

INNOVATIVE & REVOLUTIONARY THREAT DETECTION

MANAGEMENT'S DISCUSSION AND ANALYSIS SIX MONTHS ENDED JUNE 30, 2021

(Expressed in U.S. dollars, unless otherwise stated and per share amounts)

Dated: August 30, 2021

Liberty Defense Holdings, Inc., ("Liberty" or the "Company") has prepared this Management's Discussion and Analysis ("MD&A") as of August 30, 2021 and should be read in conjunction with the Company's interim condensed consolidated financial statements for the three and six months ended June 30, 2021. Unless otherwise stated, all financial information has been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. All dollar amounts herein are expressed in U.S. dollars unless stated otherwise. References to \$ means U.S. dollars, and CAD\$ are to Canadian dollars.

This MD&A may contain forward looking statements based on assumptions and judgments of management regarding events or results that may prove to be inaccurate as a result of development or other risk factors beyond its control. Actual results may differ materially from the expected results.

Additional information on the Company is available at the Company's website <u>www.libertydefense.com</u> and under the Company's profile at <u>www.sedar.com</u>.

Table of Contents

1 40		Page
1	Overview	2
2	Results of Operations	6
3	Summary of Quarterly Results	8
4	Liquidity and Capital Transactions Resources	9
5	Off-balance Sheet Arrangements	11
6	Transaction Between Related Parties	11
7	Subsequent Events	12
8	Critical Accounting Estimates	12
9	Financial Instruments	12
10	Other Requirements	12
11	Disclosure Controls and Procedures and Internal Controls over Financial Reporting	13



1. Overview

(a) Description of Business

Liberty Defense Holdings, Ltd., is a public company (TSXV: SCAN, Frankfurt: L2D, OTCQB: LDDFF), that was incorporated under the Business Corporation Act of Ontario on June 8, 2012. The Company's registered and records office address is 1055 West Georgia Street, 1500 Royal Centre, P.O. Box 11117. Vancouver, British Columbia, V6E 4N7, Canada.

The Company undertook a reverse takeover ("RTO") transaction with DrawDown Detection, Inc., ("DrawDown" or "DDD") on March 17, 2021. The Company, through its wholly owned subsidiary Liberty Defense Technologies Inc. ("LDT"), is principally engaged in the commercialization of an active 3D imaging technology system, HEXWAVE, to detect concealed threats. LDT has an exclusive global license for the active imaging technology, has trademarked HEXWAVE and is working towards bring this product to market.

(b) Board Changes

Effective March 17, 2021, in connection with the RTO Jeremy Morton agreed to resign as a director and Aman Bhardwaj agreed to resign as President of US Operations, Interim Chief Executive Officer and Acting Chief Financial Officer and a director of the Company.

Effective March 17, 2021, the Company appointed William Frain, as Chief Executive Officer and director; Omar Garcia Abrego, as Chief Financial Officer and Corporate Secretary; Michael Lanzaro, as Chief Technology Officer; and Daryl Rebeck and Arjun Grewal as directors of the Company.

Effective August 5, 2021, the Company also added Linda L. Jacksta to its board of directors.

(c) License Agreements

i) HEXWAVE Technology

a. Active real-time 3D imaging technology licensed from MIT LL

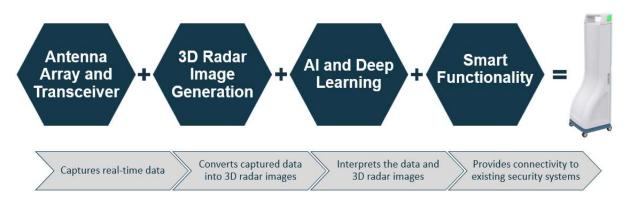
Active video rate imaging technology was developed by the Massachusetts Institute of Technology Lincoln Labs ("MIT LL") and the technology has been in development since 2014. In October 2017, a concept demonstrator (pre-prototype) of the core technology was successfully tested under environmental conditions by MIT LL.

MIT LL undertook 4 years of research and development, including building a working prototype and testing the technology in both lab and real electromagnetic environments. LDT worked with MIT LL to transfer the active imaging technology starting in Q4 2018. In September 2019, Liberty and MIT LL were recognized by the FLC (Federal Laboratory Consortium) for the 2019 Excellence in Technology Transfer North East Region.

