253,936	\$ 22,058,314	\$ 20,846,832
Total Non-Current Liabilities	\$170,384	\$ 247,427	\$ 310,014

Results of Operations

Income before other income and income tax was \$3,614,282 compared with \$2,920,237 in 2018. The Company completed the year with \$15,180,048 of cash and marketable securities compared to \$16,107,329 at the end of 2018.

Revenues

	Year Ended November 30, 2019	Year Ended November 30, 2018	Change \$	%
Revenue – Hardware and Airtime	\$ 13,977,909	\$ 13,527,368	450,541	3.3%

The increase in hardware revenue in 2019 compared to 2018 is mostly due to an increase in revenues from customers in Japan and Asia. Their combined 2019 revenues were \$7,974,616 (2018 - \$1,972,918). This was driven by a large iNetVu® ManPack order (+100 units) from Japan in the latter part of the year. The increased sales to Japan and Asia were offset by declines in revenues from North America and Africa.

Cost of Sales and Gross Profit

	Year Ended November 30, 2019	Year Ended November 30, 2018	Change \$	%
Gross Profit	\$ 8,140,686	\$ 7,509,437	\$ 631,249	8.4%
As a percentage of revenue	58.2%	55.5%		
Allocation of amortization expense	\$ (26,980)	\$ (21,756)	\$ 5,224	24%
Combined Gross Profit	\$ 8,113,706	\$ 7,487,681	\$ 626,025	8.4%
As a percentage of revenue	58.0%	55.4%		

This 8.4% gain in gross profit was driven mainly by the sale of the new ManPack product. The increase in gross profit percentage is due to the introduction of new products in Q4. Management also continues to implement cost saving processes in manufacturing.

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Expenses:

	Year Ended November 30, 2019	Year Ended November 30, 2018	Change	
			\$	%
General and Administrative	\$ 1,465,629	\$ 1,674,252	208,623	12.5%
As a percentage of revenues	10.5%	12.4%		
Research and Development	\$ 1,510,272	\$ 1,579,426	69,154	4.4%
As a percentage of revenues	10.8%	11.7%		
Sales and Marketing	\$ 1,523,523	\$ 1,313,766	209,757	16.0%
As a percentage of revenues	10.9%	9.7%		

General and Administrative

General and administrative expenses decreased \$208,623 or 12.5% for the year ended November 30, 2019 compared to the same period last year primarily due to: decreases in salaries & wages and stock option costs.

Research and Development

Research and development expense decreased \$69,154 or 4.4% compared to the same period last year. This was primarily due to a decrease in R&D parts and supplies consumption.

Sales and Marketing

Sales and marketing expenses increased \$209,757 or 16% over the same period last year. This was due mostly to increases in sales commissions, trade shows and travel costs.

Investment Income

Investment income for the year of \$263,631 (\$230,231) is comprised of interest earned on the Company's cash balances and guaranteed investment certificates. The 14.5% increase in investment income is primarily due to higher interest rates on the Company's GIC's and savings accounts. The amount invested in marketable securities during the year dropped 16.5% to \$9,857,946 (2018 - \$11,804,495).

Income Tax Expense

The Company reports its results on a fully taxed basis. The provision for income tax for fiscal 2019 was \$1,061,106 or 27.2% of income before income tax compared to \$907,222 or 28.3% of income before income tax in 2018. The effective tax rate for 2019, prior to considering the impact of non-taxable transactions, is expected to be approximately 26.5% (2018 – 26.5%).

Summary of Quarterly Financial Data

Quarter Ended	Q4/19	Q3/19	Q2/19	Q1/19	Q4/18	Q3/18	Q2/18	Q1/18
Revenue	\$ 7,009,616	\$1,453,446	\$2,566,595	\$2,948,252	\$4,987,090	\$4,002,223	\$2,721,913	\$1,816,142
Operating Income	\$ 3,083,517	(\$345,597)	\$310,902	\$565,460	\$1,616,315	\$906,933	\$377,523	\$19,466
Net Income	\$2,497,636	(\$346,290)	\$267,342	\$424,404	\$1,358,665	\$641,930	\$282,044	\$16,862
Dividend Paid	\$473,416	\$472,466	\$470,894	\$465,257	\$464,695	\$464,569	\$463,182	\$459,432
Dividend Rate /Share	\$0.0125	\$0.0125	\$0.0125	\$0.0125	\$0.0125	\$0.0125	\$0.0125	\$0.0125
Basic EPS	\$0.07	(\$0.01)	\$0.01	\$0.01	\$0.03	\$0.02	\$0.01	\$0.00
Diluted EPS	\$0.06	(\$0.01)	\$0.01	\$0.01	\$0.03	\$0.02	\$0.01	\$0.00

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The Company's operations are subject to some quarterly seasonality due to the timing of vacation periods and statutory holidays. Typically, the Company's first and third quarters will be negatively impacted as a result of Christmas season and summer vacation period.

