



DRONESHIELD

Artificial Intelligence For Multi-Mission Threat Protection and C-UAS Defence

Investor Presentation (ASX:DRO)
February 2024

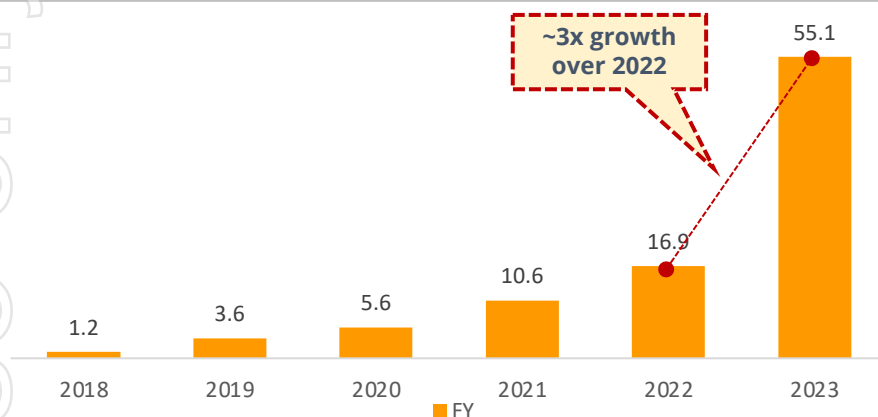
Image: DroneShield RfPatrol drone detector

Rapid Profitable Growth (\$m, Dec YE)

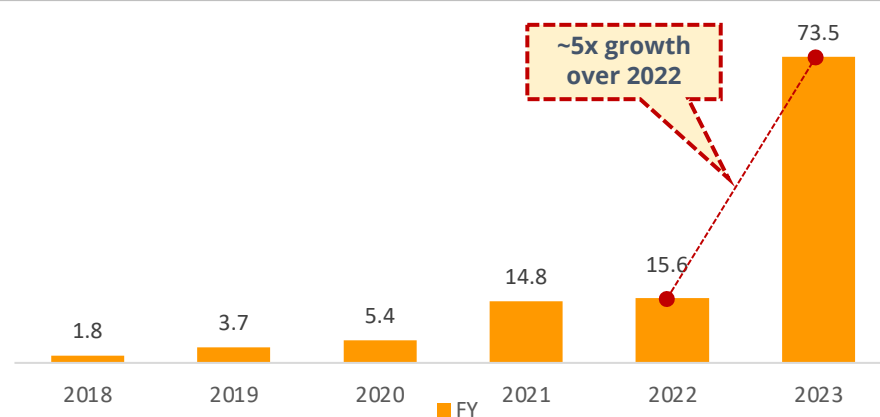


The business is accelerating its rate of growth, while becoming profitable

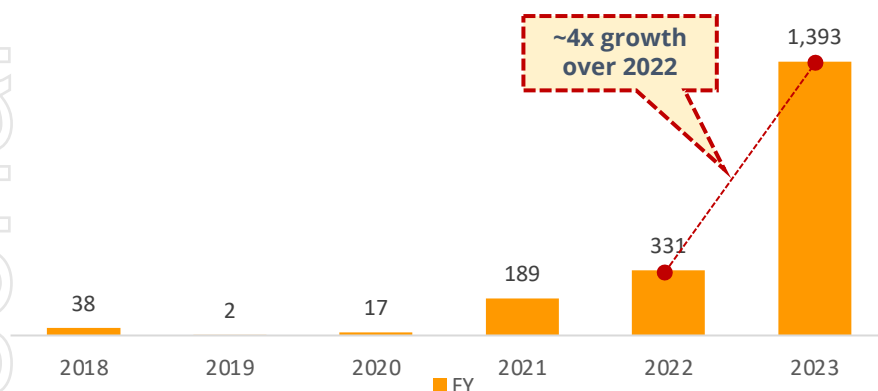
Strong Revenue Growth (A\$m)



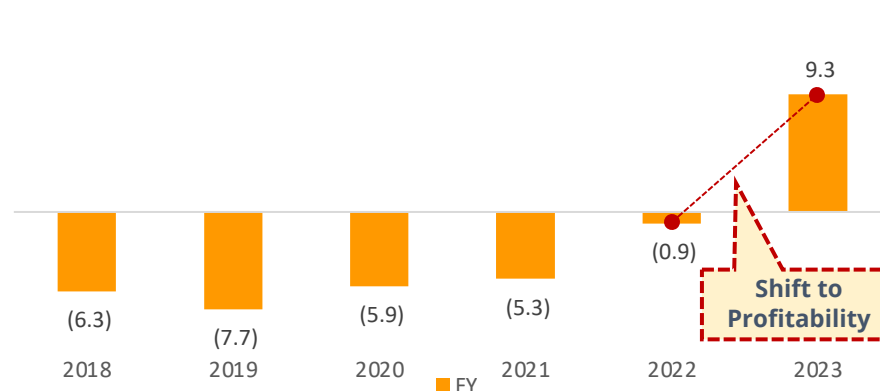
Cash Receipt Growth (Sales + Grants) (A\$m)



SaaS Revenue Growth (A\$000)



Profit After Tax (A\$m)



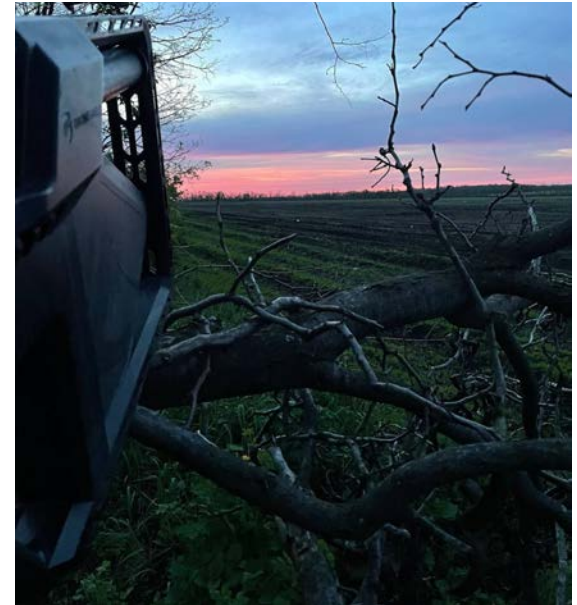
SaaS model was fully introduced in 2021

Strong 2023 Creating a Solid Base for 2024



- FY23: record contracts and rapidly growing cash receipts
 - **FY23 \$73.5 million cash receipts, up 5x** vs FY22
 - **FY23 \$55.1 million revenue, up 3x** vs FY22
 - 80% of revenues are from repeat customers
 - The revenue vs cash receipt difference mostly due to advanced payments on product subscriptions (SaaS), warranties, as well as grants received
 - Largest geographical segment revenue contributions are US at 68% and Australia at 23%
- FY23 is **first profitable year**, with \$9.3 million profit after tax
- **Shareprice up 64%** over 2023 (vs 9% for ASX300)
- **Cash balance of \$57.9 million** as of 31 Dec 2023, no debt or convertibles
 - Committed supply chain payments of \$30 million
- **\$30 million contracted backlog and pipeline of over \$510 million¹**
- Substantially completed expansion of the team to enable build, delivery and support of materially larger orders
 - Completed move to a larger Sydney facility (3x current floor space) in January, plus supply chain partners been rapidly expanding
 - No material cost to DRO to move, due to light capex model (heavy machinery work all outsourced) and landlord fitout incentive payments
 - Positions the company for \$300-400 million annual production capacity
 - 115 team members including over 90 engineers
- Favourable environment for DroneShield with rapidly rising counterdrone, defence and security spending globally
 - The Ukraine conflict continues to highlight the use of drones on the battlefield, which will continue driving increasing C-UAS orders even after the eventual ceasefire
 - Drones increasingly used across global conflicts, including Hamas terror attack on Israel

¹ There is no assurance that any of the Company's sales opportunities will result in sales.