With the exclusive global license agreement (the "License Agreement") for the use of the active imaging technology, the Company has continued to develop HEXWAVE using the technology and concepts demonstrated by MIT LL. MIT LL, through the Technology Transfer Agreement ("TTA") has transferred the intellectual property and understanding to Liberty's Center of Excellence ("COE") in order for the technology to be further refined and developed. As part of the commercialization and go to market strategy, the Company has identified certain required changes and entered into the Cooperative Research and Development Agreement (CRADA) with MIT LL to leverage off their existing experience and accelerate the development of certain aspects of HEXWAVE. In addition to active imaging technology, the Company is also developing Automatic Threat Detection technology with the help of rich 3-dimension data and deep learning algorithms.



HEXWAVE Overview:



Since acquiring the License Agreement from MIT LL, Liberty has significantly advanced HEXWAVE which includes active imaging technology, automated threat detection ("ATD") and smart IoT technologies. This culminated in the demonstration of the four principal subsystems in September 2019. This step represented a significant de-risking of the product development phase.

b. AI and Deep Learning – Automatic Threat Recognition (ATR)

Automatic Threat Recognition utilizing deep learning algorithms was developed by Liberty Defense to recognize person-borne concealed metal and non-metal threats. The 3-D data and images produced by the HEXWAVE are used to train and enhance the Artificial Intelligence engine using deep-learning algorithms.

At a frame capture rate of 10 images/sec, the algorithms can exploit the changes in person's positioning from frame-to-frame, thus maximizing the total coverage area and threat detection performance.

ATR improves detection accuracy, reduces resources required for screening, and allows the security personnel to take necessary action instantly. As additional field data and images are collected by the system over time, our plan will be to continuously improve threat detection performance HEXWAVE can receive over-the-air updates to its algorithms as new and emerging threats are identified.

Global License Agreement - September 2018

The License Agreement for the use of the technology behind HEXWAVE with MIT is for a 20-year period. Under the License Agreement, several milestones are required to be met to keep it in good standing. MIT continues to work closely with Liberty on developing this technology and recently amended the timeline to develop a beta prototype from on or before December 31, 2019, to November 1, 2020. The amendment also included additional details in relation to changes on required commercial sales dates, required total net sales by year, and payment dates on its license agreement. Refer to <u>SEDAR (www.sedar.com</u>) for further details on the MIT amendment.

HEXWAVE Key Discriminators

Central to positioning HEXWAVE is building on its key discriminators. These are enabled by the system architecture that aligns to key market needs. These include:

- Detects metal & non-metal threat objects
- Detects both indoor and outdoor locations including both overt and covert application
- Protects privacy (no personal data is collected or analyzed)
- ATD in real-time using rich 3D data and deep learning algorithms
- Smart functionality provides connectivity to existing security systems (VMS, door locks, networks)
- Routine software & AI updates
- Operationally agile (mobile and deployable across detection space)
- High throughput (over 1,000 screens per hour) with precise secondary screening



About the Explosives and Weapon Detection Market

The aggregate markets associated with the explosives and weapon detection market are expected to total over \$11 billion by 2025. The verticals most relevant to the growing Urban Security Market ("USM") are public venues, secured perimeters & buildings, land transportation, government, and others (schools, hotels, casinos, places of worship, malls, workplace & community screening).

The complexity of the urban security threat environment has dramatically changed over the last decade, requiring a more proactive approach to preventing violent attacks against communities. Since the 9/11 events, the air transportation community has effectively deployed a combination of detection technologies that are being consistently upgraded in an attempt to "stay ahead" of evolving threats. The array of detection tools has largely been protecting access to aircraft systems as gated or "point" solutions. The public is forced to tolerate the delays associated with such inspections due to the extreme risks that explosives or weapons can have on an aircraft and its passengers.

In contrast, urban communities are largely unprotected against random acts of violence or use systems that significantly impede the flow of customers into and within business facilities. While the occasional violent act was more often considered an anomaly, the frequency and magnitude of violent attacks is forcing both businesses and governments to rethink how to move to more proactive measures. Since 2015, there have been over 300 mass shootings per year in the USA at a pace of nearly one per day. There is a market-driven need for security detection that can be broadly deployed across nearly all public and private facilities. The base requirements are that they be both highly accurate and nonintrusive to our daily lives.

