



PATRIOT ONE TECHNOLOGIES INC.

Management's Discussion and Analysis

Year ended July 31, 2019

The following Management's Discussion and Analysis ("MD&A") is prepared as of October 28, 2019 and is intended to assist in understanding the results of operations and financial condition of Patriot One Technologies Inc. (the "Company"). Throughout the MD&A, reference to the Company is on a consolidated basis. This MD&A should be read in conjunction with the audited consolidated financial statements for the year ended July 31, 2019 which are prepared in accordance with International Financial Reporting Standards ("IFRS"). All amounts in this MD&A are expressed in Canadian Dollars unless otherwise indicated. The business of the Company is subject to a number of risks and uncertainties. Please refer to the Company's annual information form for the year ended July 31, 2019 (the "AIF"), available under the Company's profile at www.sedar.com for more information about these risks and uncertainties.

Forward-Looking Information

This MD&A contains forward-looking information that involves material assumptions and known and unknown risks and uncertainties, certain of which are beyond the Company's control. Such assumptions, risks and uncertainties include, without limitation, those associated with loss of markets, expected sales, future revenue recognition, currency fluctuations, the effect of global and regional economic conditions, industry conditions, changes in laws and regulations and how they are interpreted and enforced, the lack of qualified personnel or management, fluctuations in foreign exchange or interest rates, demand for the Company's products, and availability of funding. The Company's performance could differ materially from that expressed in, or implied by, this forward-looking information and, accordingly, no assurances can be given that any of the events anticipated by the forward-looking information will transpire or occur, or if they do so, what benefits the Company will derive therefrom. The forward-looking information is made as of the date of this MD&A, and the Company does not undertake any obligation to update publicly or to revise any of the included forward-looking information, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws. Actual events or results could differ materially from the Company's expectations and projections.

Corporate Structure & Profile

The Company's common shares are listed for trading on the TSX under the trading symbol "PAT". The Company is a reporting issuer in British Columbia, Alberta, Saskatchewan, Manitoba and Ontario. The principal regulator of the Company is the British Columbia Securities Commission. On April 5, 2019, the Company received final approval to graduate its listing from the TSX Venture Exchange to the Toronto Stock Exchange. The Company's securities commenced trading at the open of the market on April 9, 2019.

As at July 31, 2019, the Company had four wholly-owned subsidiaries, Patriot One Detection Ltd., a corporation incorporated under the laws of British Columbia, Canada, Patriot One (UK) Limited, a private limited company incorporated under the laws of England, Patriot One Detection Technologies Inc., a corporation incorporated on October 15, 2018 under the laws of the state of Colorado, United States of America and EhEye Inc., a corporation incorporated under the laws to the province of New Brunswick and acquired on January 8, 2019.

In addition, the Company has acquired a 49% interest in Sotech Secure, LLC ("Sotech"), a newly incorporated limited liability corporation formed under the laws of the State of Delaware.

Business of the Company

The principal business of the Company is to commercialize an integrated, layered, multi-sensor platform of technologies, with the aim of reducing the threat of mass casualty events. The Company's mission is to be the foremost global proponent and provider of innovative threat detection and counter terrorism solutions and services for general public safety. The Company has not commenced commercial operations as of July 31, 2019.

Principal Products in the PATSCAN Platform

PATSCAN VRS™

Through the acquisition of EhEye Inc., the Company is in the process of commercializing the proprietary automation software technology, rebranded as the PATSCAN™ Video Recognition Software ("VRS"). The Company's VRS threat detection video surveillance solution can now help security personnel to quickly detect weapons, public disturbances and suspicious behaviour. These "incidents of interest" are quickly displayed to onsite security personnel in real-time, allowing personnel to respond to situations quickly and effectively to keep guests, staff and patrons safe from active threats and threatening behaviour. Using computer vision techniques to automate the review and analysis of digital video footage, the VRS software puts deep learning architecture to work – alerting security teams to both anticipated and unanticipated anomalies that a standard system cannot identify. The Company has completed a series of technical integrations that enable the system to generate and execute certain capabilities with complementary hardware and software solutions, such as the automatic locking of doors or turnstiles when a threat is detected, or the automatic dissemination of a threat notification through a software-based threat notification apparatus. The Company is continually evolving and expanding the nature of these partner integrations, with the belief that the automatic extension of the threat notification to actioned physical or non-physical security solutions will enhance the overall utility of the system and provide the users security apparatus capabilities that enhance abilities to mitigate threats in a more timely and effective manner.