Liquidity and Capital Resources

	Year Ended November 30, 2019	Year Ended November 30, 2018	Change	
			\$	%
Cash	\$ 5,322,102	\$ 4,302,834	\$ 1,019,268	23.7%
Marketable securities	\$ 9,857,946	\$ 11,804,495	\$ 1,946,549	16.5%
Working capital surplus	\$ 22,383,369	\$ 20,580,939	\$ 1,802,430	8.8%
Net cash provided by (used in):				
Operating activities	\$ 154,880	\$ 2,608,771	\$ 2,453,891	94.1%
Investing activities	\$ 1,893,432	\$ (188,202)	\$ 2,081,634	1,106.2%
Financing activities	\$ (1,030,052)	\$ (1,567,578)	\$ 537,526	34.3%
Increase/(decrease) in cash	\$ 1,019,268	\$ 837,256	\$ 182,012	21.7%

Working Capital Surplus

The increase in working capital surplus is due mainly to an increase in inventories at November 30, 2019. Current assets as at November 30, 2019 were \$23,159,262 (2018 - \$21,989,777) and current liabilities for the same periods were \$775,893 (2018 - \$1,408,838).

Contractual Obligations

The Company is committed to agreements for the rental of office space at a monthly rate of \$28,763 until July 2020 and for the rental of VoIP hardware at a monthly rate of \$196 until May 2020.

Contractual Obligations:	Payments Due by Period				
	Total	Less Than 1 Year	1 – 3 Years	4 – 5 Years	After 5 Years
Operating Leases	\$231,089	\$231,089	Nil	Nil	Nil
	\$231,089	\$231,089	Nil	Nil	Nil

Operating Activities

Cash flows from operating activities for the year ended November 30, 2019 were \$154,880 compared to \$2,608,771 in 2018. This year's decrease is mainly a result of an increase in component and finished goods inventories.

Investing Activities

The marketable securities consist of the following investments, which are all held at major Canadian financial and insurance institutions:

	Year Ended November 30, 2019	Year Ended November 30, 2018
Guaranteed investment certificates	\$ 9,857,946	\$ 11,804,495

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Financing Activities

Dividend

As a result of continued earnings and a strong cash position, the Company continued to pay dividends in fiscal 2019. The Company paid quarterly dividends totaling \$1,882,033 or \$0.05 annually per share compared to 2018 when the Company paid \$1,851,878 in dividends or \$0.05 annually per share. The Company intends to continue with its quarterly dividend policy for the foreseeable future.

Capital Resources

At November 30, 2019 the Company had an overdraft protection facility of \$750,000 with a Canadian chartered bank that bears interest at prime plus 0.5%, is secured by a general security agreement providing a first charge over all company assets including accounts receivable, inventory and equipment. As at November 30, 2019 the Company has no borrowings under the credit facility. Management believes that C-COM has sufficient cash resources to continue to finance its working capital requirements.

The Company operates internationally with approximately 95% of its business derived from non-Canadian sources as compared to 90% for the same period last year. All of the Company's international business is denominated in United States dollars and therefore the Company's results from operations are affected by exchange rate fluctuations of the United States dollar relative to the Canadian dollar. The Company did not use foreign currency forward contracts in its management of foreign currency exposure.

In the short term, the Company will continue to fund operations through cash generated from the continued profitability of the sales of its core products and services. In the longer term, additional financing may be required to fund further innovation and development of the next generation of products and services. At this time, the Company does not have plans to pursue additional sources of financing and there can be no assurance that any additional financing that may be required will be available to the Company when needed, on commercially reasonable terms, or at all. In addition, any equity financing may involve substantial dilution to the Company's existing shareholders.

Off-Balance Sheet Arrangements

There were no off-balance sheet arrangements at November 30, 2019.

Related Party Transactions and Balances

The Company regards the members of the Board of Directors, the partners of Labarge Weinstein LLP, and the senior managers and their immediate families of the following entities as related parties: C-COM Satellite Systems Inc., Triton Inc., 718133 Ontario Inc., Rampart International Corp. and Branim Consulting Corp.

The Company had the following transactions and balances with related parties during the year.