Current Alternatives

The current alternatives in the USM are typically restricted to:

- principally focusing on metal threats, therefore non-metal threats can potentially go undetected
- airport solutions which are not able to be used across other verticals and do not have the requisite throughput
- limited outdoor application and therefore hinder the capability of providing a layered defense for proactive threat detection
- requiring large dedicated areas or space versus integration into existing infrastructure
- limited capability for integration into existing security systems command & control

About Liberty's Management Team

Central to Liberty's team is the technical and management expertise of President and CTO, Mike Lanzaro former Vice President of Engineering and Technology at L-3 Security & Detection Systems (NYSE – LHX), the world's leading supplier of security inspection systems. Also COO, Aman Bhardwaj who is the technology and product development lead for the business, with 30 years experience in bringing software and hardware technologies to market and building global teams in U.S., Canada, China, and India for large multi-national and start-up companies.

Liberty's Advisors

Liberty has assembled a group of Advisors that can provide unprecedented market access to a number of our identified market verticals including stadiums National Hockey League and Federation Internationale de Football Association and shopping malls. A key aspect to Liberty's success will be gaining access and developing the market for HEXWAVE.

ii) License Agreement with Battelle Memorial Institute

On April 13, 2021, Liberty through its wholly owned subsidiary DrawDown Detection, Inc., licensed the millimeter wave-based, High-Definition Advanced Imaging Technology (HD-AIT) body scanner and shoe scanner technologies from Battelle Memorial Institute ("Battelle"), which operates the Pacific Northwest National Laboratory. HD-AIT will enhance security screening at airports by providing a next-generation technology platform for threat detection. The license agreement provides the Company with three years exclusively licensed



for certain patents which on expiration will turn into life of patent under nonexclusively basis. The Company also received the license for certain patents for life under nonexclusively basis at the inception of the license agreement. As consideration for the license agreement the Company will pay \$30,000 on signing of the agreement (paid) and \$30,000 in six months.

Under the above license agreement, the Company shall pay a five percent royalty on net sales and twenty-five percent in all sublicensing revenues if permitted. The Company is required to pay a minimum royalty amount every year which run between \$50,000 in the first year to \$200,000 in year 2024 and thereafter. The Company is also obligated to achieve certain minimum diligent requirements in the next twelve to thirty-six months and reimburse Battelle for patenting expenses including past patenting expenses in the amount of \$50,000 on or before January 22, 2022.

All payments made under the license agreement with Battelle are non-refundable.

iii) DKL License Agreement

On October 11, 2018, the Company through its wholly owned subsidiary DrawDown Technologies, Inc ("DDT") entered into a license agreement with DKL International, Inc., ("DKL"), as amended on February 6, 2020, for the commercial development of DKL's passive detection techniques and products that detect smokeless gunpowder from a standoff distance.

On June 6, 2021, the Company and DKL executed a settlement and release agreement in which both parties agreed to terminate the Licensing Agreement and will no longer have further rights and/or obligations pursuant thereto. In order to settle any and all outstanding obligations under the Licensing Agreement the Company paid to DKL an amount of \$125,000.

(d) Recent Developments

From inception, Liberty set itself an aggressive product development timeline by pursuing a concurrent engineering and development approach and prior to its financial constraints had managed to deliver upon this timeline.

Liberty has also established a number of collaboration agreements with multiple well-respected recognizable organizations across its various market verticals to participate in Beta testing HEXWAVE. These include the Port of Tampa, FL, University of Wisconsin Police Department, Greater Toronto Airport Authority, Metro Toronto Convention Center, Maryland Stadium Authority, a Hindu temple in Southeast United States, Virginia Division of Capitol Police, FC Bayern München, and Utah Attorney General, among others.

In addition to advancing HEXWAVE and the market for it, Liberty achieved a number of significant corporate milestones which include:

- Signed a license agreement with Battelle Memorial Institute (April 2021)
- <u>Secured a \$1 million grant from The Israel-US Binational Industrial Research and Development (BIRD)</u> Foundation (Mar 2021)
- <u>Complete the business combination with DrawDown (March 2021)</u>
- <u>Closing of oversubscribed public offering for total gross proceeds of CAD\$6.9 million (March 2021)</u>
- Update on Merger with DrawDown (June 2020)
- Execution of Definitive Agreement with DrawDown (April 2020)
- <u>Proposed merger transaction with DrawDown (January 2020)</u>

(e) Outlook and Going Concern

Expenditure in research and development activities undertaken with the prospect of gaining new scientific or technological knowledge and understanding is recognized in the statement of loss as an expense when incurred. No research and development costs have been deferred to date.