The Company has rapidly advanced the commercial readiness of the PATSCAN VRS™ and the first commercial deployments are anticipated to occur in fiscal Q1 2020. Early-adopter commercial deployments have been underway for months and current efforts include final stages of quality control activities and related planning activities along with the finalization of commercial terms of sale. Initial deployments were and are representative of a wide variety of markets, including education, retail and public sector. The Company has placed an initial multimillion-dollar purchase order for the hardware components on which the software-based solution for VRS and other sensors will run. Upon successful completion of on-site testing and performance evaluation, the Company will be offering the product for full commercial sale to all interested parties.

The Company's efforts in evaluating and sourcing hardware for the first-generation product, and optimizing functionality on lower cost, more powerful hardware, is being supported by leading edge industry partners, particularly Cisco, including the evaluation, support, and sourcing of edge and cloud-based offerings.

Further to the initial version offered for commercial sale, the Company has a robust development pipeline of complementary detection capabilities that have been identified based on specific market needs and reiterated by early-adopter customers, including fight and disturbance detection as a separate module. Further to these efforts, the Company is developing and evaluating alternative deployment methods, including cloud-based deployments and on-edge deployments with leading video camera original equipment manufacturers. Subsequent versions of the software product are expected to be rolled out iteratively, with commercially available integrated solutions from third party service and hardware providers.

PATSCAN TMS™

The Company has acquired from Quasar Federal Systems, Inc. a perpetual, worldwide, exclusive, fully paid-up, transferable and irrevocable license (with a right of sublicense) and is in the process of developing a targeted magnetic sensor system, branded as PATSCAN™ Targeted Magnetic Signature identification ("TMS"), utilizing a unique passive sensor array to detect concealed weapons on people and in bags. The Company intends the PATSCAN TMS system to be deployable covertly in schools, stadiums, concert halls, shopping centres and other entryways into private, public or secured buildings to prevent mass casualty attacks and other incidents of violence. Target-selective detection along with covert configuration deployment allows for rapid processing through security checkpoints unlike conventional metal detector portals. As with the other suite of sensor products, the PATSCAN TMS is being developed with continuously evolving algorithms that are remotely upgradable to periodically provide new targets and threat objects of interest.

Subsequent to the licensing agreement signed with Quasar Federal Systems, Inc., in June 2019, the Company has expeditiously developed a beta-system based off of the licensed technology. A first-generation system is currently being tested, with real-world, large-scale data gathering exercises supporting the algorithm development and refinement of the machine learning back end. The Company is encouraged by initial results and continues to work with the developed sensor array to refine and improve the detection capabilities utilizing real-world training & test data sets. Initial early-adopter deployments for customer feedback and deployment refinement is expected to take place in the coming months.

PATSCAN CMR™

The Company has licensed the PATSCAN Cognitive Microwave Radar technology ("CMR"), for which the base patented approach to detecting concealed on-body weapons was developed at McMaster University. The Company's license is to develop, license, manufacture and market the CMR systems worldwide. The Company intends to use such technology to create an automatic warning system for screening of on-body concealed weapons (e.g., handguns, knives, grenades, explosive vests, etc.). The CMR's early warning capability is designed to extend threat perimeter and improve response times. The CMR uses low power impulse radar system for the stand-off detection of on-body concealed weapons. The technology currently has a three (3) metre detection range, such that it can be concealed and deployed in high traffic areas, such as entryways, hallways, stairwells and other public spaces in airports, stadiums, schools and similar spaces. The CMR is designed to integrate with existing security systems (for example, Closed Circuit TV, turnstile and entry controls, biometrics). The Company aims to make the technology compact and portable, as well as operate on microwave frequency range from 500MHz to 4.8GHz and is working to train its CMR systems to recognize various weapons and non-threat targets (i.e., unarmed civilians) before full commercial deployment. The Company believes this technology has extensive potential for use in enhancing military and or law enforcement capabilities, as well as commercial applications.

The Company is engaged in furthering the capability of the radar-based threat detection solutions through other proprietary and complementary approaches that are in varying degrees of technological readiness. The Company believes a series of distinct and integrated approaches will serve to expand the capabilities of the product range by offering differing and complementary capabilities, such as long-range, short-range, mobile, high-throughput, low-throughput, and lower cost alternatives that are aimed at fulfilling customer needs across a wide swathe of use cases. The Company further believes that each of the various technological approaches could supplement the accuracy and detection capabilities of the various other sensor technologies in the portfolio, along with future additional sensor systems that could augment the current sensor set. This is particularly so, with the sensor fusion approach adopted by the Company.

Currently the Company is engaged in acquiring real world data from test subjects in various client environments. The acquisition of data from varying locations, body types, environmental factors such as temperature, humidity, signal and physical clutter and various other factors is being undertaken to further strengthen the machine learning engine's ability to classify mass casualty threat objects, along with reducing false positives.