		Nov. 30, 2019	Nov. 30, 2018
		\$	\$
<i>Board of Directors:</i>			
Board of Director fees	(i)	96,000	96,000
<i>Transactions with Rampart International Corp.:</i>			
Reimbursement of common area expenses	(ii)	4,425	4,944
<i>Transactions with 718133 Ontario Inc.:</i>			
Rental of office and warehouse space	(iii)	308,485	295,240
<i>Transactions with Branim Consulting Corp.:</i>			
Purchase of consulting services	(iv)	47,040	50,614

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Transactions with other parties:

Legal fees and expenses	(v)	25,259	24,743
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	As At Nov. 30, 2019	As At Nov. 30, 2018
	\$	\$
<i>Balances with related parties</i>		
Amounts receivable from Rampart International Corp.	nil	nil
Amounts due to Labarge Weinstein LLP	1,500	3,390
Amounts due to Branim Consulting Corp.	2,712	nil

Balances with related parties are due upon demand and are included with accounts payable and accrued liabilities.

- The Board of Directors instituted a Board of Directors fee of \$24,000 per annum per board member commencing December 1, 2012, paid quarterly.
- The Company invoices Rampart International Corp. for their share of common area expenses incurred in the building for which the Company pays the entire bill and recovers Rampart International Corp.'s portion based on square footage. The sole shareholder of Rampart International Corp. is related to the Chief Executive Officer of C-Com Satellite Systems Inc.
- The Company has a 1-year lease commitment with 718133 Ontario Ltd. which ends July 2020 for office and warehouse space. The Company and 718133 Ontario Ltd. have common ownership.
- The Company purchases financial consulting services from Branim Consulting Corp. and the Company's Chief Financial Officer is a director of Branim Consulting Corp.
- The Company retains a business law firm in Ottawa, Canada to provide legal services and advice. The Corporate secretary is a partner of this firm.

Critical Accounting Estimates

The preparation of financial statements of the Company requires management to make estimates and assumptions that affect the reported amount of assets and liabilities, disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Among other things, estimates are used in the accounting for allowances for bad debts, stock-based compensation, inventory obsolescence, product warranty, useful lives of assets and impairment of property and equipment. The reported amounts and note disclosures are determined using management's best estimates based on the assumptions that reflect the most probable set of economic conditions and planned course of action. Actual results could differ from the estimates used in these financial statements and such differences could be material.

Adoption of New Accounting Rules and Impact on Financial Results

IFRS 9 Financial instruments

Effective December 1, 2018, the Company adopted IFRS 9, Financial Instruments ("IFRS 9") and as permitted by the transitional provisions of IFRS 9, the Company elected not to restate comparative figures. IFRS 9 introduces new requirements for classification and measurement of financial assets and financial liabilities, impairment for financial assets and hedge accounting.

IFRS 9 replaces the 'incurred loss' model in IAS 39, Financial Instruments, with an 'expected credit loss' ("ECL") model. The new impairment model applies to financial assets measured at amortized cost under IFRS 9, credit losses are recognized earlier than under IAS 39.

The adoption of IFRS 9 did not have a significant impact on the financial position and/or financial performance of the Company.

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IFRS 15 Revenue from Contracts with Customers

In May 2014, the IASB released IFRS 15 – Revenue from Contracts with Customers. The Standard replaces IAS11 Construction Contracts and IAS18 Revenue, providing a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. The core principle of the new standard is recognizing revenue to depict fulfillment of performance obligations to customers in amounts that reflect the consideration to which the Company expects to be entitled in exchange for those goods or services. Revenue is recognized when, or as, the customer obtains control of the goods or services.

Effective December 1, 2018, the Company adopted IFRS 15 using the cumulative effect method, with the effect of adopting this standard recognized on December 1, 2018, the date of initial application. Accordingly, the information presented for 2018 has not been restated. It remains as previously reported under IAS 18, IAS 11 and related interpretations.

In its adoption of IFRS 15, the Company has elected to apply the requirements of the new standard only to contracts that are incomplete at the date of initial application. The Company has also elected to apply the contract modification practical expedient and reflect the aggregate effect of all contract modifications prior to the transition date.

The adoption of IFRS 15 had no material impact on the Company's reporting of revenue, and as such no adjustment is required to the Company's December 1, 2018 retained earnings.

IFRS 16 Leases

In January 2016, the IASB released IFRS 16 Leases which replaces IAS 17 Leases. IFRS 16 sets out a single lessee accounting model that requires a lessee to recognize assets and liabilities for all lease agreements unless the underlying asset has a low value or the lease term is twelve months or less. A lessee is required to recognize a right-of-use asset for the underlying leased asset and a lease liability representing the present value of payment obligations for the lease term. IFRS 16 is effective for the Company's annual periods beginning on December 1, 2019.

The Company has assessed the new standard and reviewed its portfolio of lease contracts in order to identify leases under the scope of IFRS 16. The Company's lease on its premises was renewed for a one-year period. Therefore, the requirements of IFRS16 will not apply.

