

## INNOVATIVE & REVOLUTIONARY THREAT DETECTION

# MANAGEMENT'S DISCUSSION AND ANALYSIS NINE MONTHS ENDED SEPTEMBER 30, 2021

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

Dated: November 29, 2021

Liberty Defense Holdings, Inc., ("Liberty" or the "Company") has prepared this Management's Discussion and Analysis ("MD&A") as of November 29, 2021 and should be read in conjunction with the Company's interim condensed consolidated financial statements for the three and nine months ended September 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>.

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#### 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 "DD") on March 17, 2021 (note 3) in which Liberty acquired all of the issued and outstanding common shares of DrawDown on a post-DrawDown consolidation basis in exchange for common shares of Liberty on a one to one basis post-Liberty consolidation. As described to undertake this transaction, Liberty completed a share consolidation on a 6.2 old shares to 1 new share basis and DrawDown also completed a share consolidation on a 2 old shares to 1 new share basis. Drawdown has been identified as the accounting acquirer and, accordingly, the Company is considered to be a continuation of Drawdown, and the net assets of the Company at the date of the reverse acquisition are deemed to have been acquired by Drawdown. These interim condensed consolidated financial statements include the results of operations of the Company from 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.

#### (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; Aman Bhardwaj as Chief Operating Officer, Daryl Rebeck, John McCoach 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.

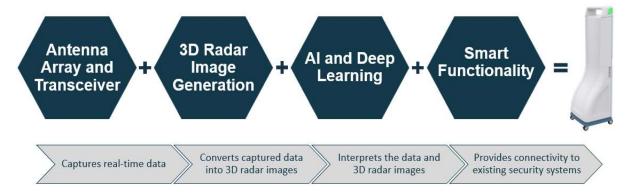
MIT LL undertook 4 years of research and development, including building a working prototype and testing the technology in both lab and real electromagnetic environments. LDT worked with MIT LL to transfer the active imaging technology starting in Q4 2018. In September 2019, Liberty and MIT LL were recognized 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 to be in effect until December 2035. 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 SEDAR (www.sedar.com) 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 April 19, 2021, the Company gave notice of termination of the license agreement with DKL. Such notice of termination served as formal notice that the licensing agreement was terminated in full effective six months following the date of this notice. Upon the effective date of the termination, the parties to the licensing agreement with DKL will have no further rights and/or obligations pursuant thereto. In order to settle any and all outstanding amounts owed to DKL under this licensing agreement the Company paid \$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:

- Received a \$500K contract award from the Transportation Security Administration's ("TSA") (October 2021)
- Signed a license agreement with Battelle Memorial Institute (April 2021)
- Returned funding from the \$1 million grant from The Israel-US Binational Industrial Research and Development (BIRD) Foundation (Mar 2021) due to Levitations' inability to achieve positive cash flow or attract an investment (Oct 2021).
- Complete the business combination with DrawDown (March 2021)
- Closing of oversubscribed public offering for total gross proceeds of CAD\$6.9 million (March 2021)
- Update on Merger with DrawDown (June 2020)
- Execution of Definitive Agreement with DrawDown (April 2020)
- Proposed merger transaction with DrawDown (January 2020)



#### (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 nine months ended September 30, 2021, of \$6,308,314. 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 nine months ended September 30, 2021, the Company reported a total loss and comprehensive loss of \$3,012,091 and \$6,524,924 respectively (three and nine months ended September 30, 2020 – \$207,176 and \$639,979 respectively), and basic and diluted loss per share of \$0.04 and \$0.14 (three and nine months ended September 30, 2020 – \$0.01 and \$0.02 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 nine months ended September 30, 2021, and 2020 is comprised of the following items:



	Three months ended September 30,		Nine months end	Nine months ended September 30,	
		2021	2020	2021	2020
Research and development:					
Consideration recovery for the DKL licensing agreement					
(note 6 (b))	\$	- \$	_	\$ -	\$ (268, 126)
Product development		(17,755)	_	613,050	
Technology costs		278,325	_	312,265	66,124
Legal fees		67,083	_	139,522	_
Salaries & Consulting Fees (note 8 and 16)		943,358	_	1,489,373	_
Stock-based Compensation (note 14 and 16)		91,912	_	155,607	_
Office, rent and administration		29,428	_	40,672	_
Travel and miscellaneous		31,456	_	31,456	_
Depreciation (note 5)		31,184	_	75,757	_
Amortization (note 6 (a))		2,684	_	6,808	_
General Expenses:					_
Consulting fees, salaries and benefits (note 8 and 16)		913,445	79,163	1,324,627	410,206
Depreciation (note 5)		15,492	_	19,594	_
Legal and professional fees		85,824	63,517	203,528	213,987
Stock based compensation (note 14)		146,678	7,364	221,860	70,831
Office, rent and administration		47,419	1,405	97,032	5,880
Regulatory and shareholder information		12,938	346	48,019	8,827
Travel, promotion and investor relations		183,368	12,620	664,032	48,679
RTO transaction costs (note 3)		(1,528)	_	889,593	_
		2,861,311	164,415	6,332,795	556,408
Other expense (income):					
Interest income		189	(44,333)	(55,021)	(97,075)
interest expense		344	35,498	42,378	63,521
Accretion expense		571	34,934	41,181	63,071
Foreign exchange (gain) loss		(107,428)	66,474	(53,019)	(3,779)
		(106,324)	92,573	(24,481)	25,738
Total loss for the period	\$	(2,754,987) \$	(256,988)	\$ (6,308,314)	\$ (582,146)

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 September 30, 2021, was \$1,457,675 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 this period, the Company incurred in \$(17,755) for product development due to accrual reversal from prior periods, \$278,325 incurred in connection to technology costs and \$943,358 in salaries and consulting fees that relate to software development and beta testing. It also includes stock-based compensation in the amount of \$91,912 in connection to stock options granted to directors, officers, employees, and consultants of the Company on April 7, June 10 and Jul 28, 2021. During the comparative period, three months ended September 30, 2020, the Company spent \$nil\$ in connection to its previous handheld gunpowder detection device technology which was completely discontinued early this year.
- ii) During the three months ended September 30, 2021, total general expenses in the amount of \$1,403,636 were incurred mainly in connection to consulting fees, legal and professional fees, stock-based compensation and travel promotion and investor relations.

Consulting fees, salaries and benefits increased from \$79,163 to \$913,445 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 and the numbers of employees and consults hired recently by the Company with the purpose to quickly advance the different technologies under license agreements. Stock based compensation also increased from \$7,364 to \$146,678 as stock options and restricted shares units were granted on April 7, June 10 and July 28, 2021. Also, there is a significant increase in travel promotion and investor relations as it went from \$12,620 to \$183,368 in the current year. This is because there is a significant



- increase of various promotional initiatives that are underway to promote the Company and its licensed technologies to create public awareness.
- iii) During the three months ended September 30, 2021, the Company recorded net other income in the amount of \$106,324 compared to net other expenses of \$92,573 incurred during the same period of the previous year. The main differences relate to interest income which in the comparative year was recorded an amount of \$44,333 in connection to interest on the loan between DrawDown and Liberty; since the RTO these balances are eliminated on consolidation. The Company also recorded a decrease in foreign exchange loss compared to the previous year due to foreign exchange rate differentials. 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.

# 3. Summary of Quarterly Results

Three months ended	Working capital (deficiency)	Total assets	Total loss and comprehensive income loss	Loss per share
	\$	\$	\$	\$
30-Sep-21	3,444,825	13,651,601	(3,012,091)	(0.04)
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)

During the third quarter of 2021, the Company continued with the development of its different technologies and hired key individuals that will help the Company to support the success of the beta launch HEXWAVE product, along with the development of the product prototype for the Company's aviation checkpoint and other security solutions. The Company also secured 6,000 square feet of new office and engineering lab space in the Boston area to support the Company's growing needs.

During the second quarter of 2021, the Company closed a brokered private placement for gross proceeds of \$5,777,490 (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.

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 \$5,535,499 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 \$8,885,199 and had RTO transaction costs of \$889,593 recorded in the nine months ended September 30, 2021.

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 September 30, 2021, the Company had a cash balance of \$3,528,029 and a working capital of \$3,444,825. Current liabilities as of September 30, 2021, are in the amount of \$461,657, 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.