The Company's expenditures in development activities where research results are used in planning and designing the production of new or substantially improved products and processes is recognized under intangible assets if the product



or process is technically and commercially feasible, if there is an intention and ability to complete the project and then use or sell it and expect economic benefits from the project, if the company has sufficient resources to complete development and if it is able to measure reliably the cost during development. The recognized research and development expenditures incurred are recognized in the statement of loss as an expense when incurred.

The Company incurred in a total loss during the six months ended June 30, 2021, of \$3,553,327. Furthermore, the Company has limited financial resources, no source of operating cash flows, and there is no assurance that enough funding (including adequate financing) will be available to conduct further research and development. These factors indicate the existence of a material uncertainty that casts significant doubt upon the Company's ability to continue as a going concern. As a result, the Company may be unable to realize its assets and discharge its liabilities in the normal course of business.

In March 2020, the World Health Organization declared coronavirus COVID-19 a global pandemic. This contagious disease outbreak, which has continued to spread, and any related adverse public health developments, has adversely affected workforces, economies, and financial markets globally, potentially leading to an economic downturn. It is not possible for the Company to predict the duration or magnitude of the adverse results of the outbreak and its effects on the Company's business or ability to raise funds.

The application of the going concern concept is dependent upon the Company's ability to generate future profitable operations and receive continued financial support from its creditors and shareholders. These interim condensed consolidated financial statements do not give effect to any adjustments that might be required should the Company be unable to continue as a going concern.

Management plans to continue to pursue equity and/or debt financing to support operations. There can be no assurance that these financing efforts will be successful. Failure to maintain the support of creditors and obtain additional external financing will cause the Company to curtail operations and the Company's ability to continue as a going concern will be impaired. The outcome of these matters cannot be predicted at this time.

2. Results of Operations

Certain comparatives in prior periods may have revised to conform to the current presentation.

During the three and six months ended June 30, 2021, the Company reported a total loss and comprehensive loss of \$2,518,392 and \$3,512,833 respectively (three and six months ended June 30, 2020 - \$339,998 and \$432,803 respectively), and basic and diluted loss per share of \$0.05 and \$0.10 (three and six months ended June 30, 2020 - \$0.01 and \$0.01 respectively). Despite the accumulated losses, Management of the Company is committed to continue with the research and development of its different licensed technologies.

The net loss for the three and six months ended June 30, 2021, and 2020 is comprised of the following items:



	Three months ended June 30,		Six months er	ded June 30,
	2021	2020	2021	2020
Research and development:				
	\$ - \$	- \$	- \$	(268,126)
Product development	450,526	_	630,805	-
Technology costs	33,940	50,779	33,940	66,124
Legal fees	54,889	_	72,439	_
Salaries & Consulting Fees (note 8)	875,013	_	546,015	_
Stock-based Compensation (note 14)	62,905	_	63,695	_
Office, rent and administration	9,373	_	11,244	_
Travel and miscellaneous	_	_	_	_
Depreciation	33,430	_	44,573	_
Amortization (note 6 (a))	2,062	_	4,124	_
Non-refundable Licensing Fee (note 5)	_	_	_	_
General Expenses:				
Consulting fees, salaries and benefits (note 8 and 16)	341,495	157,215	411,182	331,043
Depreciation	144	_	4,102	_
Legal and professional fees	34,703	65,778	117,704	150,470
Stock based compensation (note 14)	70,604	9,342	75,182	63,467
Office, rent and administration	35,691	1,221	49,613	4,475
Regulatory and shareholder information	22,662	8,481	35,081	8,481
Travel, promotion and investor relations	437,544	10,965	480,664	36,059
RTO transaction costs (note 3)	83,506	_	891,121	-
	2,548,487	303,781	3,471,484	391,993
Other expense (income):				
Interest income	(835)	(49,706)	(55,210)	(52,742)
interest expense	3,067	28,023	42,034	28,023
Accretion expense	1,318	28,137	40,610	28,137
Foreign exchange loss	31,773	116,308	54,409	(70,253)
	35,323	122,762	81,843	(66,835)
Total loss for the period	\$ (2,583,810) \$	(426,543) \$	(3,553,327) \$	(325,158)

Significant variances affecting the total loss for the period are discussed as follows:

On March 17, 2021, the Company undertook a reverse takeover transaction with DrawDown Detection, Inc., as a result all comparative figures only include the transaction of DrawDown and current balances are affected from March 17, 2021, onwards to include not only the transaction of DrawDown but also the transactions of Liberty.