Risk Factors

The company is subject to a number of risks and uncertainties that could significantly affect the Company's financial condition and future results of operations. Risk management is an integral part of how the Company plans and monitors the business strategies and results and we have embedded risk management activities in the operational responsibilities of management, and made them an integral part of overall governance, organizational and accountability structure. The risks and uncertainties described herein are not the only ones the Company faces. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business. If any of the following risks actually occur, the Company's business may be harmed and its financial condition and results of operations may suffer significantly.

The Company's quarterly revenues and operating results may fluctuate, which may harm its results of operations

Some of the factors affecting the Company's revenue and results, many of which are outside of its control, include:

- competitive conditions in the Company's industry, including new products, product announcements and incentive pricing offered by its competitors;
- the Company's ability to hire, train and retain sufficient technical, sales, and professional services staff;
- the Company's ability to maintain existing relationships with channel partners and customers and to create new relationships with potential channel partners and customers;
- varying size, timing and contractual terms of orders for the Company's products;
- the nature of the Company's customers' purchase and budget cycles and changes in their budgets for, and timing of, equipment and related purchases;
- the length and variability of the sales cycles for the Company's products;
- order cancellations;
- market acceptance of new and enhanced versions of the Company's products;

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- strategic decisions by the Company or its competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- general weakening of the economy resulting in a decrease in the overall demand for the Company's products;
- the geographical mix of the Company's sales, together with fluctuations in foreign currency exchange rates;
- changes in personnel and related costs;
- changes in the Company's pricing policies and the pricing policies of its competitors; and
- timing of product development and new product initiatives.

Because the Company's quarterly revenue could be dependent upon a relatively small number of large customer deployments, even minor variations in the rate and timing of conversion of its sales prospects into revenue could cause the Company to plan or budget inaccurately, and those variations could adversely affect its financial results.

Reliance on resellers

The Company currently relies on resellers for a significant portion of its revenues. An adverse change in the Company's relationship with any resellers could reduce the Company's sales and harm its business and prospects. If the Company is unable to retain and expand its business with key resellers on favourable terms, or develop new relationships with resellers, then the business, financial condition and results of operations of the Company could be adversely affected.

The Company's business may be harmed if it does not continue to penetrate markets and continue to grow

If the Company fails to further penetrate its core markets and existing geographic markets, or to successfully expand its business into new markets or through the right sales channels, the growth in sales of the Company's products, along with its operating results, could be negatively impacted. Some of the Company's competitors are larger and better capitalized and as a result, they may be better able to expand more quickly and through more sales channels. Some of the Company's competitors provide end-to-end solutions. If the various core markets in which the Company's products are offered fail to grow, or grow more slowly than the Company currently anticipates, or if the Company is unable to establish new markets for its products, the Company's business, operating results and financial condition could be materially adversely affected.

The Company's success depends on its ability to develop new products and enhance its existing products

The markets for the Company's products are competitive and are characterized by rapidly changing technology, evolving industry standards and frequent new product introductions. To keep pace with the technological developments, satisfy increasingly sophisticated customer requirements and achieve market acceptance, the Company must enhance and improve existing products and it must continue to introduce new products. Currently, the Company's products embody complex technology and are designed to be compatible with current and evolving industry standards. If the Company is unable to successfully develop new products or enhance and improve its existing products or if it fails to position and/or price its products to meet market demand, the Company's business and operating results will be adversely affected. Accelerated product introductions and short product life cycles require high levels of expenditures for research and development that could adversely affect its operating results. Further, any new products the Company develops could require an investment of significant resources, long development and testing periods and may not be introduced in a timely manner or may not achieve the broad market acceptance necessary to generate significant revenue. The Company may determine that certain new products do not have sufficient potential to warrant the continued allocation of resources and may elect to terminate one or more new product candidates. If a new product is terminated in which the Company has invested significant resources, the Company's prospects may suffer since resources were expended on a project that did not yield a return on the Company's investment and it missed the chance to allocate such resources to potentially more productive uses and this may negatively impact the Company's business, financial condition and operating results. In addition, as the Company develops new products, they may render some of its older products redundant or obsolete. As the Company discontinues the sale of these older products, it must manage the reseller commitments and customer expectations. If the Company is unable to properly manage the possible discontinuation of these older products, it could have a material adverse effect on its business, financial condition and results of operations.