DroneGun Tactical deployed in Ukraine, and the Israel Defense Force soldier with DroneGun Mk4 and RfPatrol (top and bottom images)



C-UAS pioneer, full in-house suite of multi-mission products, culture of innovation and deep channels to market

Market leading, differentiated technology



All hardware (except radar and camera) developed and made in-house (with outsourced manufacturing to DRO's specifications for large batches)

- low in-house capex as heavy industrial work is outsourced at lower margins to DRO specifications



All SaaS software, including AI engines for RF sensors, cameras, sensorfusion; and EW work, done in-house

- robust software and digital infrastructure to support enterprise grade software updates, monitoring and retrieval



90+ in-house engineers (out of team of 110) developing and integrating IP into product updates

- FPGA, AI/ML, RF/waveform, data engineering, field service engineering, front-end, back-end, platforms, mechanical engineering, industrial design, UI/UX, and production engineers, quality managers

Global pioneer with strong team and brand



The original counter-drone pioneer, with a strong global brand and reputation for innovation and quality



Experienced in-house veteran sales team (complemented by global distributor network)

Complete product, integration and geographic coverage



Body-worn, vehicle/ship and fixed site systems



Both integrator and sensor maker – can integrate third party sensors/actuators, and have its sensors easily integrated into larger systems



Global presence in around 70 countries via experienced and trained distributor network



Mature technology development roadmap executed by a seasoned counterdrone team, ensuring solutions adapt to counterdrone market shifts

Numerous other differentiators



Substantial and growing in-house AI databases for RF, sensorfusion and optical/thermal AI



Deep sales pipeline and relationships with end users and channel partners, following multi-year nurturing and growth



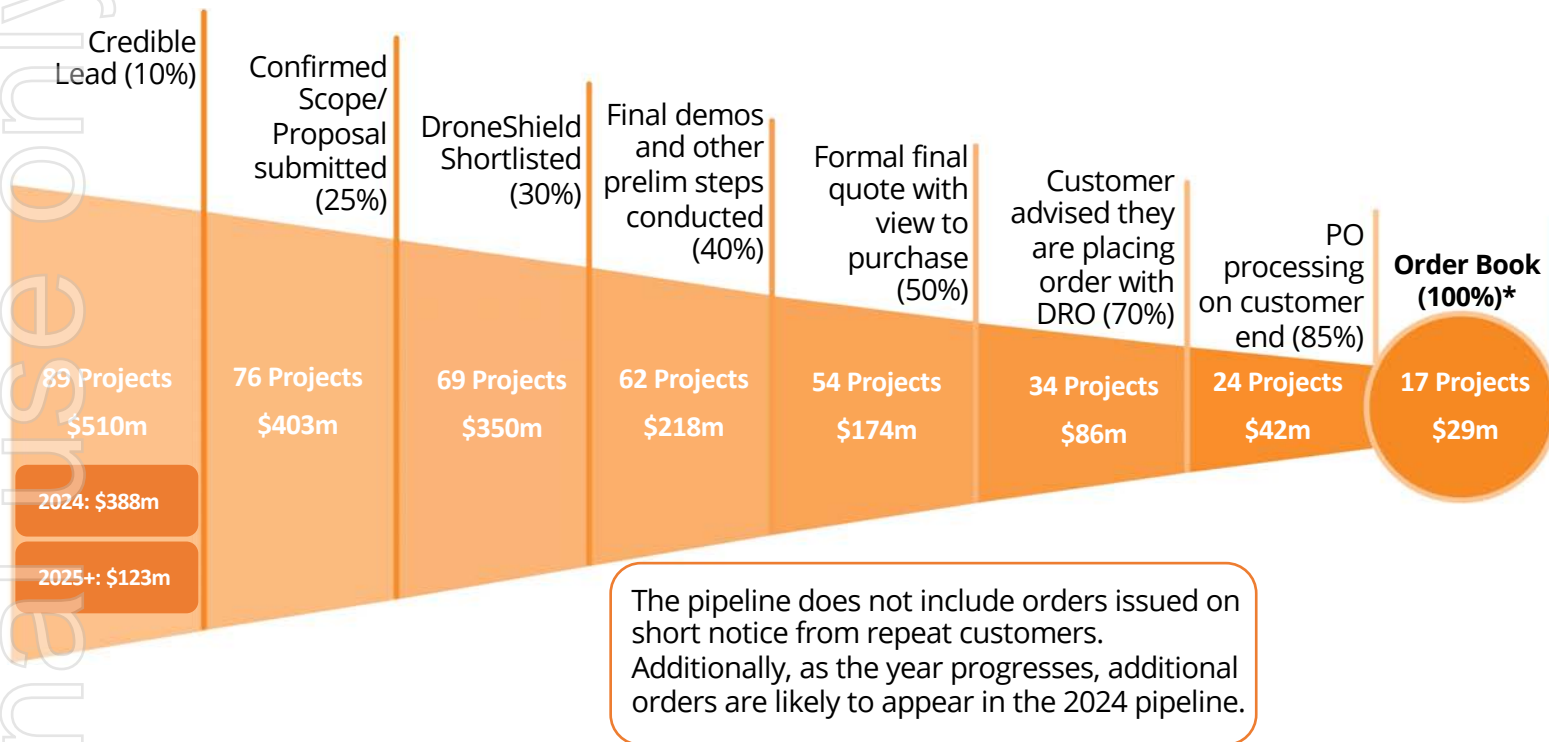
Security clearances, certifications, NATO Stock Numbers. Non-ITAR solutions.

Deep and High Quality Government Customer 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



P-Go vs P-Win

Probability weighting on a project is a blend of

1. P-Go (deal going ahead on time, without material changes) and
2. P-Win (probability of the deal awarded to DRO vs competitor)

P-Go is managed by building proactive relationships with customers and having a large amount of projects on the go.

P-Win is generally exceptional, based on numerous product differentiators.

