



DRONESHIELD

DroneShield
AGM Presentation (ASX:DRO)
26 April 2022



AI-Enabled Platforms for Protection against Advanced Threats

AGM Presentation (ASX:DRO)

26 April 2022

Image: DroneGun MKIII™ C-UAS device

2021 Key Achievements



2021 has been a major step forward for DroneShield, despite the COVID pandemic challenges



Another all-time record year for revenues and cash receipts



Expanded past counterdrone into two AI-powered adjacent areas of Electronic Warfare and Computer vision, with Australian DoD contracts for each



Multi-million dollar project: \$3.8m 2 year contract with Australian DoD



Ramped up a second outsourced manufacturing facility in preparation for larger orders (no cost to DRO – payment per unit made)



Scaled the high-calibre team from 30 to 60 across Australia, US and UK



Brazil military with DroneSentry™ installation

Investment Highlights



World leading
proprietary **AI platform**
for protection against
drones

Leverage to the **global defence
and security technology sector**.
\$10bn counterdrone
addressable market, **in addition
to electronic warfare and
tracking systems markets**

Sales pipeline of **\$155m for
2022 and \$170m for 2023**

Best in class customer
base including
**Department of Defence,
US Air Force, US State
Department**

FY21 revenue **more than
doubling to \$10.6m**, cash
receipts **almost tripling to
\$14.8m**

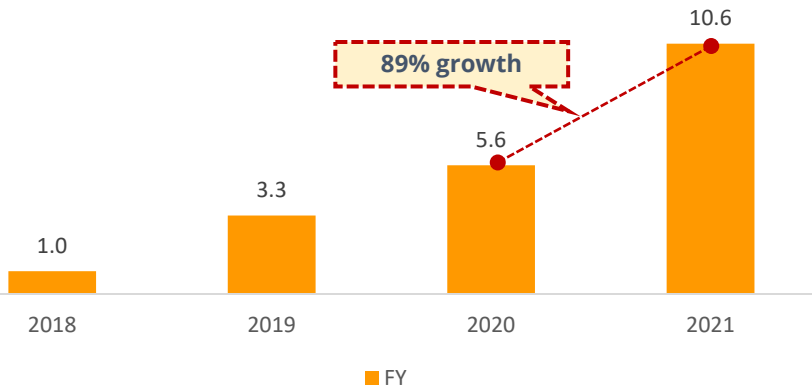
Approaching an **inflection
point** with receipts from
existing customers **rising
from \$2.2m in 2020 to
\$9.9m in 2021**

Continued Rapid Growth (A\$m, Dec YE)

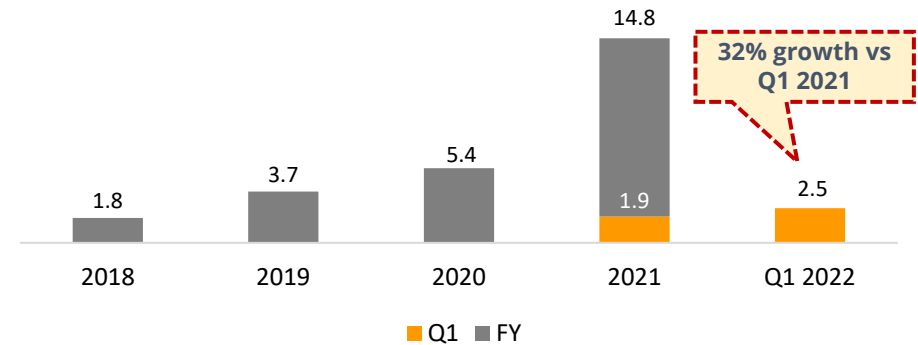


Rapidly improving financials, as the business stands at an inflection point into 2022