Failure to manage the Company's growth successfully may adversely impact its operating results

The growth of the Company's operations places a strain on managerial, financial and human resources. The Company's ability to manage future growth depends upon a number of factors, including its ability to rapidly:

- build and train sales and marketing staff and resellers to create an expanding presence in the evolving marketplace for the Company's products, and to keep staff and resellers informed regarding the technical features, issues and key selling

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- points of its products;
- attract and retain qualified technical personnel in order to continue to develop reliable and saleable products and services that respond to evolving customer needs;
- expand its distribution channels to ensure that resellers across multiple industry and geographic segments will perceive the Company as a credible market participant and reliable supplier that will enable the profitable growth of their business;
- develop customer support capacity as sales increase, so that the Company can deliver cost-effective scalable support services to support its sales efforts in a manner that does not divert resources from product development efforts; and
- expand the Company's internal management, financial and IT controls significantly, so that it can maintain control over its operations and provide support to other functional areas within the Company's business as the number of personnel and size of its business increases.

Any failure to manage the Company's growth or achieve profitability could have a material adverse effect on its business, financial condition or results of operations.

The Company may lose sales, or sales may be delayed, due to the long sales and implementation cycle for its products

The Company's customers typically invest substantial time, money and other resources researching their needs and available competitive alternatives before deciding to purchase the Company's products. Generally, the larger the potential sale, the more time, money and other resources will be invested. As a result, it may take many months after the Company's first contact with a customer before a sale can actually be completed. The Company may invest significant sales and other resources in a potential customer that may not generate revenue for a substantial period of time, if at all. The time required for implementation of the Company's products varies among its customers and may last several months, depending on its customers' needs, the resources they apply to a project and the products deployed. During these long sales and implementation cycles, events may occur that affect the size or timing of the order or even cause it to be cancelled. For example:

- purchasing decisions may be postponed, or large purchases reduced, during periods of economic uncertainty;
- the Company or its competitors may announce or introduce new products; or
- the customer's own budget and purchasing priorities may change.

If these events were to occur, sales of the Company's products may be cancelled or delayed, which would reduce its revenue.

If the Company is required to change its pricing models to compete successfully, its margins and operating results may be adversely affected

The highly competitive market in which the Company conducts its business may require the Company to reduce its prices. If the Company's competitors offer discounts on certain products in an effort to recapture or gain market share of other products, the Company may be required to lower prices or offer other favourable terms to compete successfully. Any such change would likely reduce its margins and could adversely affect its operating results. Some of the Company's competitors may bundle other products that compete with the Company for promotional purposes or as a long-term pricing strategy or provide guarantees of prices and product implementations. These practices could, over time, limit the prices that the Company can charge for its products. If the Company cannot offset price reductions with a corresponding increase in the number of sales or with lower spending, then the reduced revenue resulting from lower prices would adversely affect its margins and operating costs.

The financial condition of third parties may adversely affect the Company

The Company relies on third party suppliers to provide it with components and services necessary for the completion and delivery of its products. The Company also relies on third party resellers for significant portion of its sales and revenues. In addition, the Company periodically outsources limited aspects of the development and testing of its products to third parties and a significant increase in the price of the services provided by these third parties, or delays in their deliveries, could have a material adverse effect on the Company's business, financial condition and results of operations. In the event that any of the third parties with whom the Company has significant relationships, including its channel partners and third party suppliers, files a petition in or is assigned into bankruptcy or becomes insolvent, or makes an assignment for the benefit of creditors or makes any arrangements or otherwise becomes subject to any proceedings under bankruptcy or insolvency laws with a trustee, or a receiver is appointed in respect of a substantial portion of its property, or such third party liquidates or winds up its daily operations for any reason whatsoever, then the Company's business, financial position and results of operations may be materially and adversely affected.

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The Corporation and its suppliers, partners and customers are exposed to potential interruption and damage, and partial or full loss, resulting from environmental disasters and other catastrophic events. There can be no assurance that in the event of an earthquake, hurricane, tornado, fire, flood, ice storm, tsunami, typhoon, terrorist attack, cyber-attack, act of war or other natural, manmade or technical catastrophe, all or some parts of the operations of the Corporation or its suppliers, partners or customers will not be disrupted. The occurrence of a significant event which disrupts the ability of the Corporation or its suppliers or partners to sell the Corporation's products for an extended period, including events which reduce customer demand for the Corporation's products, could have a material negative impact on the Corporation's business.

Climate change is predicted to lead to increased frequency and intensity of weather events and related impacts such as storms, wildfires, flooding and storm surge. Extreme weather events create a risk of physical damage to the operations of the Corporation or its suppliers, partners and customers which may not be recoverable through insurance, legal, regulatory cost recovery or other processes and could materially affect the Corporation's business, results of operations and cash flows, including its reputation with customers, regulators, governments and financial markets.

An outbreak of infectious disease, a pandemic or a similar public health threat, such as the recent outbreak of the novel coronavirus known as COVID-19, or a fear of any of the foregoing, could adversely impact the Corporation by causing operating, supply chain and project development delays and disruptions, labour shortages, reduced product demand, travel disruption and shutdowns (including as a result of government regulation and prevention measures), and increased costs to the Corporation.