- i) Research and development ("R&D") expenses for the three months ended June 30, 2021, was \$1,522,138 in connection to expenses related to R&D of the Company's licensed technologies with the purpose to mainly continue advancing its HEXWAVE technology. During the same period, the Company incurred in \$450,526 for product development and \$875,013 in salaries and consulting fees that relate to software development and beta testing. During the comparative period, three months ended June 30, 2020, the Company only spent \$50,779 in connection its previous handheld gunpowder detection device technology which was discontinued early this year. It also includes stock-based compensation in the amount of \$62,905 in connection the stock option granted to directors, officers, employees and consultants of the Company on April 7, 2021.
- ii) During the three months ended June 30, 2021, total general expenses in the amount of \$1,026,349 were incurred mainly in connection to consulting fees, travel promotion and investor relations and RTO transactions costs.

Consulting fees, salaries and benefits increased from \$157,215 to \$341,495 as the comparative period only includes transactions incurred by DrawDown. The cash spent during the current period under consulting fees and salaries represent the incremental activity within the Company with the purpose to quickly advance the different technologies under license agreements. Also, there is a significant increase in travel promotion and



investor relations which relates to different promotional initiatives underway to promote the Company and its technologies to create public awareness. The Company also recorded about \$83,506 in RTO transaction costs that came in late in relation to legal and professional fees incurred in the RTO transaction with DrawDown. Stock based compensation incurred during the current period in the amount of \$70,604 relates to stock option granted on April 7, 2021.

iii) During the three months ended June 30, 2021, the Company recorded net other expenses in the amount of \$35,323 compared to net other expenses of \$122,762 incurred during the same period of the previous year. The main differences relate to a decrease in interest income as this was recorded in connection to the convertible debentures under DrawDown which were settled in conjunction with closing of the RTO transaction. One more significant difference is the decrease of foreign exchange loss. The Company's functional currency is the Canadian dollar and holding financial assets and liabilities in other currencies produce a foreign exchange gain or loss during the period, depending on the used currencies exchange rates affecting transactions in the Company.

Three months ended	Working capital (deficiency)	Total assets	Total loss and comprehensive income loss	Loss per share
	\$	\$	\$	\$
30-Jun-21	5,193,209	14,857,621	(2,518,392)	(0.05)
31-Mar-21	2,297,814	11,897,154	(994,441)	(0.05)
31-Dec-20	(527,519)	2,071,133	(397,233)	(0.01)
30-Sep-20	(135,847)	1,916,518	(207,176)	(0.01)
30-Jun-20	63,965	1,806,596	(339,998)	(0.01)
31-Mar-20	383,253	1,297,068	(92,805)	0.01
31-Dec-19	589,543	1,072,032	(980,206)	(0.03)
30-Sep-19	1,325,651	1,553,832	(414,648)	(0.01)

3. Summary of Quarterly Results

Effective March 17, 2021, the Company undertook a reverse takeover ("RTO") transaction with DrawDown. As part of the RTO transaction on March 12, 2021, the Company closed a financing with a total of 17,250,000 subscription receipts for one Unit (the "Unit") at a price of \$0.30 (CAD\$0.40) per Unit. Each Unit was comprised of one common share and one-half of one purchase warrant. Each whole purchase warrant entitles the holder thereof to purchase one share at \$0.45 (CAD\$0.60) per share for a period of two years. Gross proceeds of the financing were CAD\$6,900,000, which includes the exercise of the agent's over-allotment option in full representing 2,250,000 subscription receipts. Additionally, as part of accounting for the RTO, the company recorded an intangible asset in the amount of \$8,761,517 and had RTO transaction costs of \$891,120 recorded in the six months ended June 30, 2021.

During the second quarter of 2021, the Company closed a brokered private placement for gross proceeds of CAD\$7,130,000, therefore with funding in place the Company started ramping up the necessary activities to finalize the beta testing of its HEXWAVE technology and prepare the company for manufacturing and commercialization. Additionally, the Company added more personnel to the different areas of the Company to start developing policies and procedures that will help the Company in its next phase of growth.