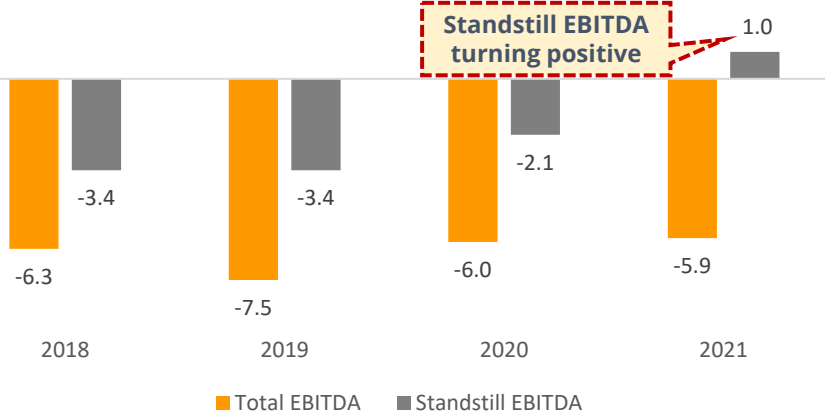
Strong Revenue Growth



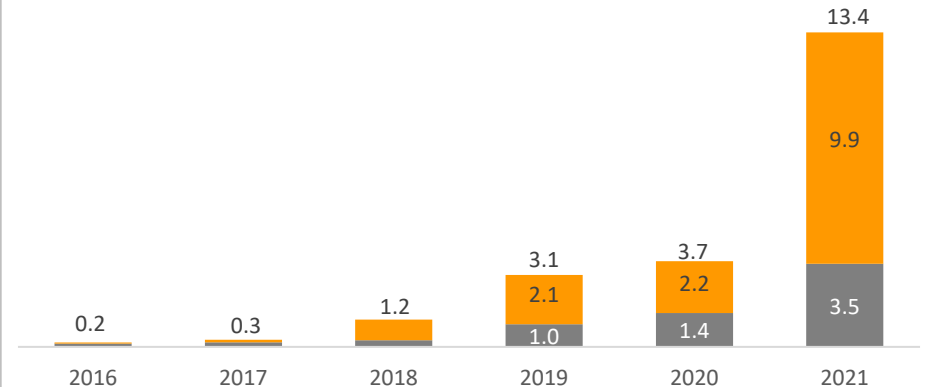
Rapid Cash Receipt Growth



Improving EBITDA



Customer "Stickiness" – Repeat vs First Time Cash Receipts



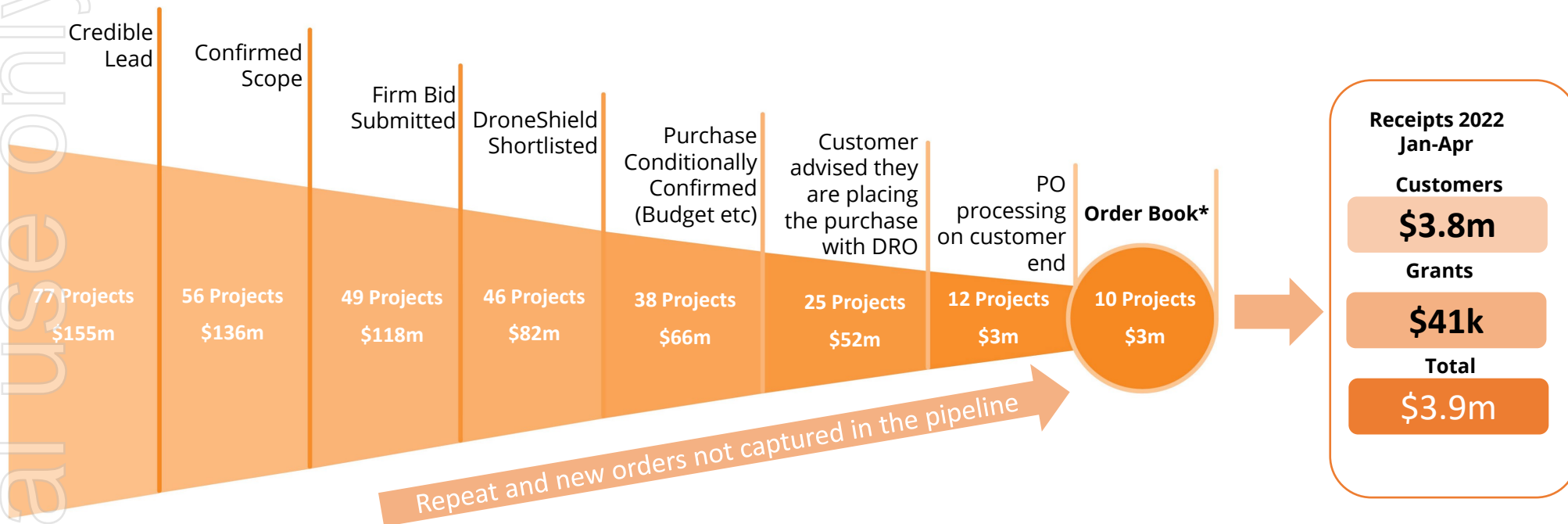
Note: \$14.8m cash receipts in 2021 includes grant of US\$99,600 from the US Government, under the Paycheck Protection Program