The Company's success depends in part on its ability to protect its rights in its intellectual property

The Company relies on various intellectual property protections, including contractual provisions, patents, copyright, trade secrets, trademarks and know-how to preserve its intellectual property rights. Although it currently has patents and patent applications, some of the Company's core technology is primarily protected by trade secrets and copyright. The Company typically enters into agreements with its employees, consultants, customers, channel partners and vendors in an effort to control ownership of its intellectual property and access to and distribution of its software, documentation and other proprietary information. Although the Company believes that the steps it has taken are reasonable, the steps the Company takes may not prevent misappropriation of its intellectual property, and the agreements it enters into may not be enforceable. It may also be possible for third parties to obtain and use the Company's intellectual property without its authorization. Policing unauthorized use of intellectual property is difficult, time-consuming and costly. Further, some foreign laws do not protect proprietary rights to the same extent as the laws of Canada or the United States. Additionally, the absence of internationally harmonized intellectual property laws makes it more difficult to ensure consistent protection of the Company's proprietary rights. To protect its intellectual property, the Company may become involved in litigation, which could result in substantial expenses, divert the attention of management, cause significant delays, materially disrupt the conduct of its business or adversely affect its revenue, financial condition and results of operations.

Intellectual property claims brought against the Company could be time consuming, costly to defend and disruptive to its business

The Company cannot determine with certainty whether any existing third party patents or the issuance of any third party patent would require the Company to alter its technology, obtain licenses or cease certain activities. The Company may become subject to claims by third parties that its technology infringes their property rights due to the growth of software products in the Company's target markets, the overlap in functionality of these products and the prevalence of software products. The Company may become subject to these claims either directly or through indemnities against these claims that it routinely provides to its customers. Litigation may be necessary to determine the scope, enforceability and validity of such third party proprietary rights or to establish the Company's proprietary rights. Some of the Company's competitors have substantially greater resources than it does, and those competitors may be able to sustain the costs of complex intellectual property litigation to a greater degree and for a longer period of time than the Company. Regardless of their merit, any such disputes could:

- be time consuming;
- be expensive to defend;
- divert management's attention and focus away from the Company's business;
- subject the Company to significant liabilities; and
- require the Company to enter into costly royalty or licensing agreements or to modify or stop using the infringing

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technology.

Further, if the Company is found to have infringed any patents, trademarks or other intellectual property rights, a court could award significant damages and enjoin the Company from distributing its products that infringe the patents, trademarks or other intellectual property in jurisdictions in which such rights are affected. This could result in a material adverse effect on the Company's business, results of operations and financial condition.

The Company may be liable to its customers or third parties and may lose customers if it is unable to collect data or it otherwise loses data

Because of the large amount of data that the Company collects and manages, it is possible that errors in the Company's systems or in third party systems used by the Company to deliver its service could cause the information that it collects to be incomplete or contain inaccuracies that the Company's customers or third parties regard as significant. Furthermore, the Company's ability to collect and report data may be interrupted by a number of factors, including its inability to access the Internet, the failure of its network or software systems or third party network or software systems relied upon by the Company, security breaches or computer viruses. The Company may be liable to its customers or third parties for damages they may incur resulting from such events. In addition, if the Company supplies inaccurate or incomplete information or experiences interruptions in its ability to capture, store and supply information in real time or at all, the Company's reputation could be harmed and it could lose customers.

Cyber Risks

The Company faces cyber risks that include, but are not limited to data breaches, unauthorized access and denial of service attacks as well as associated financial, reputational and business interruption risks. In its business, the Company collects and stores personal information and despite necessary precautions taken by the Company there is a risk of unauthorized access or security breaches resulting from third-party action, employee error, malfeasance or otherwise, which can lead to the loss of information, litigation, indemnity obligations and other significant liabilities. The Company could also be exposed to regulatory penalties for the unauthorized release of confidential information. Furthermore, the Company could face reputational harm relating to a negative perception of the Company's products which could result in the loss of customers. The Company monitors for these such risks and is committed to cyber security with a goal of maintaining and protecting its overall data security. However, despite such efforts by the Company, it may not be able to fully mitigate such cyber security risks given the evolving methods used to compromise data security, which are generally not identified until they are launched against a target.

Market Risk

Market Risk is the risk that changes in market prices, such as foreign exchange rates and interest rates will affect the Company's income.