Notes:

The pipeline is cumulative – eg, the 76 projects at Confirmed Scope stage are included as part of the 89 projects at the Credible Lead stage

* Order Book = current Purchase Orders (POs), less amount already paid to DRO (eg deposit) under those POs

2024 Pipeline of \$388m, with a further \$123m of projects tracked for 2025+



USA continues to be the major contributor to the sales and is the primary focus for the business, however the global pipeline is also growing rapidly



USA

2024 Pipeline: \$231m / 41 projects

- Multiple military/Govt order discussions
- Well advanced on several major acquisition programs



Europe

2024 Pipeline: \$106m / 15 projects

- Well advanced on several major acquisition programs
- Diverse pipeline across countries, products and use cases



United Kingdom

2024 Pipeline: \$23m / 4 projects

- Sales associated with BT partnership
- Primarily Ministry of Defence focused



Australia

2024 Pipeline: \$6m / 5 projects

- Execution continues on the \$10m, 2 year DoD contract
- Substantial upside, not currently in the pipeline, from Government allocating funding towards C-UAS (such as LAND156) and additional Ukraine aid



Other

2024 Pipeline: \$22m / 14 projects

- Diverse range of geographic and product opportunities
- Middle East continues as an active focus, however conservatively small allocation in the pipeline

- The pipeline includes existing defined sales opportunities at various stages of maturity
- The opportunities are unweighted, and measured as cash receipts to December 2024
- Quoted in Australian dollars. AUD.USD FX rate at 0.65, AUD.EUR FX rate at 0.60, AUD.GBP FX rate at 0.52
- Necessarily, not all, and there can be no assurance that any, of the Company's sales opportunities will result in sales



DRONESHIELD

Personal use only

Problem and Opportunity: Drones as a Threat

Drones - A Critical and Growing Threat Vector



Russia launches 'kamikaze' drone attack on Kyiv, killing 4 and hitting civilian infrastructure

By Victoria Butenko, Olga Voltovych and Yulia Kesaleva, CNN
Updated 3:09 PM EDT, Mon October 17, 2022

Drone activity at Augusta Correctional Center in Craigsville causes lockdowns

Drugs and weapons were given to the windows of the Donacona prison

Flights into Gatwick diverted after reports of drone near airport

Spokesperson says 12 incoming flights affected during almost hour-long suspension due to alert



© A British Airways plane at Gatwick. The carrier said one of its flights was diverted to Stansted before refuelling and returning to the West Sussex airport. Photograph: Gareth Fuller/PA

BORDER CRIME

Smugglers use drones to spy on agents in the field, Border Patrol says

by: Salvador Rivera
Posted: Mar 9, 2023 / 06:27 PM CST
Updated: Mar 16, 2023 / 07:30 PM CDT

LOCAL NEWS

Unauthorized drone causes temporary ground stoppage at Pittsburgh International Airport

KDKA NEWS
JUNE 9, 2023 / 12:53 PM / CBS PITTSBURGH

f t i

Forbes

FORBES > MONEY > PERSONAL FINANCE

The Drone Is Quickly Becoming A Federal Prison Contraband Nightmare

Walter Pavlo Contributor
I write and consult on federal criminal law and criminal justice.

Dec 27, 2022, 06:57pm EST

Follow

FORTUNE

POLITICS - WAR

How Hamas flooded Israel, killed hundreds and took another 100 hostage: A revolution in drone warfare dating back to Ukraine

BY MICHAEL J. ARMSTRONG AND THE CONVERSATION
October 9, 2023 at 3:49 PM GMT+2

f t i

100 drones a day in Sydney Airport no-fly zone


A sharp increase in drones flying in airport no-fly zones has commercial pilots on alert and the regulator erecting warning signs.

Pak smugglers switch to smaller, stealthier drones to drop drugs into Punjab

By Ravinder Vasudeva · Chandigarh

Aug 18, 2023 12:09 AM IST

Reason: Such drones can fly long distances and make comparatively less noise, thus making it harder for security agencies to detect these as compared to the large-sized drones.



Russia Hits Ukraine's Kyiv Region With Drone Attack

Ukraine's air-force command says it downed six Iranian-made drones over the south

Rising Tides of Military and C-UAS Spend Present Tailwinds for Continued, Accelerated Growth



Key Market Drivers



Rising Global Conflicts & Geopolitical Tensions



Proliferation of Cheap Combat & Consumer Drones



Escalation of Drone-Based Offensives



Advancements in AI & Autonomous Warfare Technology

DroneShield is the only pure-play C-UAS publicly listed company globally, providing the C-UAS sector exposure.



DroneSentry-X Mk2 at a US Army testing event

Driving an Urgent Need for Counter-Drone Solutions Across Both Military & Civilian Sectors



The Rapid Proliferation of Drones has Escalated the Potential for Disruptive Incidents...



Payload Delivery



Intel Gathering



Swarms



Nuisance Activity



Cyber Attacks

Commercial Airspace



Deepening the Demand for Robust Countermeasures, Positions DroneShield for Sector-wide Market Capture with its Sophisticated, Proprietary C-UAS Solutions