The Company is engaged with and in continuous discussions with a mix of academic institutions, reseller partners, and interested end-user clients with regards to initial test deployments. Initial beta-deployments, both paid and unpaid, will continue throughout the coming quarters as system hardening and work around generalization for diverse environments continues.

It is possible that modifications to regulatory approvals or other certifications may be required as development continues. Moving beyond a minimum viable product for early adopter pilot installations, the Company may need to make submissions to FCC and Industry Canada (as well as other jurisdictions in due course) for the use, for example of additional power or additional frequencies in certain specific environments to enhance performance, which will require demonstrating, among other things, that there are no harmful health effects or interference with critical systems. Active work by the Company is underway in this respect. While any such further regulatory approvals are not assured, the Company is not aware of any specific existing regulatory obstacles to the development approach being undertaken.

PATSCAN STS™

Through our investment in Sotech, the Company is developing the PATSCAN STS™, powered by Sotech Secure ("STS"), a technology for the stand-off detection of explosives and other threats such as chemical and biological agents as well as illicit narcotics. The innovative technology includes the ability to function covertly in non-invasive deployments and operate as a stand-alone solution or integrated with related threat detection systems.

The Company continues to support and fund the activities of Sotech in developing and advancing the PATSCAN STS™ technology. The development and commercialization efforts are advancing in line with the expected and planned development timeline.

OTHER TECHNOLOGIES

The Company is continuously evaluating complimentary and auxiliary technologies that could enhance and augment the PATSCAN™ product portfolio and provide further capabilities to the end-users in meeting the objective of reducing the threat of active events. Through discussions with interested end-users, existing and prospective reseller entities, government agencies and lawmakers, industry partners, and competitors alike, the Company has identified a series of sensor-based technologies and complementary software applications that could augment the Company's current product portfolio and ultimately, enhance the capabilities of the Company's product platform in being able to reduce the risk of mass casualty events in a wider variety of possible use cases. Evaluation is ongoing.

The Company believes, given its strong financial and cash position, that there is ample opportunity to augment the product portfolio in a strategic manner. Announcements with regards to any such acquisition, licensing or partnerships will be made in accordance with the terms of the relevant agreements.

Operations

The Company is focused on developing the accuracy, efficacy and utility of the PATSCAN platform in real-world environments, ensuring real-world variables, deployment scenarios and other pertinent considerations are being addressed prior to full-scale commercial launch. The Company continues to work closely with a select number of reseller partners and their early-adopter clients on refining the platform's performance in real-world environments. These deployments have enabled the various engineering teams to further refine the hardware componentry, software functionality and machine learning & artificial intelligence-based algorithms to further the technological & commercial readiness of the platform. These initial early-adopter deployments have been invaluable in assessing how the Company and its reseller network can deploy these solutions at scale with minimal customization, on-site assistance by the Company, while ensuring a sufficient and acceptable degree of performance.

Regulatory Approval

During the financial year ended July 31, 2018 the Company received U.S. Federal Communications Commission ("FCC") Declaration of Conformity certification for its CMR version 1. With the achievement of this milestone, the Company holds both FCC and Industry Canada certification for the CMR 1.0. FCC and Industry Canada certification allow the Company to take the CMR 1.0 hardware out into real world environments for trials, testing and optimization. This is a critical component in the development process of CMR 1.0 and allows the Company to make significant system performance enhancements as it moves toward commercialization. However, development work on our radar solution is continual and new and updated variants will require similar certifications for both testing and commercial roll-out. The Company has filed several additional applications with the FCC to ensure that the relevant versions of CMR continue to follow all rules and regulations as stipulated by the FCC, and other regulatory regimes, and meet the needs of the test, pilot-program and commercial deployment scenarios of the Company. The Company is required to adhere to and comply with certain FCC requirements for the TMS, for which the Company is currently in the process of evaluating.

While the Company is focused on core development and testing of the initial CMR and subsequent variants, the Company continues to focus on sales and marketing efforts of the PATSCAN Platform to build out capacity to execute globally. The Company will need to qualify additional security systems re-sellers and integrators, as well as commit significant resources to developing the technical relationship with Cisco, including design of platform architecture for strategic deployment at scale. The Company will also need to increase its presence in international markets through trade shows and other targeted events and in certain cases, direct presence. The Company intends to invest in trade show infrastructure, multi-language video and other promotional material, as well as engage with multiple overseas regulatory authorities.

The Company has a multi-year innovation pipeline. As product enhancements and new product types emerge, further regulatory certifications or modifications will be required. Furthermore, the Company intends to pursue a global market. Each jurisdiction has its own regulations and processes for approval. This can be time consuming and expensive but is a necessary requirement for penetrating the global market. The Company is currently engaged with several organizations and individuals with security and defense industry experience for the purposes of expanding global commercialization partnerships.