During the quarters in 2019 the Company continued the research and development of its technology for a handheld gunpowder detection device, more recently during the quarters affecting the year 2020, the Company started to mainly focus on a business combination opportunity with Liberty, as a result a good portion of the work done and resources of the Company were directed to the due diligence. Additionally, in February of 2020, the Company requested DKL to amend its licensing agreement to accommodate for the business combination with Liberty and cancelled shares and warrants previously issued and all the necessary regulatory and third-party approvals.



4. Liquidity and Capital Transactions Resources

(a) Liquidity

As of June 30, 2021, the Company had a cash balance of \$5,542,451 and a working capital of \$5,193,209. Current liabilities as of June 30, 2021, are in the amount of \$476,807, which have been incurred in connection to continuing the development of the Company's licensed technologies and keeping the licenses and the Company's public registry in good standing.

	Six months ended June		
	2021	2020	
Cash provided by (used in):			
Operating activities	\$ (4,253,462) \$	(557,817)	
Financing activities	9,734,680	(44,902)	
Effect of foreign exchange rate changes on cash	4,186	(89,888)	
Increase (decrease) in cash and cash equivalents during the period	5,485,404	(692,607)	
Cash and cash equivalents, beginning of period	57,047	967,947	
Cash and cash equivalents, end of period	\$ 5,542,451 \$	275,340	

During the six months ended June 30, 2021, the Company used net cash in operating activities in the amount of \$4,253,462 mainly due expenses related to research and development, salaries and consulting fees, promotional and invertor relations activities and RTO transaction costs incurred in the period. The Company also provided cash in financing activities in the net amount of \$9,734,680 which mainly relates to proceeds form issuance of common shares. During the current period the Company closed a subscription receipts financing on March 12, 2021 and a brokered private placement on June 17, 2021 with to total proceeds received, net of share issuance costs, of \$10,788,134. The Company also used cash in the amount of \$1,053,454 to repaid working capital loans, financing provided to Liberty before closing of the RTO transaction and effectively paid an overdraft acquired as part of the RTO transaction.

No investing transaction were recorded during the current period or the comparative period.

The Company has not issued dividends to date and has no plans to pay dividends in the foreseeable future.

(b) Capital Transactions and Resources

Common share transactions for the six months ended June 30, 2021

- i) On June 17, 2021, the Company closed a brokered private placement of 14,260,000 units ("Units") at a price of CAD\$0.50 per Unit for gross proceeds of CAD\$7,130,000. Each Unit consists of one common share of the Company and one-half of one common share purchase warrant (each whole warrant, a "Warrant "). Each Warrant entitles the holder thereof to acquire one additional Common Share of the Company at a price of CAD\$0.75 per Common Share within 24 months. The Company paid to the agent a cash commission of \$448,464 (CAD\$553,450) and issued to the agent 1,106,900 non-transferable compensation warrants (the "Compensation Warrants"). Each Compensation Warrant entitles the Agent to acquire one Common Share of the Company at a price of CAD\$0.50 per Common Share within 24 months with a fair value of \$237,384.
- ii) On March 17, 2021, the Company completed a share consolidation of two old common shares for one new basis in connection to the completion of the RTO transaction. All shares and per share data presented in the Company's interim condensed consolidated financial statements and MD&A have been retroactively adjusted to reflect the share consolidation unless otherwise noted.
- iii) A total of 10,733,792 common shares were issued upon completion of the RTO transaction on March 17, 2021 with a fair value of \$3,444,458. Also, the convertible debentures issued in connection to the RTO transaction were converted into DrawDown Units and immediately exchanged for Liberty shares on a one for one basis along with the warrants and finder's warrants under the same economic terms and conditions. A total of 5,825,468 common shares were issued with a fair value of \$1,495,507.



iv) As part of the RTO transaction on March 12, 2021, the Company closed a financing with a total of 17,250,000 subscription receipts and 2,250,00 which represents the exercise of the agent's over-allotment option in full for total gross proceeds of CAD\$6,900,000.