Growing Counter-Drone Applications Across End Markets

Military



Government Facilities



Law Enforcement



Protective Details



Airports



Stadiums



Commercial Venues



Energy Production



High Profile Events



Shipping / LNG Ports



Rescue / Fire Response



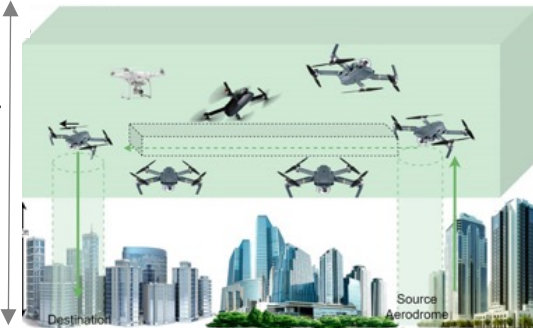
Correctional Facilities



UAM Corridor



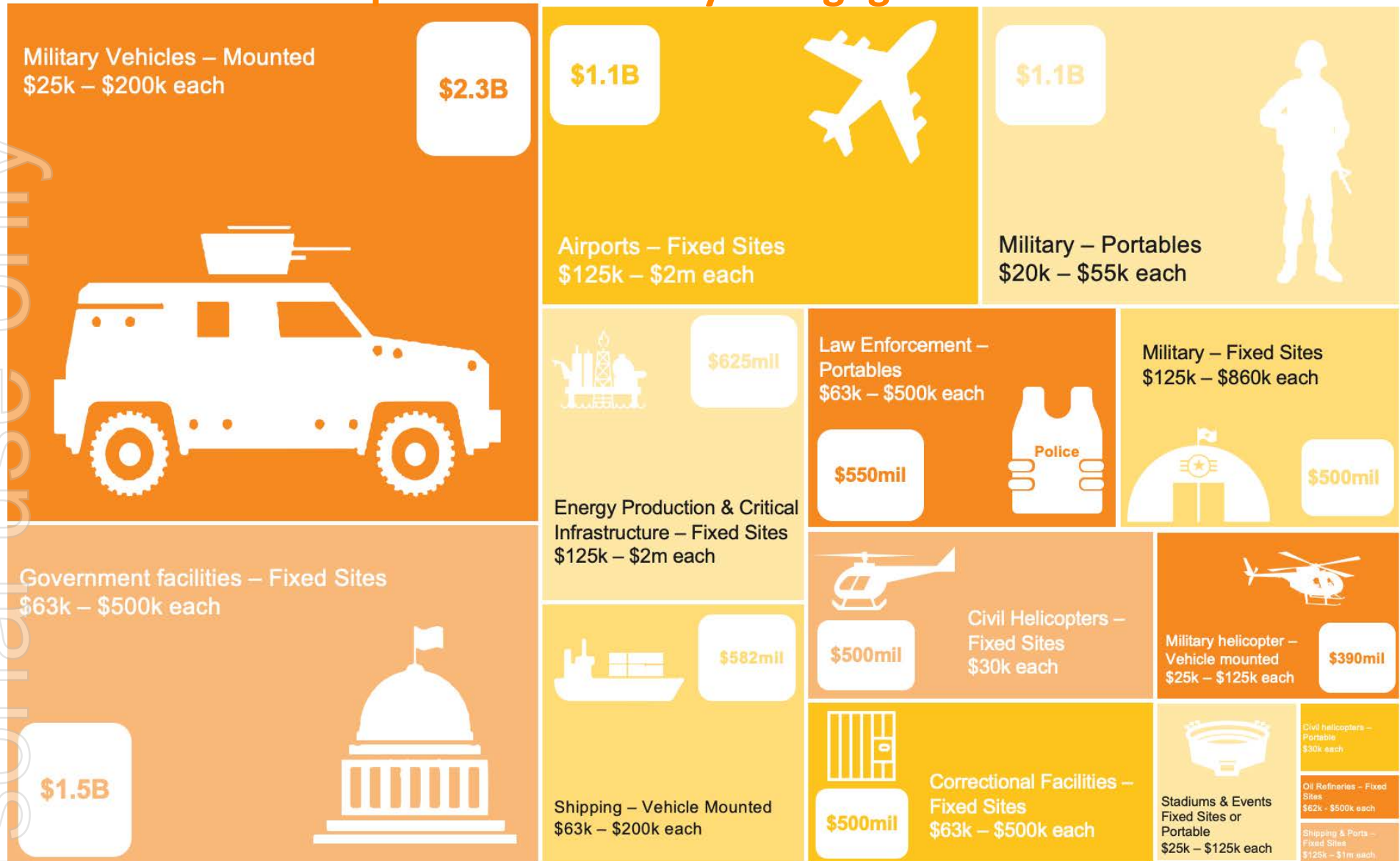
Low-Level Airspace



Vast and Growing TAM of >US\$10b



The C-UAS market penetration today is negligible at <1%



Note: All dollar figures are in US\$



DRONESHIELD

Personal use only



DroneShield Overview

The DroneShield Story: Emergence of an Industry Leader



1

**MARKET PIONEER IN COUNTER-
DRONE TECHNOLOGY AT THE
FOREFRONT OF INNOVATION...**



2

**...UNDERPINNED BY CUTTING-EDGE
PROPRIETARY AI-BASED SOFTWARE
CAPABILITIES...**



3

**...VALIDATED THROUGH TOP
TIER CUSTOMER BASE**



4

**EXCEPTIONAL BRAND AND
DIFFERENTIATED MARKET POSITION**



5

**AT A CRITICAL
INFLECTION POINT,
CAPITALIZING ON NUMEROUS
GROWTH VECTORS...**



6

**...EVIDENCED BY RAPIDLY SCALING
FINANCIAL PROFILE**



7

**LED BY A VISIONARY TEAM OF
INDUSTRY VETERANS WITH DEEP
INDUSTRY EXPERIENCE**



Summary



DroneShield Overview	<ul style="list-style-type: none">Founded in 2014 and listed on the ASX in 2016, DroneShield provides Artificial Intelligence platforms for protection against dronesHardware and software to detect and safely neutralise small drones used for warfare, terrorism, contraband delivery, and airport disruptionsKey customers include military, intelligence community, Homeland Security, law enforcement, critical infrastructure, prisons and airports globally
Business Model	<ul style="list-style-type: none">Three streams of revenue: hardware (drone detection and defeat devices), SaaS (device software updates) and R&DSales through an experienced in-house veteran salesforce with distribution partners across over 70 countriesSaaS is expected to become a significant proportion of overall revenue over the next 5 yearsR&D contracts are adjacent to the core technology, and contribute advanced capability in-house
SaaS via Proprietary AI Software Engines	<ul style="list-style-type: none">RFAI™ (radiofrequency spectrum engine), DroneOptID™ (optical AI engine), SFAI™ (sensorfusion AI engine)The engines undertake real-time, at the edge, detection and identification of drones and other potential threatsThe result is an increase in detection responsiveness, lower false positives and an increase in the speed at which new threats are detected, classified and tracked by DRO systemsCustomers receive regular software updates via enrolling in a SaaS model at the time of purchase of their systemsAll solutions except for radars and cameras hardware fully developed in-house, with no reliance on third party IP
Addressable Market	<ul style="list-style-type: none">US\$10 billion worldwide addressable marketRapidly improving and easily available drone technology is driving demand for counterdrone solutionsCurrent geopolitical conflicts make extensive use of drones by all sides
Growth Strategy	<ul style="list-style-type: none">Today, over 75% of revenues is derived from defenceDefence, intelligence community and border security will continue to be the key focus, however there is a major opportunity for growth into civilian airports, critical infrastructure, prisons, stadiums and corporates

Market Pioneer in Counter-Drone Technology at the Forefront of Innovation



Complete Multi-Mission Counter-Drone Arsenal with the Best Product for Every Scenario

Body-Worn			Vehicle / Stationary		Fixed Site		
							
DroneGun Mk3	DroneGun Mk4	DroneGun Tactical	RfPatrol Mk2	DroneSentry-X Mk2	DroneCannon	RfOne	DroneSentry

2023 Revenue

2%

older model

17%

% of total expected to rise in 2024

41%

% of total expected to reduce in 2024

29%

% of total expected to stay stable

6%

% of total expected to rise in 2024

5%

Smaller amount due to fixed sites being a smaller market at present. This will rise as defence bases, airports, prisons and similar customers commence adoption

Best in Breed, Proprietary Technology



Multi-Sensor Detection, ID and Tracking



World Class Detection Range



World Class Defeat Range

Protecting Against a Wide Range of Threats



Aerial Vehicles

Ground Vehicles

Surface Vehicles

Underwater Vehicles

With An Established Competitive Moat



Veteran Sales Force with deep market experience and strategic expertise



Top Tier Customer Base with prestigious US DoD recommendation

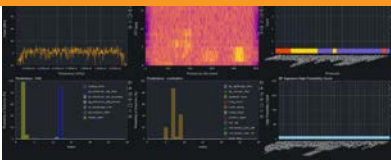


World Class Engineering Talent with 85+ in-house innovators developing & integrating IP in-house

Software (SaaS and R&D contracts)



Electronic Warfare and SIGINT



RFAI (Radiofrequency AI engine)



DroneSentry-C2 (incl SensorFusion AI) and DroneOptID






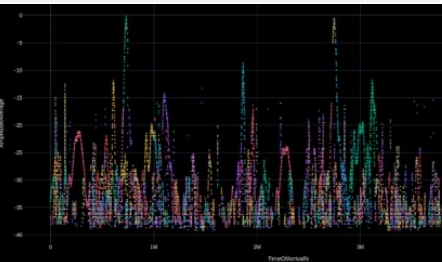
Global Presence across ~70 countries via experienced and trained distributor network



Robust Credentials including security clearances, best-in-class certifications, NATO stock numbers