Diversified and Mature 2022 Pipeline



Multiple projects at each development stage improve predictability of cashflows

6-18 months from lead to sale, but can be much shorter for repeat orders



Notes:
Cash Receipts to Dec 2022 only. As the year progresses, remaining forecasted projects will reduce in number but become more certain
The pipeline is cumulative – eg, the 50+ projects at Confirmed Scope stage are included as part of the 70+ projects at the Credible Lead stage
* Order Book = current Purchase Orders (POs), less amount already paid to DRO (eg deposit) under those POs

Counterdrone: Multi-Billion Dollar Market by 2024



Rapidly improving and easily available drone technology is driving demand for counterdrone solutions

Military



Government Facilities



Law Enforcement



Protective Details



Airports



Stadiums



Commercial Venues



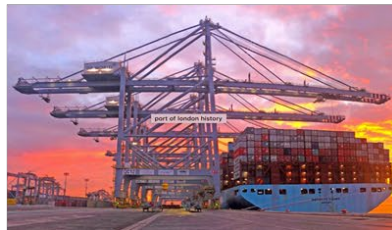
Energy Production



High Profile Events



Shipping / LNG Ports



Rescue / Fire Response



Correctional Facilities



Sources:

MarchWatch: <https://www.marketwatch.com/press-release/counter-uas-market-size-share-growth-business-scenario-insights-industry-analysis-and-forecasts-report-2027-2021-11-11>

Markets and Markets: <https://www.marketsandmarkets.com/Market-Reports/anti-drone-market-177013645.html>

Factors & Factors: <https://www.globenewswire.com/en/news-release/2021/08/27/2287713/0/en/Global-Counter-UAV-Market-Size-Share-Expected-to-Reach-USD-2-041-09-Million-by-2026-Facts-Factors.html>