Foreign Currency Risk Related to Contracts

The Company is exposed to foreign currency fluctuations on its cash balance, accounts receivable, accounts payable and future cash flows related to contracts denominated in a foreign currency. Future cash flows will be realized over the life of the contracts. The Company does not use foreign currency forward contracts to minimize the short-term impact of currency fluctuations on foreign currency receivables and payables.

A 10% strengthening (weakening) of the Canadian dollar against the US dollar at November 30, 2019 would have decreased (increased) net earnings by approximately \$237,000 (2018 – \$280,000).

Credit Risk

Credit Risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's accounts receivable. The Company's exposure to credit risk with its customers is influenced mainly by the individual characteristics of each customer. The Company's customers, which receive credit terms, are made up both public Companies, and large private companies which we have established long term relationships with. A significant portion of the Company's accounts receivable is from its long-time customers. Over the past five years the company has not suffered any significant credit related losses.

The Company limits its exposure to credit risks for cash and marketable securities by dealing only with major Canadian financial institutions. Management does not expect any of the institutions to fail to meet their obligations.

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Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's approach to manage liquidity risk is to ensure, as far as possible, that it will have sufficient liquidity to meet liabilities when due. At November 30, 2019 the Company has a cash balance of \$5,322,102 (2018 – \$4,302,834) and has a secured credit facility, subject to annual review. The credit facility permits the Company to borrow funds up to an aggregate of \$750,000 in either Canadian or US currency. The credit facility is secured by a general security agreement providing a first charge over all Company assets including accounts receivable, inventory, and equipment. As at November 30, 2019 the Company had no borrowings under the credit facility. All of the Company's financial liabilities have contractual maturities of less than 30 days.

The Company's share price will fluctuate

The trading price of the Company's common shares is subject to change and could in the future fluctuate significantly. The fluctuations could be in response to numerous factors beyond the Company's control, including: quarterly variations in results of operations; announcements of technological innovations or new products by the Company, its customers or competitors; changes in securities analysts' recommendations; announcements of acquisitions; changes in earnings estimates made by independent analysts; general fluctuations in the stock market; or revenue and results of operations below the expectations of public market securities analysts or investors. Any of these could result in a sharp decline in the market price of the common shares. In addition, stock markets have occasionally experienced extreme price and volume fluctuations. The market prices for high-technology companies have been particularly affected by these market fluctuations and such effects have often been unrelated to the opening performance of such companies. These broad market fluctuations may cause a decline in the market price of the common shares.

The Company's significant shareholders will have the ability to control certain corporate actions

The Company's significant shareholders may be in a position to exercise significant influence over all matters requiring shareholder approval, including the election of directors, determination of significant corporate actions, amendments to the Company's articles and by-laws and the approval of any business combinations.

Dividends

The Company currently pays a quarterly dividend on its common shares. The Company's dividend policy will be reviewed from time to time by the board of directors of the Company in the context of its earnings, financial condition and other relevant factors. Depending on the results of that review, the Company may decide to cease paying dividends in the future or may lower the dividend rate. If the Company does cease paying a dividend or lowers the dividend, its shareholders will not be able to receive a return on the Company's common shares in the form of dividends at the historical rate or at all.

Summary of Outstanding Share Data

As at November 30, 2019 the Company had 37,966,900 Common shares issued and outstanding (2018 – 37,220,550).

As at March 13, 2020, the Company had 37,966,900 common shares issued and outstanding.

During fiscal 2019 the Company issued 433,000 options to purchase common shares (2018 – 848,000) to employees and directors and recorded an expense and contributed surplus of \$92,570 (2018 - \$194,870).

During fiscal 2019, 746,350 options were exercised and 746,350 shares were issued (2018 – 466,000 options were exercised and 466,000 shares were issued).

Climate Change

The Company does not perceive any risks; Physical, Regulatory, Reputational or Litigation, as a result of global climate changes. On the contrary, following the Katrina disaster and the devastating earthquake and tsunami in Japan, the Company experienced a surge in sales to accommodate the demand for communications in the stricken areas. The Company made the decision to increase inventory levels to enable it to be ready for the increased demand caused by climate changes. In addition to this, the Company is developing new products that will utilize solar energy to power the iNetVu Flyaway and Transportable antenna systems.

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Directors and Officers Compensation

During the year ended November 30, 2019, C-COM's officers and directors received the following compensation:

		Salary & Bonus	Board of Director Fees	Contractor Fees	Stock Options Granted
Leslie Klein	President, C.E.O. and Director	\$ 505,796	\$ 24,000	Nil	Nil
Jim Fowles	Chief Financial Officer	Nil	Nil	\$ 47,040	Nil
Bilal Awada	Chief Technology Officer	\$ 198,281	Nil	Nil	Nil
Shane McLean	Corporate Secretary	Nil	Nil	Nil	Nil
Eli Fathi	Director	Nil	\$ 24,000	Nil	Nil
Ronald Leslie	Director	Nil	\$ 24,000	Nil	Nil
Arunas Slekyas	Director	Nil	\$ 24,000	Nil	Nil
Andrew Klein	VP Sales	\$ 248,038	Nil	Nil	\$36,000

For further information about our management compensation practices and policies please refer to the management information circular for our most recent annual meeting of shareholders which is available at www.sedar.com.