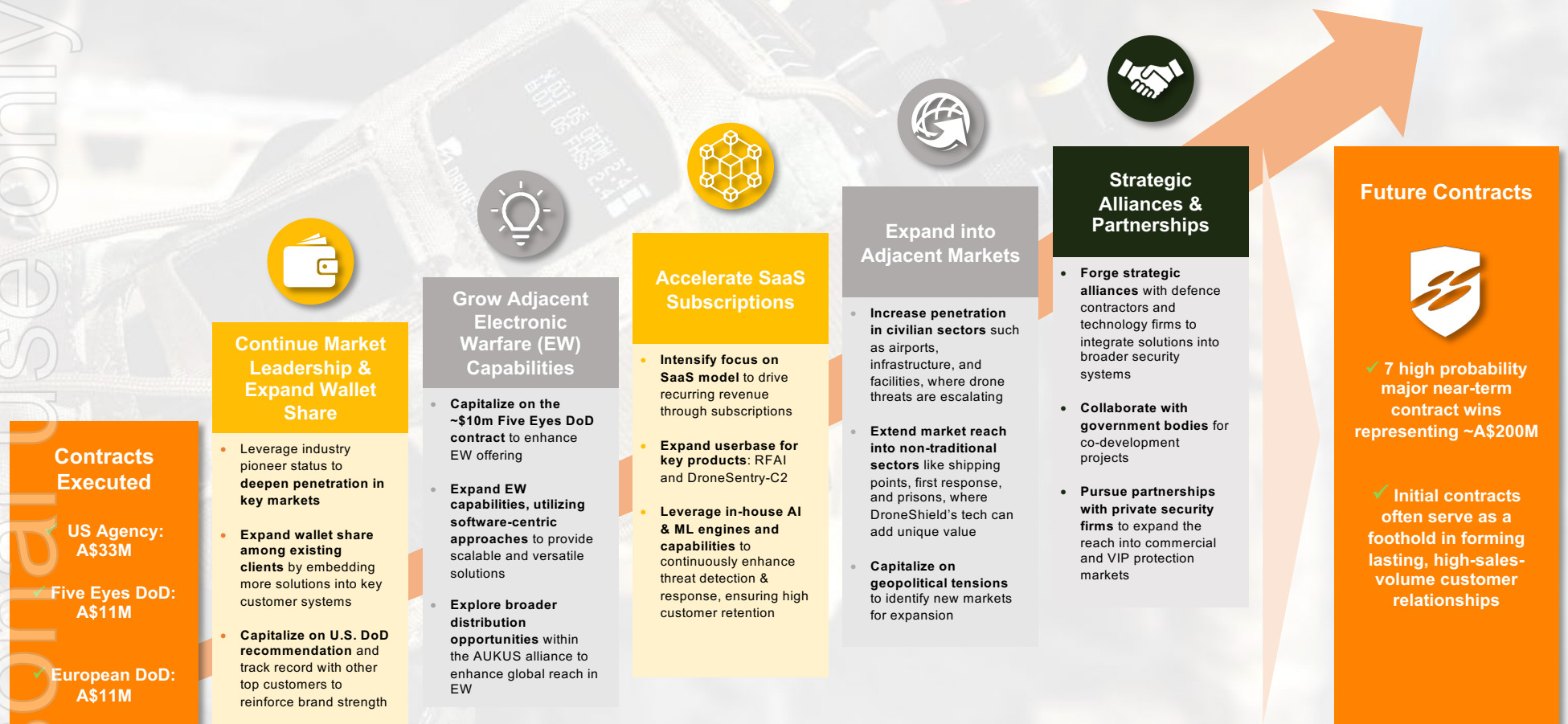
Explosive Growth Based on a Strong Foundation



2014-2017 Building the Foundation	2018-2022 “Green Shoots”	2023 Explosive Growth	2024-2028 Transforming to Next Level
<ul style="list-style-type: none"> Setting up in Australia and US ASX IPO (raising \$7m) R&D and productizing the initial product family: <ul style="list-style-type: none"> DroneGun Mk1 and Mk2 Acoustic detection sensors Team grows to 11 staff Global partner network setup C-UAS market in infancy Customers demos, trials and initial smaller orders From nil to \$300k/year annual revenue 	<ul style="list-style-type: none"> Multiple \$1m+ orders \$3.8m 2-year R&D contract \$9.6m and \$17m capital raises, \$3.7m Epirus investment Completing the product line-up: <ul style="list-style-type: none"> DroneGun Tactical RfPatrol Mk1 and Mk2 DroneSentry-X Refinement of DroneSentry Introducing SaaS model First-ever ACMA licence to manufacture jammers Team grows to 60 staff From \$1m to \$17m annual revenue 	<ul style="list-style-type: none"> \$33m U.S. Govt sale \$9.9m 2-year R&D contract Numerous other multi-million contracts \$40m capital raise in March 2023 to fund working capital and scale the team 105 staff in Sydney and Virginia Exploding market, with Ukraine highlighting the need for C-UAS products \$30m order backlog \$400m pipeline First profitable year 	<ul style="list-style-type: none"> 5-year target*: <ul style="list-style-type: none"> \$300-\$500m annual revenue 50% of revenue in SaaS and software R&D This revenue is expected to be supported by 130-150 staff
			

* There is no assurance that any of the Company's sales opportunities will result in sales.

At a Critical Inflection Point, capitalizing on numerous Growth Vectors



Personal use only























DRONESHIELD

Competitor Analysis

Exceptional Brand and Differentiated Market Position



										
Origin										
Integrator	✓	✓	✓	✓	✓	-	✓	-	-	-
DETECT										
Dismounted	✓	-	-	-	-	-	✓	-	-	-
Vehicle	✓	-	✓	-	-	-	✓	✓	✓	✓
Fixed Site	✓	✓	✓	-	✓	-	✓	✓	✓	✓
DEFEAT										
Dismounted	✓	-	-	✓	✓	✓	✓	-	-	-
Vehicle	✓	-	-	-	-	-	✓	✓	-	✓
Fixed Site	✓	✓	-	✓	-	-	✓	✓	✓	✓
COMMENTARY										
Platform information	<div>✓ Integrator via its Lattice platform</div> <div><ul style="list-style-type: none">Substantially an integratorAcquired AVT, a smaller integratorRoll up by Highlander Partners of Liteye, Black Sage and Radio Hill (in Feb 24)Integrator/C2 supplier, and handheld disruptorsFocus on law enforcementAcquired Aerial Armor Jan 23Handheld Dronekiller jammer gunLacks a full product suiteLower performance vs DROEuropean customer focusHandheld defeat is on-the-body based, creating potential issuesRF detect-and-defeat (via Citadel purchase)LOCUST laser defeatAcquired Verus Mar 23Offer an expensive, competing product to DroneSentryProtocol manipulation – similar legal restrictions to jamming, less reliability, no swarm protection</div>									



- ✓ Most extensive product range on the market
- ✓ Unrivalled versatility from handheld to fixed-site solutions
- ✓ Large IP portfolio and robust AI capabilities
- ✓ Battle-tested, superior performance

Note: Competitor analysis based on publicly available information



DRONESHIELD



Appendices

Geopolitical Environment Providing Market Tailwinds



Increased expenditure by Western Governments in response to the war in Ukraine

- US DoD proposed 2024 budget of over US\$840bn, a record peacetime amount¹
- Germany increasing spending to over 2% of GDP (from 1.53% in 2021), including a new EUR100bn fund to modernise military²
- Poland have announced a record 2023 Defence budget at 3% of GDP³
- Australia completed Defence Strategic Review (DSR), with expectations to increase the allocations to asymmetric, high-tech and greyzone warfare. The next step is the release of Integrated Investment Plan, which will lay out implementation blueprint of the DSR