US\$10bn Total Addressable Market



Military Vehicles - Mounted
\$25k - \$200k each

\$2.3bn

\$1.1bn



Airports - Fixed Sites
\$125k - \$2m each

\$1.1bn



Military - Portables
\$20k - \$55k each



\$625mil

Energy Production & Critical
Infrastructure - Fixed Sites
\$125k - \$2m each

Law Enforcement - Portables
\$63k - \$500k each

\$550mil

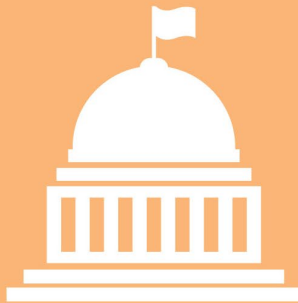


Military - Fixed Sites
\$125k - \$860k each

\$500mil



Government Facilities - Fixed Sites
\$63k - \$500k each



\$1.5bn



\$582mil

Shipping - Vehicle Mounted
\$63k - \$200k each



\$500mil

Civil Helicopters -
Fixed Sites
\$30k each



Military helicopter -
Vehicle mounted
\$25k - \$125k each

\$390mil

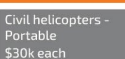


\$500mil

Correctional Facilities -
Fixed Sites
\$63k - \$500k each



Stadiums & Events
Fixed Sites or Portable
\$25k - \$125k each



Civil helicopters -
Portable
\$30k each

Oil Refineries - Fixed Sites
\$62k - \$500k each

Shipping & Ports - Fixed Sites
\$125k - \$1m each

Sources: <https://www.dronesshield.com/counterdrone-market>

AI Generally: US\$58bn in 2021, US\$310bn in 2026

AI in Military: US\$6bn in 2020, US\$12bn in 2025



2021 has seen a major step forward for DroneShield, despite the COVID pandemic challenges



A new high-tech area, substantially open to disruption by smaller companies like DroneShield



Sovereign capability aligned – DroneShield well positioned with existing multiple AI contracts with Australian DoD



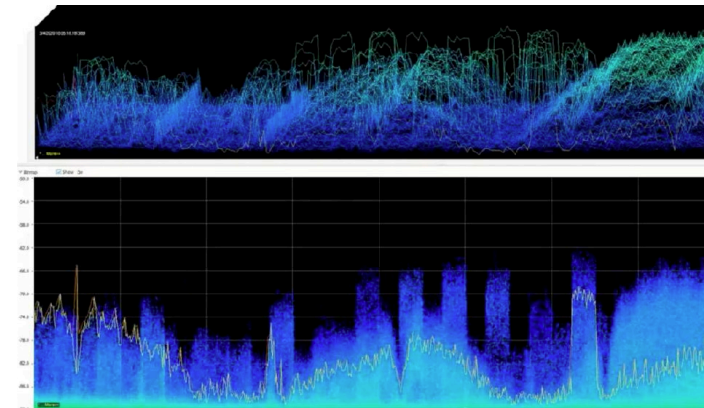
Competitive differentiation via team skillset, trusted supplier relationship with security clearances, and accumulation of large datasets



Substantially software based, multi-year contracts – reduces lumpiness in earnings, enables high margins



Adjacencies to core DroneShield business of counterdrone



Market size references:

<https://www.marketsandmarkets.com/Market-Reports/artificial-intelligence-military-market-41793495.html>

<https://www.marketsandmarkets.com/Market-Reports/artificial-intelligence-market-74851580.html>

DroneShield Capability Overview



Rapidly evolving capabilities in response to customer requirements

Hardware with Embedded Software and Associated Services

Dismounted & Body-Worn Counterdrone Solutions



DroneGun



DroneGun
Tactical



RfPatrol



DroneNode

Vehicle / Ship / Fixed Site Counterdrone Solutions



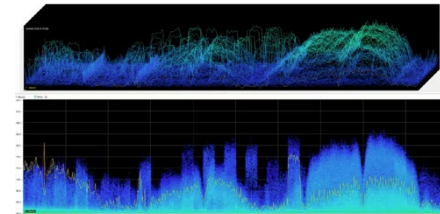
DroneSentry-X



DroneSentry

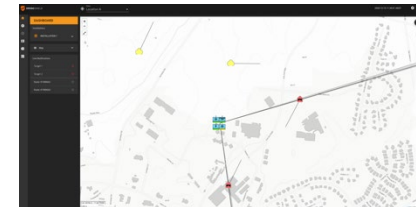
Subscription and R&D Based Software

Electronic Warfare and Signals Intelligence



R&D Contracts

C2 and Universal Tracking Platforms (UTPs)