Additional information relating to C-COM may be found at www.sedar.com.

Outlook

The company delivered better sales and higher profitability in fiscal year 2019 than the previous year. In 2019 we have finished the development of our new Manpack series antenna systems and saw the first large order for over 100 units delivered to our reseller in Japan for cellular backhaul use by Softbank. While the oil and gas segment vertical picked up in 2019, and was reflected in the very strong first quarter, this industry vertical slowed down again in 2020 and we expect it to produce less revenues for C-COM in 2020, unless something drastic happens and oil prices move higher.

Some of the competitors are no longer around, while others are looking for buyers to exit the marketplace. C-COM has seen a slow but steady rebound of new orders in 2019 from both existing and new customers. The Company's key line of Comm-on-the-Pause (COTP) products, specifically, Oil & Gas, Military, Mobile Banking, Cellular Backhaul, Disaster Management/Emergency Response verticals saw new demand. Our new Manpack series antennas are generating very strong interest from new markets segments around the world and we expect to sell a significant number of units in 2020 as well. These small, one-case, one man back-pack like antennas are designed to be carried by a single person and assembled in about eight minutes without the use of tools. Available in 60cm, 80cm and 100 cm configurations, these light modular carbon fiber units support Ku, Ka and X-band frequencies.

C-COM's flagship iNetVu[®] mobile antenna line continues to gain worldwide acceptance and are operating reliably from the most Northern areas of Canada and Russia to the deserts of Australia and Saudi Arabia. C-COM continues to develop and innovate for emerging markets, both territorially and vertically. The Company is also pursuing longer-range R&D projects that will target significant consumer and enterprise markets which C-COM is presently not addressing.

During 2019, C-COM saw increases in the sales of the next generation antenna systems to integrator partners in North America, Europe, the Middle East, Australia and Africa. The Company has designed seventeen different antenna systems to support HTS Ka-band services, with several further variations in various stages of design and production. C-COM is seeing strong demand for lightweight, transportable Ka-band Flyaway antennas specifically for satellite news gathering, military and disaster management.

A new vertical market for tracking LEO's, Smallsats and CubeSats is emerging and C-COM has developed advanced tracking algorithms for this market for use with its existing Flyaway antennas. These new satellites operate in low earth orbit and deliver large amounts of data. C-COM has deployed several its antenna systems with these new entrants and has demonstrated successful tracking of these fast-moving satellites, as well as transmitting and receiving data to and from them at very high data rates. We expect this new market to generate incremental revenue for the company in 2020 and beyond.

The Company is also involved in extensive R&D of next generation antenna technologies in conjunction with the University of Waterloo. Several patents from this research project have already been filed and others are being filed. This research and development opportunity should provide C-COM with a revolutionary, patentable Ka-band antenna technology to be used with the growing number of HTS being launched in the next several years. This intelligent scalable and conformal antenna technology is designed to be mass

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producible at a reasonable price and be compatible with 5G and other developing millimeter wave technologies, which require low cost/high performance solutions.

C-COM is going to encounter significant competition on its development path. Ease of use, worldwide distribution, effective customer support, attractive pricing and mass production capabilities coupled with high reliability are mandatory product goals to be the market leader. To date, C-COM maintains a strong technological and historical advantage over its COTP competition, as well as a price advantage over other established players in this marketplace. The Company has carved out a significant worldwide market presence for its niche products.

If C-COM can maintain price, availability, technology leadership - and maintain strong profit margins – as we have for the past 15 consecutive years, the Company is confident that it holds a distinct advantage over others presently in this market segment or considering entering it. This is due to the many years of software development, refined hardware design, advanced product development and an impressive global base of loyal customers, supported by a worldwide reseller network of 500+ dedicated resellers and systems integrators located in over 100 countries.

In addition, C-COM has a compelling reputation for delivering highly reliable, cost effective and well supported products to the mobile VSAT customer base in time frames that are unmatched in the industry. If the Company can develop a strong COTM product based on the Phased Array antenna technology being developed in conjunction with the University of Waterloo, which will complement the existing COTP family, C-COM will be the only mobile antenna company in the world having success in both of these markets.

The foregoing outlook constitutes forward looking information. Please refer to the information under the heading “Forward Looking Information” on this first page of this MD&A.