The CMR 1.0 and its successor variants may need to comply with additional regulatory requirements prescribed for detection systems and Ultra-Wide Band Emission devices. Like most other electronic devices, detection systems must meet relevant regulatory, environmental and electrical safety requirements. Furthermore, any detection equipment that is deployed for use at airports must comply with guidelines prescribed by the Transportation Security Administration ("TSA"), Federal Aviation Administration ("FAA"), and related international standards, regulations and test certifications. Once hardware configurations are finalized, in addition to regulatory approval for emissions (ie., FCC and Industry Canada), there are market specific requirements surrounding certain components that need to be met (ie., enclosures, connectors, cabling for safe operation in various environmental conditions such as IP ratings (water and dust proofing)). There will be a continuous program of submissions for such requirements and the Company will need to hire specialist in-house resources to complete them. The Company is currently building out such capabilities internally while working with third party consultants to advise on compliance of such requirements.

Revenue Streams

The Company plans to distribute products and services through a channel model, partnering with leading providers of security products and services. Management is in conversations (and a number of active partnerships) with industry leading full-service commercial security systems companies that have a global presence providing integrated security solutions, such as Cisco Systems, to resell and promote the Company's products as part of security installations globally.

The Company has set initial early-adopter pricing for the PATSCAN Platform and begun communicating to the sales channel partners under contract. Initial commitments have been received from customers of the initial reseller partners and following successful initial commercial deployments the Company will be focused on expanding the contracted reseller partners with an initial focus on the North American market .

Market

The safety and security market is a very competitive market. Growing threats from man-made tragedies underpin higher rates of growth in this market worldwide. Recently, security/software-as-a-service, integration of command and control systems with communication systems and advanced imaging technology are gaining higher market shares. PATSCAN products can be positioned in public and private spaces used by a large number of persons, who can enjoy unhindered access. Some of the spaces identified as compromised entrance points are:

- (1) airports, subways and other general public transportation systems;
- (2) public schools and school buses;
- (3) embassies, consulates and trade offices;
- (4) athletic and entertainment-focused stadiums/arenas; and
- (5) places of worship.

Partnerships

The Company has benefited from a prominent public profile and effective vision to solidify partnerships of various natures with certain industry leaders, including Cisco Systems, Raytheon Canada Ltd., Ridge Global LLC, the University of North Dakota ("UND"), the UND police force, and Johnson Controls Inc. (Johnson Controls Inc. relationship announced August 15, 2019). In the Company's view, these partnerships will continue to serve the Company's product development, internal technical capabilities, working capital profile and the successful deployment of the PATSCAN platform. The willingness of industry leaders to form partnerships of various natures with the Company is a further validation of the need for these solutions to address real-world mass casualty threats and in the Company's view offers a prominent source of technical, financial and industry validation that will significantly benefit the Company's advancement to full-scale commercial operations.

Subsequent acquisition of Xtract Technologies Inc. ("Xtract")

Subsequent to July 31, 2019, the Company acquired all issued and outstanding shares of Xtract, a leading firm in the development of novel neural network architecture and data fusion techniques, which in the Company's belief will significantly advance the development timeline of the sensor technologies being developed, while providing the Company with Xtract's existing business interests and profitable existing contracts and backlog. Please refer to the Company's press release of September 9, 2019 for more information about the Xtract acquisition.

Overall Performance

Selected Financial Data - Summary of Annual Results for the years ended

	<u>2019</u>	<u>2018</u>
Expenses		
Research and development	\$ 2,772,645	\$ 4,750,193
Business development, advertising and marketing	5,247,680	2,607,183
Personnel	2,838,672	1,940,015
General and administration	3,152,623	1,436,415
	<u>14,011,620</u>	<u>10,733,806</u>
Interest Income	(862,013)	-
Other non-cash costs	4,282,360	1,251,970
Loss and comprehensive loss	<u>\$ 17,431,967</u>	<u>\$ 11,985,776</u>
Basic and diluted loss per share	<u>\$ 0.13</u>	<u>\$ 0.13</u>

Overall cash costs for the year were \$14,011,620, compared with \$10,733,806, an increase of \$3,277,814 or 31% over the prior year.

The increase is attributable to the growth in the operations, administration, sales & marketing, and associated aspects of the business infrastructure as the Company advances from primarily research and development activities to commercial sales of the PATSCAN platform. Additionally, the Company's acquisition of Eh-Eye, the Sotech joint venture formed and the technology acquisition through the Quasar Federal Systems Inc. licensing agreement have been supported by the incremental operating expenditures reflected in the annual increase in cash operating expenses denoted above.

Research and development

Research and development costs continue to be a significant portion of the overall cash expenditures, as the Company focuses on the commercial readiness of the sensor technologies and the integration of the sensors to a common platform. Included within the research and development expenditures for 2019 is \$1,140,000 in non-dilutive funding from Raytheon Canada Ltd. and the Canadian Industrial & Technological Benefits program.