DroneSentry-C2

Optical Detection and Tracking AI



DroneOptID

DroneShield AI Software Sees Through Noise – Radiofrequency Spectrum

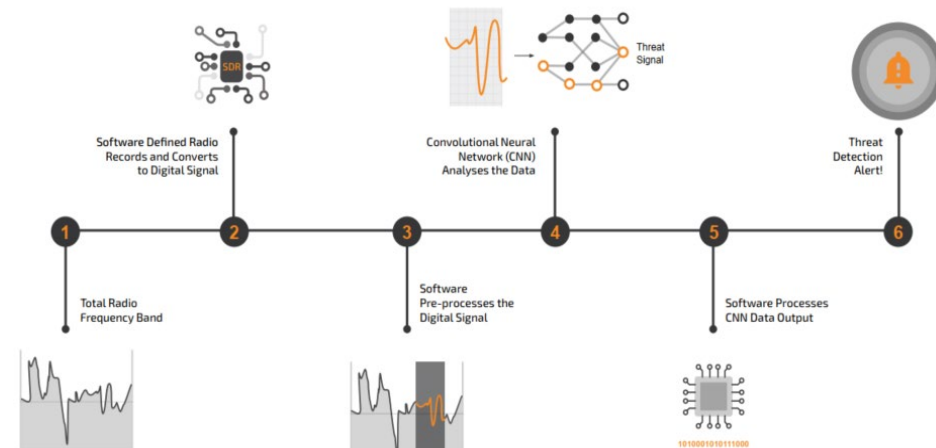
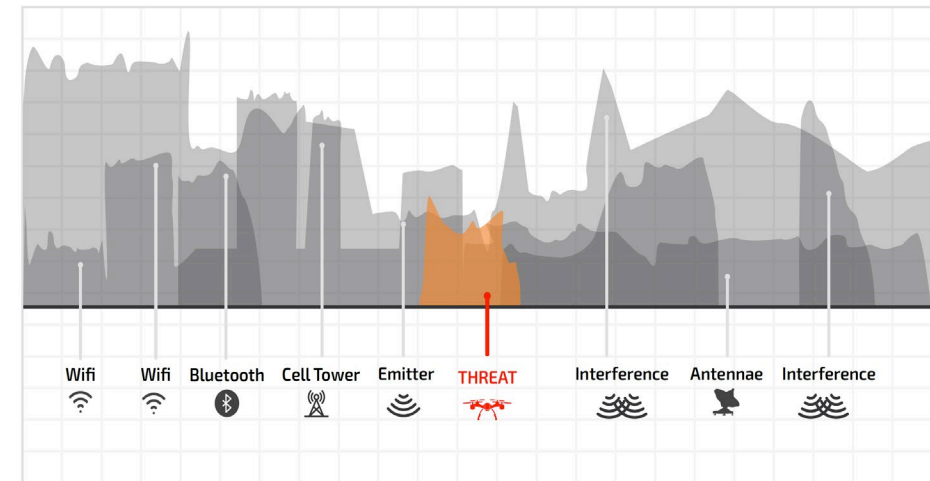


World leading proprietary RF AI platform for protection against advanced threats, such as drones

- Drones operate in arguably the densest parts of the Radio Frequency (“RF”) Spectrum with “noise” coming from all kinds of other emitters including Wi-Fi, Bluetooth, cell towers and antennas
 - Consequently, counter-drone detection technology needs to be able to pull a signal out of all the other “noise”, while still maintaining a low false alarm rate
 - Achieving this using traditional techniques, especially in a very cluttered environment, is very difficult – if not impossible

Consequently, DroneShield has developed a cutting-edge spectrum awareness capability using proprietary Artificial Intelligence techniques through its RFAI™ engine

- The RFAI™ engine receives quarterly updates (intra-quarter updates also available) which get pushed to the devices deployed across the globe in a variety of ways suitable for the security of the end user



DroneOptID AI Software – Optical and Thermal Spectrum Counterdrone Surveillance



DroneShield's DroneOptID™ AI engine detects and tracks complex threats such as drones in cluttered environments