Common share transactions for the six months ended June 30, 2020

- Pursuant to the February 6, 2020, amendment to the Licensing Agreement, DKL agreed to surrender back to the Company, 1,500,000 (3,000,000 pre-consolidation) common shares that were issued to DKL on April 2, 2019, as part of the consideration for the Licensing Agreement with a state value of \$230,982 (CAD\$300,000).
- ii) On April 12, 2020, a total of 5,662,500 (11,325,000 pre-consolidation) common shares were cancelled and return to treasury. These shares were issued in connection to a private placement closed on March 5, 2019, where the Company issued 5,662,500 (11,325,000 pre-consolidation) at CAD\$0.0005 (CAD\$0.001 preconsolidation) for gross proceeds of \$8,511 (CAD\$11,325)

Other sources of funds

Other sources of funds potentially available to the Company are through the exercise of outstanding stock options, and share purchase warrants with the following terms:

As at June 30, 2021, the number of stock options outstanding and exercisable, adjusted for the share consolidation was:

	Outsta	Exercisable			
Expiry date	Number of stock options	Exercise price	Remaining contractual life (years)	- - I	
01-May-24	50,000	CAD\$ 0.50	2.84	50,000	
15-Jun-24	37,500	CAD\$ 0.50	2.96	37,500	
01-Jul-24	75,000	CAD\$ 0.50	3.01	75,000	
08-Jul-24	75,000	CAD\$ 0.50	3.02	75,000	
31-Jul-24	50,000	CAD\$ 0.50	3.09	50,000	
23-Aug-24	37,500	CAD\$ 0.50	3.15	37,500	
25-Sep-24	37,500	CAD\$ 0.50	3.24	37,500	
29-Sep-24	75,000	CAD\$ 0.50	3.25	75,000	
April 9 and July 2, 2024	230,645	CAD\$ 4.96	3.01	225,269	
07-Apr-26	2,195,000	CAD\$ 0.50	4.77	-	
	2,863,145			662,769	

The outstanding number of share purchase warrants, adjusted for the share consolidation outstanding are as follows:



	Outstanding					
Expiry date	Number of warrants	Exercise price	Remaining contractual life			
			(years)			
05-Mar-22	123,300	CAD\$0.40	0.68			
29-May-22	84,986	CAD\$0.40	0.91			
09-Jan-22	314,516	CAD\$4.96	0.53			
11-Mar-23	1,098,125	CAD\$0.40	1.70			
11-Mar-23	8,625,000	CAD\$0.60	1.70			
17-Mar-24	2,912,737	CAD\$0.50	2.72			
17-Jun-23	7,130,000	CAD\$0.75	1.96			
17-Jun-23	1,106,900	CAD\$0.50	1.96			
	21,395,564					

5. Off-balance Sheet Arrangements

The Company does not utilize off-balance sheet arrangements.

6. Transactions Between Related Parties

The Company's related parties consist of the Company's directors, officers and companies associated with them including 1214852 B.C. LTD., a company where Omar Garcia Abrego, the Chief Financial Officer is a shareholder.

Compensation of key management personnel:

Key management personnel include members of the Board, the Chief Executive Officer, Chief Technology Officer, Chief Operating Officer and Chief Financial Officer. The net aggregate compensation paid, or payable and related party transactions are shown as follows:

	Three months ended June 30,			Six months ended June 30,			
	2021		2020	r	2021		2020
Short-term benefits	\$ 319,934	\$	132,316	\$	426,864	\$	259,871
Share-based compensation	94,630		-		94,630		-
Consulting services (1)	73,255		29,715		144,312		61,332
	\$ 487,820	\$	162,031	\$	665,806	\$	321,203

(1) Includes fees paid or payable to 1214852 B.C. LTD.

Related party balances:

As at June 30, 2021, the Company had a payable balance of 125,666 (December 31, 2020 – 25,722). This payable balance includes accounts payable and accrued liabilities relating to professional fees from directors, officers or their related companies. These related party balances are unsecured, non-interest bearing and have no specific terms of settlement.

Additionally, during the year ended December 31, 2020, the Company received working capital loan proceeds of 275,627 from Directors and officers or their related parties. During the period ended June 30, 2021, all of these working capital loans were paid in full and the outstanding balance at June 30, 2021 is \$nil (December 31, 2020 – \$275,627). These loans were unsecure and non-interest bearing.



DKL International Inc:

Howard Sidman a former member of the Board of Directors is also the founder and president of DKL. Included in accounts payable and accrued liabilities as at December 31, 2020 was \$56,500.

The Company also paid or accrued \$49,829 and \$49,829 for the three and six months ended June 30, 2020, respectively to DKL in relation to research and development costs.