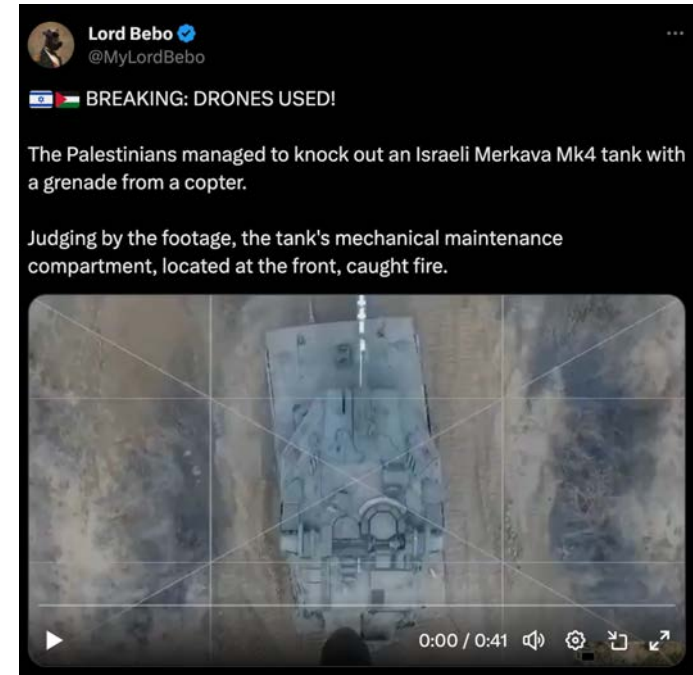
In Australia, the Government is seeking to rapidly grow sovereign defence capability, with several key focus areas directly matching DRO expertise, including counter-robotics, Electronic Warfare, and battlefield surveillance (ISR)

Record Defence and Security budgets, combined with a demonstrated use of drones by both sides in Ukraine for payload delivery, directing artillery strikes, collecting field intelligence and general use, has put increasing focus on both drone and counterdrone systems for all major militaries

Increasing global tensions and use of drones across hot zones, including Hamas attack on Israel, and in the Armenia/Azerbaijan ongoing conflict

DroneShield is one of very few fielded and proven counterdrone systems with US DoD recommendations and based in Australia and US, hence well positioned to supply to Western allies

Combined, these factors are expected to lead to meaningful and consistent order flow for DroneShield across near and medium term



Iranian Shahed drones used by the Russian military

¹ <https://www.cbo.gov/publication/59511#:~:text=The%20proposed%20budget%20for%20DoD,2024%20in%20the%20previous%20FYDP>.

² <https://www.reuters.com/business/aerospace-defense/germany-hike-defense-spending-scholz-says-further-policy-shift-2022-02-27/>

³ <https://www.trade.gov/market-intelligence/polands-defense-spending>

How a Counterdrone System Works



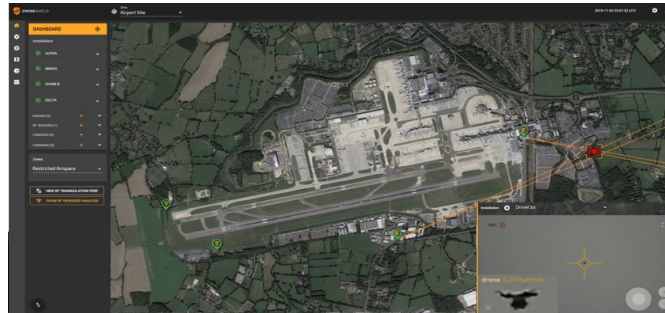
DroneShield Performs all 3 steps of the Process

DETECT



State of the art, multi-sensor drone **detection** products provide optimal detection and identification of drones and other UAS threats

ASSESS



Machine learning and AI based detection and classification software for near-real time **tracking** and **assessment** of drone threats

RESPOND







Respond / defeat technologies offer intelligent, responsive, non-kinetic solutions for the controlled management of threats

Counterdrone Detection Solutions



DroneShield uses Multi-sensor Drone Detection for Optimal Results, Unaffected by time of Day or Weather






	Radio Frequency	Radar*	Cameras*	Acoustic*
Imagery				
Overview	<ul style="list-style-type: none"> Foundational layer Detects drone comms protocols (via conventional RF library or an AI engine) 	<ul style="list-style-type: none"> Motion tracker - emits signals which are then reflected back to the radar by targets 	<ul style="list-style-type: none"> Electro-Optical (EO), Infrared (IR) and Thermal Video analytics and image capture identification of drone activity 	<ul style="list-style-type: none"> Compares noise of drone blades or motor to a database of acoustic signatures
Advantages	<ul style="list-style-type: none"> ✓ No interference with other sensors ✓ Tracks multiple targets ✓ Passive – cannot be “seen” ✓ Low false alarm rate ✓ Direction-finding capability ✓ Long ranges ✓ Cost effective 	<ul style="list-style-type: none"> ✓ Picks up drones without RF emissions ✓ Tracks multiple targets 	<ul style="list-style-type: none"> ✓ Best used for verification, classification and tracking of a target detected by other sensors ✓ Potential identification of payloads ✓ Provides “eye on target” 	<ul style="list-style-type: none"> ✓ Passive, cost effective ✓ Supporting sensor, filling gaps from other sensors
Disadvantages	<ul style="list-style-type: none"> ✗ Doesn't pick up RF-silent drones ✗ Requires firmware updates 	<ul style="list-style-type: none"> ✗ False alarms (birds etc) ✗ Is “seen” as emits energy ✗ Longer range detection is expensive ✗ Struggles with hovering drones 	<ul style="list-style-type: none"> ✗ Not well suited for detection on its own due to field-of-view vs distance trade-off ✗ Short ranges 	<ul style="list-style-type: none"> ✗ Short range ✗ False alarms ✗ Cannot locate or track ✗ Requires signature database updates

* Third party hardware, integrated into DroneShield combined multi-sensor solution, with differentiated offering via AI-powered software layers

Counterdrone Defeat Solutions



DroneShield uses smart jamming which has advantages over other technologies, particularly, in its use across civil and military applications, and does not compete against large Defence Primes