- Drones are small, fast-moving objects, hard to detect with naked eye more than 50m away, against complex background
- Cameras on their own cannot detect and track drones at any meaningful distance, due to
 - the trade-off between the camera Field-of-View (FoV) and Depth. A wide FoV would only see drone at a close distance. A narrow FoV means only looking at a tiny part of the area
 - Even once an object is detected, separating drones from birds is difficult, especially for fixed wing drones
- To enable cameras to accurately detect and track drones and other objects, DroneShield has developed a proprietary AI engine DroneOptID™, in conjunction with University of Technology Sydney, with DroneShield retaining the IP
 - DroneOptID™ uses the latest in Computer Vision technology to detect, identify and track drones in real time, cutting through all the other “noise”
 - The software takes geographical and environmental data from other sensors in order to slew and validate a drone threat. Once the drone is in the field of view of the camera, using proprietary DroneShield algorithms, the DroneOptID™ software uses motion tracking and machine learning techniques to identify and track the target
- Further development is currently under way, funded by the Australian Department of Defence

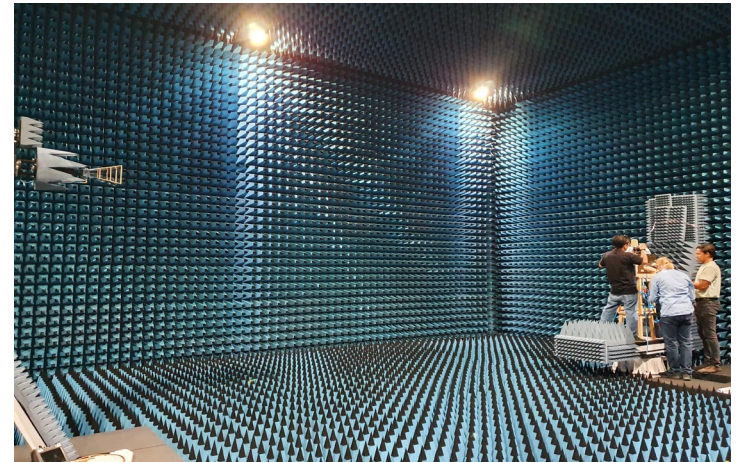


Artificial Intelligence in Electronic Warfare



DroneShield is favourably exposed to the fast-growing Electronic Warfare business segment

- **Electronic warfare (EW)** is any action involving the use of the electromagnetic spectrum (EM spectrum) or directed energy to control the spectrum, attack an enemy, or impede enemy assaults. The purpose of electronic warfare is to deny the opponent the advantage of—and ensure friendly unimpeded access to—the EM spectrum
- Demand for smart EW technologies to jam, degrade, disrupt or neutralise an adversary capability are rapidly growing and are an essential part of modern warfare
- Given the overlap with DroneShield's counter-drone AI technology and the minimal Australian based competition in EW technology, DroneShield is in the box seat to exert dominance in this rapidly growing area
- In 2021, DroneShield received a A\$3.8 million, 2-year R&D contract with the Australian Department of Defence
 - Contract was awarded on a sole source basis. Importantly, the contract was not in counter-drone, but EW and Signals Intelligence, an adjacent area utilising an existing DroneShield skillset, but with much wider applications.
- Additional, and larger, contracts are expected with the Australian Department of Defence, as DroneShield builds up its AI capabilities in the EW and Signals Intelligence arena



Technology Roadmap – SaaS, unpinned by owned large datasets and AI algorithms



Expanding on the current work with Australian DoD, DroneShield's offering will increasingly become hardware-agnostic hardware for detecting, identifying and tracking threats through noise

Cluttered Battlefield

SPACE

SEA

Classified Battlefield

AIR

LAND



Target: Helicopter #000145
Class: Helicopter, threat
Multi-Class: true
Probability: 0.95



Target: Fighter Jet #003581
Class: Jet, friendly
Multi-Class: true
Probability: 0.98



Target: Frigate #0051459
Class: Frigate, friendly
Multi-Class: true
Probability: 0.94



Target: Satellite Dish
Class: Satellite, no threat
Multi-Class: true
Probability: 0.93



Target: Vehicle #001350
Class: Vehicle, unknown
Multi-Class: true
Probability: 0.94



Target: Land Mine
Class: Mine, threat
Multi-Class: true
Probability: 0.89

- Ability to deploy on vast amounts of customer hardware platforms
- Growing number of deployed devices feeding DroneShield datasets

DroneShield's competitive counterdrone advantage?