	Nine months	ended (	September 30, 2020
Cash (used in) provided by:			
Operating activities:			
Loss and comprehensive loss for the period	\$ (6,308,314)	\$	(582,146)
Items not involving cash:	1,070,955		(61,484)
Changes in non-cash working capital:	(708,460)		192,929
Cash used in operating activities	(5,945,819)		(450,701)
Cash used in investing activities	(23,915)		
Cash provided by (used in) financing activities	9,572,750		(252,281)
Effect of foreign exchange rate changes on cash	(132,034)		(43,169)
Increase (decrease) in cash	3,470,982		(746,151)
Cash, beginning of the period	57,047		967,947
Cash, end of the period	\$ 3,528,029	\$	221,796

During the nine months ended September 30, 2021, the Company used net cash in operating activities in the amount of \$5,945,819 mainly due to 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 incurred \$23,915 in investing activities which relates to additions to intangible assets and also provided cash in financing activities in the net amount of \$9,572,750 which mainly relates to proceeds form issuance of common shares and warrants exercised, and the repayments of working capital loans in the amount of \$550,525.

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 nine months ended September 30, 2021

- i) On July 15, 2021, the Company issued 50,000 common shares for gross proceeds of \$19,887 in connection with warrants exercised. The fair value of these warrants exercised was \$10,723 and was transferred from the equity reserves and recorded against share capital. Additionally, On July 21, 2021, the Company issued 2,193,250 capital markets performance shares to certain employees and a consultant of the Company with an estimated fair value of \$1,045,317.
- ii) 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 \$5,777,490 (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. The Company also incurred \$76,391 in legal and filling fees.
- iii) On March 17, 2021, DrawDown 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.
- iv) 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.
- v) 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 for total proceeds of \$5,535,499 (CAD\$6,900,000). Each Unit is 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. The Company issued 1,098,125 compensation warrants to the agents. Each compensation warrant entitles the agents to acquire one common share of the company at a price of CAD\$0.40 per common share within 24 months with a fair value of \$141,886.

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

- i) Pursuant to the February 6, 2020, amendment to the Licensing Agreement, DKL agreed to surrender back to the Company, 1,500,000 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 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 at CAD\$0.0005 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 September 30, 2021, the number of stock options outstanding and exercisable, adjusted for the share consolidation was:



	Outstand	Outstanding		
Expiry date	Number of stock options	Exercise price	Remaining contractual life (years)	Number of stock options
01-May-24	50,000	CAD\$ 0.50	2.59	50,000
15-Jun-24	37,500	CAD\$ 0.50	2.71	37,500
01-Jul-24	75,000	CAD\$ 0.50	2.75	75,000
08-Jul-24	75,000	CAD\$ 0.50	2.77	75,000
31-Jul-24	50,000	CAD\$ 0.50	2.84	50,000
23-Aug-24	37,500	CAD\$ 0.50	2.90	37,500
25-Sep-24	37,500	CAD\$ 0.50	2.99	37,500
29-Sep-24	75,000	CAD\$ 0.50	3.00	75,000
Apr 9 and Jul 2, 2024	230,645	CAD\$ 4.96	2.76	230,645
07-Apr-26	2,195,000	CAD\$ 0.50	4.52	-
10-Jun-26	100,000	CAD\$ 0.50	4.70	-
28-Jul-26	240,000	CAD\$ 0.50	4.83	-
	3,203,145			668,145

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

	Warrants	Exercise
	outstanding	Price
Outstanding, December 31, 2019	1,740,000	CAD\$ 0.20
Issued	208,286	0.40
Cancelled	(1,740,000)	0.20
Outstanding, December 31, 2020	208,286	CAD\$ 0.40
RTO transaction	1,738,166	6.48
Issued	20,872,759	0.62
Cancelled	(1,423,650)	6.82
Exercised	(50,000)	0.50
Outstanding, September 30, 2021	21,345,561	CAD\$ 0.68

# 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 Financial Officer, Chief Technology Officer, and Chief Operating Officer. The net aggregate compensation paid, or payable and related party transactions are shown as follows:

	Three months ended September 30,		Niı	Nine months ended September 30,			
	2021		2020		2021		2020
Short-term benefits	\$ 526,151	\$	53,732	\$	953,015	\$	310,603
Share-based compensation	152,809		-		247,439		-
Consulting services (1)	38,960		32,840		183,272		94,172
	\$ 717,920	\$	86,572	\$	1,383,725	\$	404,775

<sup>(1)</sup> Includes fees paid or payable to 1214852 B.C. LTD.



#### Related party balances:

As of September 30, 2021, the Company had a balance payable of \$145,789 (December 31, 2020 – \$449,230). This payable balance includes accounts payable and accrued liabilities relating to consulting services from directors, officers or their related companies included in compensation of key management personnel. 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 loans. The outstanding balance at December 31, 2021 is in the amount of \$550,525 from Directors and officers or their related parties. During the period ended September 30, 2021, all of these working capital loans were paid in full and the outstanding balance at September 30, 2021 is \$nil. These working capital loans were unsecure and non-interest bearing.