Gross research and development expenditures for the year were \$3,912,645, and net cost recoveries in research and development expenditures were \$1,140,000, amounting to a net total cost of \$2,772,645 for 2019 compared with \$4,750,193 in 2018, a decrease of \$837,548 or 18% over 2018.

The decrease was attributable to the streamlining of the engineering function with a focus on increasing the proportion of full-time employees to external consultants, contractors and partners, which has had a positive effect on the overall cash costs of the research and development efforts while maintaining capacity. Furthermore, as various facets of the development plan are achieved, of which some activities have been subcontracted to development partners, the reduction in the overall research and development spend as compared to the prior year, reflects the completion of these activities.

Business development, advertising and marketing

Business development, advertising and marketing costs for the year were \$5,247,680 compared with \$2,607,183 in 2018, an increase of \$2,640,497 or 101% compared with 2018.

The increase in 2019 relates to activities to increase the awareness, visibility and understanding of the product portfolio within the geographical and customer sectors that will typify the early years of commercial deployment. In addition to the efforts to generate and nurture demand for the existing products, the Company has furthered efforts to identify additional technologies and solutions. Approximately one third of the increase in the costs for the year relate to expenditures to further advance the technological capabilities of the layered, multi-sensor based PATSCAN product portfolio. These activities involve the Company's early-adopter resellers, end-users, technical and business partners, who continue to offer actionable real-world feedback on system deployment, performance, and other pertinent and valuable information relating to the utilization of these technologies in real-world scenarios.

The Company has developed key partnerships with organizations such as the Westgate Las Vegas Resort & Casino, University of North Dakota, the Cisco Systems Innovation Program, Ridge Global, several key law enforcement agencies, security professionals and government officials with the stated aim of positioning the Company to be the global leader in threat detection technologies. As the Company advances towards commercialization, there has been a concerted effort to engage with a wider base of key partners, resellers, legislators and security industry experts to enhance, support and augment the Company's market position. The Company is in ongoing discussions with policy makers in Washington, D.C., to inform of the advancement in commercialization efforts, with a complimentary aim of discussing the funding strategies, privacy concerns and civil liberties which will need be considered as the technology permeates the locations and spaces identified above.

Further to the above, the Company has invested with partners with the aim of expanding the Company's online presence with regards to the investment community. Certain expenditures in the current fiscal year have served to ensure the Company's profile stays in the forefront of the threat detection industry.

Personnel

Personnel costs, excluding those costs associated with research and development, for the year were \$2,838,672 compared with \$1,940,015 for the prior year, an increase of \$898,657 or 46%. The increase relates to the investment in sales, marketing, operations, & corporate administration necessary to advance into commercial operations. Headcount for these noted functions increased 53% from July 31, 2018 to July 31, 2019.

General and administration

General and administration costs for the year were \$3,152,623 as compared with \$1,436,415 in 2018, an increase \$1,716,208 or 119%.

A significant portion of the increase for the year and compared with the prior year relates to professional fees to support the advancement into commercialization, assessing and evaluating complimentary investment opportunities, along with the increased overhead costs associated with a growing physical footprint across North America, for sales, operations, administrative, along with testing and development locations to support the business.

Included within the general and administration expense for the year is a one-time fee of \$200,000 associated with the graduation of the Company's listing to the Toronto Stock Exchange.

Selected Financial Data - Summary of Quarterly Results (in 000's)

	Year	Quarter Ended				Year	Quarter Ended				Year
	ended Jul 31, 2019	Jul 31, 2019	Apr. 30, 2019	Jan 31, 2019	Oct 31, 2018	ended Jul 31, 2018	Jul 31, 2018	Apr 30, 2018	Jan 31, 2018	Oct 31, 2017	ended Jul 31, 2017
Expenses											
Research and development	\$ 2,773	\$ 639	\$ 385	\$ 834	\$ 915	\$ 4,825	\$ 1,888	\$ 1,320	\$ 910	\$ 707	\$ 1,676
Business development, advertising and marketing	5,248	1,039	1,782	1,139	1,288	2,528	897	689	651	291	786
Personnel	2,838	908	773	668	489	1,624	610	361	399	254	499
Other cash costs	3,153	1,007	796	708	642	1,758	566	514	421	257	866
	14,012	3,593	3,736	3,349	3,334	10,735	3,961	2,884	2,381	1,509	3,827
Interest income	(862)	(301)	(278)	(126)	-	-	-	-	-	-	-
Other non-cash costs	4,282	1,661	689	508	1,424	1,250	525	351	194	179	3,889
Loss and comprehensive loss	\$17,432	\$ 4,953	\$ 4,147	\$ 3,731	\$ 4,758	\$11,985	\$ 4,486	\$ 3,235	\$ 2,575	\$ 1,688	\$ 7,716
Basic and diluted loss per share	\$ 0.13	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.04	\$ 0.13	\$ 0.04	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.17
Working capital	\$51,899	\$51,899	\$62,866	\$70,036	\$31,388	\$32,969	\$32,969	\$36,498	\$14,440	\$15,464	\$ 5,512
Total assets	\$69,340	\$69,220	\$72,304	\$76,761	\$33,410	\$34,292	\$34,292	\$37,489	\$15,140	\$15,948	\$ 6,177
Non-current liabilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