C-UAS market pioneer, with a culture of systematic innovation and understanding of channels to market

Market leading, differentiated technology...



Multi-sensor detection, ID and tracking



Best-in-breed detection range



Best-in-breed defeat range

...underpinned by AI-powered SaaS...



Proprietary software integrated across product suite



Difficult to replicate



Experienced development team for quarterly software updates

...across multiple platforms...



Body-worn



Vehicle/Ship mounted



Fixed site

... and backed by high barriers to entry



Experienced in-house veteran sales team



Established relationships with global defence partners and clients



Deep in-house world-leading technology talent

2022 Key Priorities



Multiple large (\$5m+) contracts across multiple countries and customers



Another order of magnitude year of increase in customer cash receipts



Winning contracts adjacent to current core capability, within Artificial Intelligence domains – such as Command-and-Control and Tracking Systems



High-profile contract wins in a teaming consortiums with Defence Primes



**Turning cashflow-positive across the business
(requires approx. \$25m of customer cash receipts and grants)**



DroneShield RfPatrol™ with soldier radios that the device is operable with, DroneSentry-X™ in the background

Contact details



Email: info@dronesshield.com

Sydney, NSW (Headquarters)

Level 5, 126 Phillip St
Sydney, NSW 2000
Australia

Phone: +61 2 9995 7280

Warrenton, Virginia

7140-B Farm Station Rd,
Warrenton, VA 20187
USA

Phone: +1 (540) 215-8383



RESOLUTION 1:

Adoption of Remuneration Report



Resolution 1 is as follows:

- ▶ To consider and, if thought fit, to pass, with or without amendment, **Resolution 1, Adoption of the Remuneration Report**, as a **non-binding resolution**.

That, for the purpose of section 250R(2) of the Corporations Act and for all other purposes, approval is given for the adoption of the Remuneration Report as contained in the Company's Annual Financial Report for the financial year ended 31 December 2021.

Proxy votes received:

For	Against	Open	Abstain
45,766,110	47,428,851	751,100	2,696,199
48.72%	50.48%	0.80%	

RESOLUTION 2:

Re-election of Jethro Marks as Director



Resolution 2 is as follows:

- ▶ To consider and, if thought fit, to pass, with or without amendment, **Resolution 2, Re-election of Jethro Marks as Director**, as an **ordinary resolution**.

That Jethro Marks, a Director who retires by rotation in accordance with the Company's Constitution and ASX Listing Rule 14.5 and being eligible offers himself for re-election as a Director of the Company, effective immediately.

Proxy votes received:

For	Against	Open	Abstain
75,538,719	46,464,296	760,421	1,807,534
61.53%	37.85%	0.62%	

RESOLUTION 3: ASX Listing Rule 7.1A Approval of Future Issue of Securities



Resolution 3 is as follows:

- ▶ To consider and, if thought fit, to pass, with or without amendment, **Resolution 3, ASX Listing Rule 7.1A Approval of Future Issue of Securities**, as a **special resolution**.

That, for the purposes of ASX Listing Rule 7.1A and for all other purposes, Shareholders approve the issue of equity securities up to 10% of the issued capital of the Company (at the time of issue) calculated in accordance with the formula prescribed in ASX Listing Rule 7.1A.2 and otherwise on the terms and conditions set out in the Explanatory Statement which accompanies and forms part of this Notice of Meeting.