7. Subsequent events

- i) On July 12, 2021, the Company signed the Cooperation and Project Funding Agreement with The Israel-US Binational Industrial Research and Development (BIRD) Foundation, BIRD HLS Program, for \$1 million. The BIRD HLS program is sponsored jointly by the DHS and the Israel Ministry of Public Security (MOPS). The BIRD Foundation is an organization that provides capital for joint industrial research and development between American and Israeli companies. BIRD was established in 1977 by the governments of the United States and Israel.
- ii) On Jul 19, 2021, the Company issued 50,000 common shares for total net proceeds of CAD\$25,000 in connection with share purchase warrants exercised.
- iii) On July 21,2021, the Company released from escrow a total of 2,193,250 common shares.

8. Critical Accounting Estimates

Full disclosure of the Company's accounting policies and significant accounting estimates and judgments in accordance with IFRS can be found in note 2 and 3 of its audited consolidated financial statements as at December 31, 2020 and have remained substantially unchanged and are still applicable to the Company unless otherwise indicated.

9. Financial Instruments

As at June 30, 2021, the Company's financial instruments comprise cash, amounts receivables, accounts payable and accrued liabilities none of which are valued at fair value. The fair values of these financial instruments approximate their carrying values due to their short-term to maturity.

The Company's financial instruments are exposed to certain financial risks including, credit risk, liquidity risk, foreign currency risks, equity price risk and capital risk management. Details of each risk are laid out in the notes to the Company's audited consolidated financial statements as at December 31, 2020.

10. Other requirements

Outstanding share data

Authorized: Unlimited number of common shares

Number of common shares issued and outstanding adjusted for the share consolidation as at June 30, 2021: 47,490,095

Number of common shares issued and outstanding adjusted for the share consolidation as at August 30, 2021: 63,993,345

August 30, 2021, stock options adjusted for the share consolidation:



	Outs ta	Exercisable			
Expiry date	Number of stock options	Exercise price	Remaining contractual life (years)		
01-May-24	50,000	CAD\$ 0.50	2.84	50,000	
15-Jun-24	37,500	CAD\$ 0.50	2.96	37,500	
01-Jul-24	75,000	CAD\$ 0.50	3.01	75,000	
08-Jul-24	75,000	CAD\$ 0.50	3.02	75,000	
31-Jul-24	50,000	CAD\$ 0.50	3.09	50,000	
23-Aug-24	37,500	CAD\$ 0.50	3.15	37,500	
25-Sep-24	37,500	CAD\$ 0.50	3.24	37,500	
29-Sep-24	75,000	CAD\$ 0.50	3.25	75,000	
April 9 and July 2, 2024	230,645	CAD\$ 4.96	3.01	230,645	
07-Apr-26	2,195,000	CAD\$ 0.50	4.77	-	
	2,863,145			668,145	

August 30, 2021, share purchase warrants adjusted for the share consolidation:

	Outstanding					
Expiry date	Number of warrants	Exercise price	Remaining contractual life (years)			
05-Mar-22	123,300	CAD\$0.40	0.68			
29-May-22	84,986	CAD\$0.40	0.91			
09-Jan-22	314,516	CAD\$4.96	0.53			
11-Mar-23	1,098,125	CAD\$0.40	1.70			
11-Mar-23	8,625,000	CAD\$0.60	1.70			
17-Mar-24	2,912,737	CAD\$0.50	2.72			
17-Jun-23	7,130,000	CAD\$0.75	1.96			
17-Jun-23	1,106,900	CAD\$0.50	1.96			
	21,395,564					

11. Disclosure Controls and Procedures and Internal Controls over Financial Reporting

Disclosure controls and procedures are intended to provide reasonable assurance that information required to be disclosed is recorded, processed, summarized, and reported within the time periods specified by securities regulations and that the information required to be disclosed is accumulated and communicated to management. Internal controls over financial reporting are intended to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. In connection with National Instrument 52-109 (Certificate of Disclosure in Issuer's Annual and Interim Filings) ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company have filed a Venture Issuer Basic Certificate with respect to the financial information contained in the interim condensed consolidated financial statements for the three and six months ended June 30, 2021 and 2020, and this accompanying MD&A (together, the "Interim Filings").

In contrast to the full certificate under NI 52-109, the Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109. For further information, the reader should refer to the Venture Issuer Basic Certificates filed by the Company on SEDAR at <u>www.sedar.com</u>.