On a quarter over quarter basis, the Company has invested in the business processes, infrastructure and personnel appropriate for the transition from a sole-product, early-stage research & development operation, to an operation approaching commercial deployment, supporting a platform of various sensor technologies. Certain overhead expenditures and more discretionary expenditures in the business development, advertising, marketing and personnel are a reflection of the advancement towards commercial operations. The Company views the modestly increasing trend of quarterly cash costs to be commensurate with the business needs and expects a relatively stable and modest growth in overall cash costs throughout the next fiscal year. As appropriate, and in conjunction with the business needs, certain additional investments and expenses will be incurred to adequately and sufficiently support the Company's primary objectives.

Liquidity and Capital Resources

Liquidity risk is the risk that the Company will encounter difficulty in satisfying financial obligations as they become due. The Company manages its liquidity risk by forecasting cash flows from operations and anticipated investing and financing activities. The Company's objective in managing liquidity risk is to safeguard our ability to continue as a going concern and to sustain future development of the business. Our objective is met by retaining adequate cash reserves to provide for the possibility that cash flows from operations will not be sufficient to meet future cash flow requirements. In order to maintain or adjust our capital structure, we may issue shares. The Board of Directors does not establish quantitative return on capital criteria for management. The Company is not subject to any externally imposed capital requirements.

As at July 31, 2019, the Company had working capital of \$51,899,097, which included cash and cash equivalents of \$50,637,942 available to meet current liabilities of \$1,930,104 and other short-term business requirements. The Company's accounts payable and accrued liabilities have contractual maturities of less than 30 days and are subject to normal trade terms. The Company has no long-term debt.

During the year ended July 31, 2019, the Company had positive cash flow from operations, investing and financing activities of \$33,061,207, and a net loss from operations of \$17,588,415 as the Company has not yet achieved commercial operations and continues with the research and development, business development and marketing of its technology and products. Included in the net loss from operations was non-cash share-based compensation of \$3,080,807, and other non-cash costs of \$1,321,553.

In November 2018, the Company issued 18,400,000 units (the "Units") for gross proceeds of \$46,000,000 pursuant to a bought deal equity financing. Each Unit consisted of one common share and one common share purchase warrant (a "Warrant"). These 18,400,000 Warrants allow the holders to acquire an additional common share at \$3.25 per share until November 21, 2020. In addition, the agents received 1,120,000 agent warrants that allow holders to acquire 1,120,000 common shares at \$2.50 per share until November 21, 2020. Finally, the Company paid cash commissions of \$3,680,000 and \$153,880 for share issue related costs.

At present, the Company has no earnings from operations. The primary source of cash flows for the Company have been equity private placements. The primary uses of cash are operating expenses, including product research and development. The Company intends to finance its future cash requirements through a combination of debt and/or equity issuances. There is no assurance that the Company will be able to obtain such financings or obtain them on favourable terms.

Contractual Commitments

As of July 31, 2019, the Company has contractual commitments as follows:

	Total	Within 1 year	1 to 3 years	4 to 5 years	After 5 years
Trade and other payables	1,930,104	1,930,104	-	-	-
Operating leases	2,105,249	663,315	1,273,685	168,249	-
	\$ 4,035,353	\$ 2,593,419	\$ 1,273,685	\$ 168,249	\$ -

Our objective in managing capital is to safeguard our ability to continue as a going concern and to sustain future development of the business. In the management of capital, we include shareholders' equity, excluding accumulated other comprehensive income. Our objective is met by retaining adequate equity to provide for the possibility that cash flows from operations will not be sufficient to meet future cash flow requirements. In order to maintain or adjust our capital structure, we may issue shares or other securities. The Board of Directors does not establish quantitative return on capital criteria for management. The Company is not subject to any externally imposed capital requirements and our overall strategy with respect to capital management remains unchanged from the fiscal year ended July 31, 2018.