#### DKL International Inc:

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

DrawDown also paid or accrued \$49,829 for the nine months ended September 30, 2020 to DKL in relation to research and development costs.

# 7. Subsequent events

- (a) 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 Development Homeland Security ("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. Under the terms of the agreement, the Company agreed to partner with Levitection Ltd ("Levitection")., an Israeli company to integrate Levitection's technology with the Company's HEXWAVE technology. On October 28, 2021 the BIRD HLS Program notified both Liberty Defense Technologies and Levitection Ltd. that a decision has been made to enter into an orderly business shutdown procedure due to Levitection Ltd. inability to achieve positive cash flow or attract an investment. The Bird Foundation approved the termination of the project, and the funding previously advanced to the Company on July 8, 2021 for \$113,634 was returned to the Bird HLS Foundation on November 9, 2021.
- ii) On October 20, 2021 the Company received from Transportation Security Administration's (TSA) a contract award for \$500,000 as part of the TSA On-Person Screening Capability Program for demonstration and evaluation of the HEXWAVE and its expanded capabilities for screening Aviation Workers at a TSA designated location to enhance detection and throughput performance. The Company is required to have the HEXWAVE technology working at certain locations to collect and share data with TSA on identified threats to further develop algorithms to improve the recognition of threats with desire probability of detection.
- iii) On November 1, 2021 the Company granted 465,000 stock options to recently hired employees. The stock options have a five-year term from the date of the grant, are exercisable at a price of CAD\$0.46 per share, and vest at 25% after six months from the grant date, and 25% every six months thereafter for a total vesting period of twenty-four months.

# 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 of September 30, 2021, the Company's financial instruments comprise cash, amounts receivables, and accounts payable and accrued liabilities, none of which are valued at fair value. The fair values of amounts receivables and accounts payable and accrued liabilities approximate their carrying values due to their short-term maturity. The carrying amount of the CEBA loan approximates fair value as it was discounted using a market rate of interest.

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 September 30, 2021: 63,993,345

Number of common shares issued and outstanding adjusted for the share consolidation as at November 29, 2021: 63,993,345

Stock options adjusted for the share consolidation as at November 29, 2021:

	Outsta	Outstanding			
Expiry date	Number of stock options	Exercise price	ce Remaining Num contractual life stock op (years)		
01-May-24	50,000	CAD\$ 0.50	2.42	50,000	
15-Jun-24	37,500	CAD\$ 0.50	2.54	37,500	
01-Jul-24	75,000	CAD\$ 0.50	2.59	75,000	
08-Jul-24	75,000	CAD\$ 0.50	2.61	75,000	
31-Jul-24	50,000	CAD\$ 0.50	2.67	50,000	
23-Aug-24	37,500	CAD\$ 0.50	2.73	37,500	
25-Sep-24	37,500	CAD\$ 0.50	2.82	37,500	
29-Sep-24	75,000	CAD\$ 0.50	2.83	75,000	
April 9 and July 2, 2024	230,645	CAD\$ 4.96	2.50	230,645	
07-Apr-26	2,195,000	CAD\$ 0.50	4.35	548,750	
10-Jun-26	100,000	CAD\$ 0.50	4.53	-	
28-Jul-26	240,000	CAD\$ 0.50	4.66	-	
01-Nov-26	465,000	CAD\$ 0.46	4.92	<u>-</u>	
	3,668,145			1,216,895	

Share purchase warrants adjusted for the share consolidation as at November 29, 2021:



		Outstanding	ıg			
Expiry date	Number of warrants	Exercise price	Remaining contractual life (years)			
05-Mar-22	123,300	CAD\$0.40	0.26			
29-May-22	84,986	CAD\$0.40	0.49			
09-Jan-22	314,516	CAD\$4.96	0.11			
11-Mar-23	1,098,125	CAD\$0.40	1.28			
11-Mar-23	8,625,000	CAD\$0.60	1.28			
17-Mar-24	2,912,734	CAD\$0.50	2.30			
17-Jun-23	7,130,000	CAD\$0.75	1.55			
17-Jun-23	1,056,900	CAD\$0.50	1.55			
	21,345,561					

# 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 nine months ended September 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 <a href="https://www.sedar.com">www.sedar.com</a>.