	Safe – “soft kill” <i>No intentional damage to the drone</i>			Kinetic – “hard kill” <i>Physical force used with potential for destructive damage</i>	
	DroneShield Offering	Exotic Tech, Limited Reliability		Large Defence Primes Dominance Area	
	Smart Jamming	Spoofing/Cyber/ Protocol Manipulation	Counter-Drone Drones	Projectile Fire Kinetic Systems	Directed Energy (Laser or Microwave)
Imagery					
Overview	<ul style="list-style-type: none"> Radio waves force a drone to fly back, hover, or land 	<ul style="list-style-type: none"> Hijacks the control of a drone 	<ul style="list-style-type: none"> “Kamikaze” or “catching” drones 	<ul style="list-style-type: none"> Remote weapons systems shoot down drones 	<ul style="list-style-type: none"> Lasers and high-power microwave systems “dazzle” or destroy a drone
Advantages	<ul style="list-style-type: none"> ✓ Universal effectiveness ✓ 360-degree defeat coverage ✓ Effective against swarms ✓ Civil and military environments 	<ul style="list-style-type: none"> ✓ Allows for the re-routing and re-direction of malicious drone flight paths ✓ Applications in both civil and military environments 	<ul style="list-style-type: none"> ✓ “Catching” the drone is available to a wider range of customers 	<ul style="list-style-type: none"> ✓ Effective against Govt-grade drones ✓ Established technology for military operations 	<ul style="list-style-type: none"> ✓ Effective against Govt-grade drones ✓ Systems can be mounted on naval vessels for complex defence systems
Disadvantages	<ul style="list-style-type: none"> ✗ Potential for collateral interference (for a “dirty” jammer) 	<ul style="list-style-type: none"> ✗ Not effective against all drones ✗ Higher chance of collateral damage ✗ 30-90sec per drone to engage, can’t engage multiple drones same time 	<ul style="list-style-type: none"> ✗ Generally slow to deploy ✗ Not effective against swarms 	<ul style="list-style-type: none"> ✗ Collateral damage ✗ Unsuitable for use in a civil environment 	<ul style="list-style-type: none"> ✗ In early stages ✗ Only available for military applications

Benefits and Applications of Safe, Layered, Counterdrone Systems over Kinetic Systems



Safe Counter-drone Systems Have Many Advantages over Kinetic Counter-drone Systems, which are only Practical for Deployment in War-like Scenarios

Avoidance of Collateral Damage



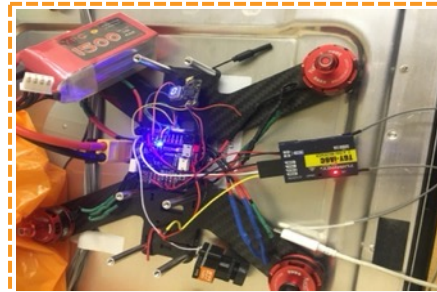
- DroneShield safe defeat solutions force drones to pre-set emergency protocols causing the drone to fly back to its starting point, hover, or land, safely neutralizing the threat
- Alternatively, kinetic solutions could see a destroyed drone fall on crowds of people or inflict “friendly fire” from projectiles

Evidence for Legal Prosecution



- A drone which has been forced to land can be collected by local law enforcement to track the whereabouts of its controller
- As drones are usually accompanied by an image recording device, this can be used as legal evidence to prosecute offenders

Intelligence Gathering



- Drones can often carry sensitive instruments or technology
- When forced to land, this technology can be exploited by military personnel to aid in intelligence gathering operations

Multi-Platform with Scale Benefits



- Safe solutions can be carried on-the-man, mounted on light skinned vehicles and provide continuous passive protection unconstrained by ammunition stores
- Kinetic counter-drone solutions are often mounted on heavy, remote weapon stations and constrained by magazine depth

DroneShield AI Software Sees Through Noise – Radiofrequency Spectrum



World Leading Proprietary RF AI Platform for Protection Against Advanced Threats, such as Drones

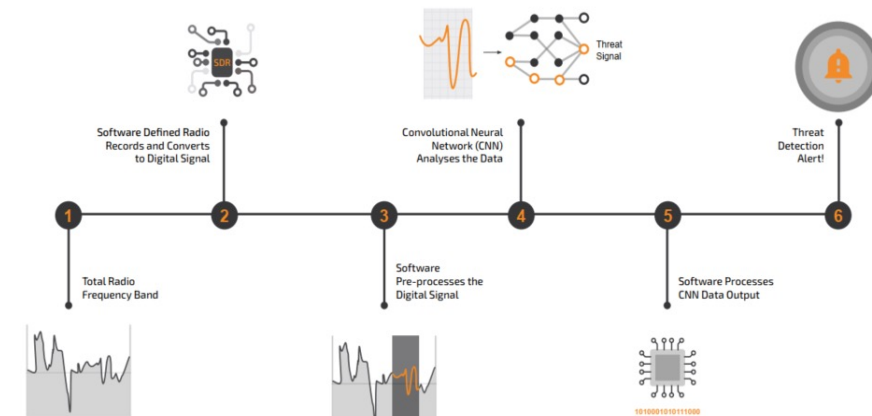
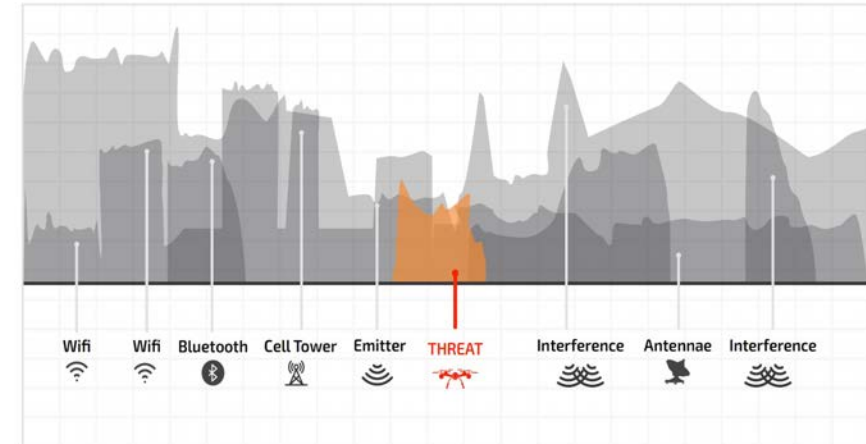
- Drones operate in the densest parts of the Radio Frequency (“RF”) Spectrum with “noise” coming from all kinds of other emitters including Wi-Fi, Bluetooth, cell towers and antennas
 - Drone detection technology needs to be able to pull a signal out of all the other “noise”, while maintaining low false alarms

- DroneShield has developed a cutting-edge spectrum awareness capability using proprietary AI techniques through its RFAI™ engine

The RFAI™ engine receives quarterly updates (intra-quarter updates also available) which get pushed to the devices globally

- Why is this more advanced than the cell phone technology?

- Need to detect all protocols, all the time, on all bands, while cell phones are specific dedicated protocols on specific channels
- Cell phones are a well-defined protocols with defined timing, frequency, and identifying signals to lock onto. This allows to optimize the system from the hardware bands being made narrow band so there is no interference. The Government licensed bands allow no interference sources, so the algorithms are defined, which means the math is defined
- In C-UAS, there is no set sample rate, sample frequency, bands, licensed channel control, so there is no optimization about any one algorithm



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

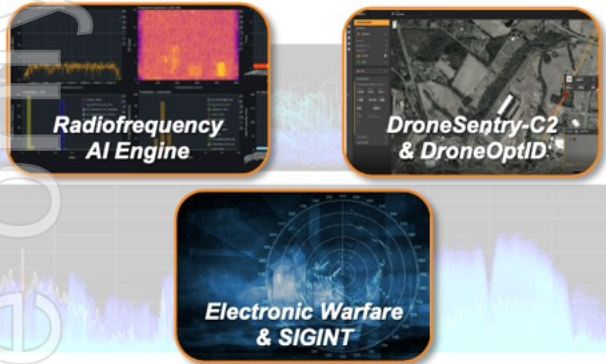
- DroneOptID uses the latest in Computer Vision technology to detect, identify and track drones in real time, cutting through all the other “noise”
- The software takes geographical and environmental data from other sensors in order to slew and validate a drone threat. Once the drone is in the field 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