The Company entered into an agreement with Bullrun Capital Inc. ("Bullrun") wherein Bullrun agreed to assign to the Company its option (the "Option Agreement") to obtain from McMaster University ("McMaster") a worldwide exclusive license to use or cause to be used certain radar technology used to detect concealed weapons (the "License Agreement") invented, developed and/or acquired by McMaster. Pursuant to this Option Agreement, the Company granted Bullrun a 2% royalty (the "Bullrun Royalty") to be paid on net sales of all commercial products developed under the License Agreement between McMaster and the Company. This royalty payable to Bullrun are in addition to any royalties to be paid to McMaster by the Company. As of July 31, 2019, no amounts related to the Bullrun Royalty are due or owing.

Pursuant to the License Agreement, the Company paid McMaster an up-front license fee of \$10,000 and issued 1,560,000 common shares with a fair value of \$78,000 to McMaster. In addition, the Company agreed to pay a royalty percentage of 3.5% on net sales of products developed using technology acquired pursuant to the License Agreement.

No additional shares are be due to McMaster. The Company agreed to make minimum annual royalty payments of \$2,500 for each of the first two years, \$5,000 for the third year and \$7,500 for the fourth year and subsequent years.

Use of Proceeds Expended from Bought Deal Financings

Use of Proceeds Category	Net Proceeds Allocated in October 2017, February 2018 and November 2018 Bought Deal Financing, Including Over Allotment	Approximate amount spent by the Company for the Period October 25, 2017 through July 31, 2019	Proceeds unspent as at July 31, 2019
Product Development	\$29,108,000	\$8,464,000	\$20,645,000
Reserved for Potential Acquisitions of Complementary Technology	\$6,900,000	\$6,500,000	\$400,000
Sales and Marketing	\$8,786,000	\$4,569,000	\$4,217,000
Production and Operations	\$8,795,000	\$4,290,000	\$4,505,000
General and Administration	\$9,770,000	\$4,254,000	\$5,516,000
International Business Development	\$6,344,000	\$2,487,000	\$3,857,000
Working Capital	\$7,322,000	N/A	N/A
Total	\$77,025,000	\$30,564,000	\$39,139,000

In addition to the above noted expenditures, certain expenditures have been capitalized in accordance with the Company's stated accounting policies. This would include items such as the purchase of property, plant, equipment, the advancement of funds to Sotech, and other such changes in working capital, such as capitalized prepaid expenses and the procurement of inventory.

The Company's intention to spend the net proceeds of the Offering as set forth above were based on the expectations of Patriot's management at the time of the financing raises. However, there may be circumstances where, for sound business reasons, a reallocation of funds may be necessary. At the current time, there are no significant changes to the business objectives and milestones and the Company does believe the current objectives and milestones are achievable with the current spending trajectory.

Financial Instruments and other instruments

The Company's only material financial instrument is cash.

The Company's risk exposures and the impact on our financial instruments are summarized below:

Liquidity risk

Our objective in managing liquidity risk is to ensure sufficient liquidity to meet financial obligations when due by maintaining sufficient cash and cash equivalents to settle current liabilities and meet anticipated working capital requirements. As of July 31, 2019, the Company had cash and cash equivalents of \$50,637,942 to settle current liabilities of \$1,930,104. Further discussion regarding our ability to manage our liabilities is discussed in the Liquidity and Capital Resources section above.

Credit risk

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. We manage credit risk by requiring payment from customers prior to shipment, where possible.

Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

(a) Interest rate risk

The Company has cash balances and no debt and therefore is not significantly exposed to fluctuating interest rates. Our current policy is to invest excess cash in a savings account or guaranteed investment certificates at our banking institution.

(b) Foreign currency risk

The Company enters into certain transactions denominated in US dollars for which the related accounts payable balances are subject to exchange rate fluctuations. As of this time, we do not hedge our exposure to foreign currency risk using financial instruments.

(c) Price risk

The Company is exposed to price risk with respect to equity prices. Equity price risk is defined as the potential adverse impact on the Company's earnings due to movements in individual equity prices or general movements in the level of the stock market. The Company closely monitors individual equity movements, and the stock market to determine the appropriate course of action to be taken by the Company.

Critical Accounting Estimates and Recent Accounting Pronouncements

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the period. Actual results may differ from these estimates.

The International Accounting Standards Board (IASB) has published new standards and amendments or interpretations to existing standards which are mandatory for periods beginning on or after January 1, 2018, as outlined below.

Accounting standards adopted:

a) Change in accounting policy

There were no new standards effective August 1, 2018 that have had a material impact on the Company's consolidated financial statements.