Proxy votes received:

For	Against	Open	Abstain
75,894,865	47,752,054	843,171	80,880
60.96%	38.36%	0.68%	

RESOLUTION 4: Approval to Issue Performance Options to Peter James, Non-Executive Chairman of the Company



Resolution 4 is as follows:

- ▶ To consider and, if thought fit, to pass, with or without amendment, **Resolution 4, Approval of Issue of Performance Options to Peter James, Non-Executive Chairman of the Company**, as an **ordinary resolution**.

That, for the purposes of ASX Listing Rule 10.11 and section 208 of the Corporations Act and for all other purposes, Shareholders approve the issue and allotment of 5,000,000 Performance Options to Peter James, Non-Executive Chairman of the Company or his nominee and otherwise on the terms and conditions set out in the Explanatory Statement which accompanies and forms part of this Notice of Meeting.

Proxy votes received:

For	Against	Open	Abstain
64,397,279	48,580,671	863,171	10,729,849
56.57%	42.67%	0.76%	

RESOLUTION 5: Approval of Issue of Performance Options to Jethro Marks, Non-Executive Director of the Company



Resolution 5 is as follows:

- ▶ To consider and, if thought fit, to pass, with or without amendment, **Resolution 5, Approval of Issue of Performance Options to Jethro Marks, Non-Executive Director of the Company**, as an **ordinary resolution**.

That, for the purposes of ASX Listing Rule 10.11 and section 208 of the Corporations Act and for all other purposes, Shareholders approve the issue and allotment of 1,000,000 Performance Options to Jethro Marks, Non-Executive Director of the Company or his nominee and otherwise on the terms and conditions set out in the Explanatory Statement which accompanies and forms part of this Notice of Meeting.

Proxy votes received:

For	Against	Open	Abstain
71,394,793	50,901,513	863,171	1,411,493
57.97%	41.33%	0.70%	

RESOLUTION 6: Approval of Issue of Performance Options to Oleg Vornik, Managing Director of the Company



Resolution 6 is as follows:

- ▶ To consider and, if thought fit, to pass, with or without amendment, **Resolution 6, Approval of Issue of Performance Options to Oleg Vornik, Managing Director of the Company**, as an **ordinary resolution**.

That, for the purposes of ASX Listing Rule 10.11 and, section 208 of the Corporations Act and for all other purposes, Shareholders approve the issue and allotment of 10,000,000 Performance Options to Oleg Vornik, Managing Director of the Company or his nominee and otherwise on the terms and conditions set out in the Explanatory Statement which accompanies and forms part of this Notice of Meeting.

Proxy votes received:

For	Against	Open	Abstain
55,405,887	50,780,063	863,171	17,521,849
51.76%	47.44%	0.81%	

RESOLUTION 7:

Re-adoption of Incentive Option Plan



Resolution 7 is as follows:

- ▶ To consider and, if thought fit, to pass, with or without amendment, **Resolution 7, Re-adoption of Incentive Option Plan**, as an **ordinary resolution**.

That, for the purposes of ASX Listing Rule 7.2 (exception 13(b)), sections 257B(1), 259B(2) and 260C(4) of the Corporations Act and for all other purposes, Shareholders approve the re-adoption of the Incentive Option Plan, on the terms and conditions set out in the Explanatory Statement which accompanies and forms part of this Notice of Meeting.

Proxy votes received:

For	Against	Open	Abstain
23,475,267	47,972,383	763,171	258,667
32.51%	66.43%	1.06%	

RESOLUTION 8:

Amendments to the Constitution



Resolution 8 is as follows:

- ▶ To consider and, if thought fit, to pass, with or without amendment, **Resolution 8, Amendments to the Constitution**, as a **special resolution**.

That, for the purposes of Section 136 of the Corporations Act and for all other purposes, approval is given for the Company's Constitution to be amended in the form of the document tabled at this Meeting and signed by the Chair for the purposes of identification, effective immediately.

Proxy votes received:

For	Against	Open	Abstain
119,994,459	2,964,782	925,503	686,226
96.86%	2.39%	0.75%	