IFRS 9, Financial Instruments – Classification and Measurement. During the year ended July 31, 2019, the Company adopted IFRS 9 which is a new standard on financial instruments that replaced IAS 39, Financial Instruments: Recognition and Measurement. IFRS 9 addresses classification and measurement of financial assets and financial liabilities as well as de-recognition of financial instruments. IFRS 9 has two measurement categories for financial assets: amortized cost and fair value. All equity instruments are measured at fair value. A debt instrument is at amortized cost only if the entity is holding it to collect contractual cash flows and the cash flows represent principal and interest. Otherwise it is at fair value through profit or loss. The Company adopted IFRS 9 on August 1, 2018 retrospectively and has determined that no differences of any significance have been noted in relation to the adoption of the standard.

b) New standards and interpretations not yet adopted

At the date of approval of this MD&A, certain new standards, amendments and interpretations to existing standards have been published but are not yet effective and have not been adopted early by the Company. These standards will be adopted at the effective date. Management anticipates that all of the pronouncements will be adopted in the Company's accounting policy for the first year beginning after the effective date of the pronouncement. Information on new standards, amendments and interpretations that are expected to be relevant to the Company's consolidated financial statements is provided below. Certain other new standards and interpretations have been issued but are not expected to have an impact on the Company's consolidated financial statements.

The Company has reviewed new and revised accounting pronouncements that have been issued but are not yet effective. IFRS 16 specifies how an IFRS reporter will recognize, measure, present and disclose leases. The standard provides a single lease accounting model, requiring lessees to recognize assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. Lessors continue to classify leases as operating or finance, with the IFRS 16 approach to lessor accounting substantially unchanged from its predecessor policy IAS 17. The Company expects to record a right-of-use asset and corresponding lease liability, measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying assets or the site on which it is located, less any lease incentives received, of approximately \$1,750,000 on August 1, 2019, the first year of adoption of IFRS 16.

Related Party Balances and Transactions

Key management personnel include persons having the authority and responsibility for planning, directing and controlling the activities of the Company and consist of executive and non-executive members of the Board of Directors and corporate officers. Key management compensation is comprised of expenses incurred with officers and directors of the Company or to companies controlled by officers and directors of the Company.

During the year ended July 31, 2019 management fees of \$264,000 (2018 - \$215,000) were incurred with a private company controlled by Martin Cronin, the president and chief executive officer and director of the Company, of which \$20,000 was included in accounts payable and accrued liabilities as at July 31, 2019 (2018 - \$Nil).

During the year ended July 31, 2019 management fees of \$201,900 (2018 - \$161,663) and share-based compensation of \$Nil (2018 - \$54,180) were incurred with the Mike Barnsley, the chief financial officer and corporate secretary.

During the year ended July 31, 2019 management fees of \$180,000 (2018 - \$395,000) were incurred with a private company controlled by a Jeffery Tindale, a director of the Company.

During the year ended July 31, 2019 director fees of \$52,083 (2018 - \$2,667) and consulting fees of \$82,750 (2018 - \$Nil) were incurred with Peter van der Gracht, an independent director, of which \$8,750 was included in accounts payable and accrued liabilities as at July 31, 2019 (2018 - \$Nil).

During the year ended July 31, 2019 director fees of \$80,109 (2018 - \$26,667) were incurred with Scott, Shepherd, an independent director and the Chairman of the Board of Directors.

During the year ended July 31, 2019 director fees of \$59,583 (2018 - \$15,000) were incurred with John Gillies, an independent director.

During the year ended July 31, 2019 director fees of \$12,706 (2018 - \$Nil) were incurred with Victoria Calvert, an independent director, of which \$3,222 was included in accounts payable and accrued liabilities as at July 31, 2019 (2018 - \$Nil).

During the year ended July 31, 2019 management fees of \$Nil (2018 - \$149,994) were incurred with a private company controlled by Dinesh Kandanchatha, a former director and former president and of the Company. In addition, during the year ended July 31, 2019, the Company incurred research and development related expenses of \$Nil (2018 - \$623,847) with a company for which Dinesh Kandanchatha became an officer in May 2018, of which \$Nil is included in accounts payable as at July 31, 2019 (2018 - \$11,707).

Off-Balance Sheet Arrangements

The Company does not utilize off-balance sheet arrangements.

Other

As of the date of this MD&A, the Company has 149,468,819 common shares issued and outstanding. The Company also has stock options outstanding to purchase an additional 7,798,445 common shares at exercise prices ranging from \$0.185 to \$2.48 per share. In addition, there are a total of 35,928,614 warrants outstanding which may be converted to one common share each at various prices as outlined below:

Number of Warrants	Exercise Price
672,175	1.20
885,500	2.00
3,278,200	1.25
283,689	1.00
4,796,150	1.70
1,288,000	2.50
18,400,000	3.25
6,324,900	2.40
35,928,614	

Additional information and other publicly filed documents relating to the Company, including the Company's AIF, are available through the internet on the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval ("SEDAR"), which can be accessed at www.sedar.com.