Cutting-Edge Proprietary AI-Based Software Capabilities



ROBUST SOFTWARE SUITE



INTEGRATED ACROSS THE DRONESHIELD ECOSYSTEM



POWERED BY BEST-IN-CLASS TECHNOLOGY



Advanced Computer Vision & ML to detect and track drones in complex environments



Sophisticated, Proprietary Algorithms to enhance real-time threat analysis and response



Substantial & Growing Threat Database leverages 35,000+ database of drone samples to precisely classify drones



Regular Software Updates maintains technological edge and responsiveness

DRONESHIELD'S SOFTWARE IN ACTION – CASE STUDIES

U.S. Navy



- **Deployment:** DroneSentry-X and DroneSentry-C2 on the U.S Navy's M80 Stiletto vessel for 6 weeks
- **Technology:** Powered by RFAI, DroneShield's AI/ML signal detection and classification engine
- **Capabilities Demonstrated:**
 - ✓ Advanced AI/ML signal detection & classification with RFAI, enabling robust detection of a diverse range of unmanned threats
 - ✓ High-performance adaptability in various sea states against swarms, showcasing sophisticated AI-driven response in dynamic environments

IRONMAN Sports Event

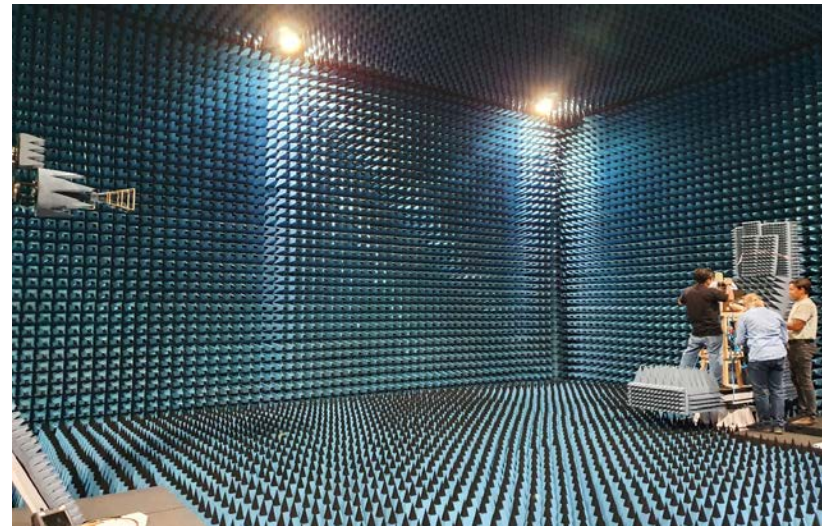
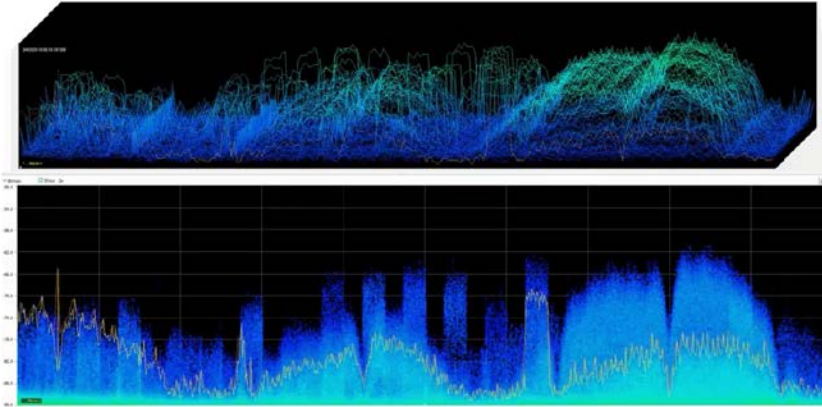


- **Deployment:** DroneSentry and DroneOptID, used for the 2nd consecutive year at the event
- **Technology:** DroneOptID for AI-powered detection, identification, and tracking
- **Capabilities Demonstrated:**
 - ✓ Leveraged AI to provide instant notifications to security personnel, enabling prompt response to potential aerial threats
 - ✓ Software system was able to integrate with existing security measures at the event, demonstrating its flexibility



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 July 2023, DroneShield received a \$9.9 million, 2-year R&D contract with the Five Eyes Department of Defence
 - Contract was awarded on a sole source basis
- Additional, and larger, contracts are expected, as DroneShield builds up its AI capabilities in the EW and Signals Intelligence arena



Visionary Team of Industry Veterans with Deep Industry Experience



Peter James

Independent Non-Executive
Chairman



Oleg Vornik

CEO and Managing Director



Jethro Marks

Independent Non-Executive
Director



Carla Balanco

CFO and Joint Company
Secretary



Red McClintock

Sales Director



Tom Branstetter

U.S. Director of Business
Development



Angus Bean

Chief Technology Officer



Lawrence Marychurch

Vice President, Design



Paul Cenoz

General Counsel and Joint
Company Secretary



Matt McCrann

U.S. CEO



Raffael Battner

Operations Manager



Carl Norman

Vice President, Embedded
Systems



Majority of the DroneShield senior team has been with the business for most of its history, delivering rapid growth.

Capital Structure



Capital Structure (approximately 11,000 shareholders) - 27 February 2024

DRO Shares on Issue	612,153,611
DRO Options on Issue ¹	61,969,000
Fully Diluted Shares on Issue	674,122,611
Fully Diluted Equity Value ²	\$509.0m
Cash (as at 31 December 2023)	\$57.9m
Debt	\$nil
Fully Diluted Enterprise Value	\$451.1m

¹ Options issued at various strike price and maturities.

² At 75.5c per share as at 27 February 2024

Director and Employee Shareholdings

Oleg Vornik, CEO and Managing Director	10,456,038 shares 15,000,000 options	3.78%*
Peter James, Independent Non-Executive Chairman	6,532,030 shares 3,000,000 options	1.41%*
Jethro Marks, Independent Non-Executive Director	1,292,901 shares 1,500,000 options	0.41%*
Other Employees	26,411,990 shares 36,769,000 options	9.37%*

Notes: Percentages are on a fully diluted basis.

Research Coverage



A security guard of Brazil's presidency uses DroneGun Tactical against a drone that was flying near the Planalto Palace and the National Congress in Brasilia, Brazil, January 8, 2023 at the Brazil Presidential Inauguration

Industry and Media Recognition



ASX-listed DroneShield wins US Defence contract



Matthew Cranston
United States correspondent

Oct 5, 2022 - 6:04pm

Washington| ASX-listed anti-drone technology company DroneShield has won a \$1.8 million contract with the US Department of Defence and says the win will open doors to [significantly larger contracts](#) with the world's biggest military.

In what is the company's largest US sale to date, DroneShield will provide dozens of DroneGun MKIIIs – a two kilogram pistol that sends a signal which neutralises an attacking drone or drone swarm.

RELATED QUOTES



Tess Bennett
Technology reporter

Aug 9, 2023 - 1:32pm

Save Share

The CEO of an Australian company that builds rifle-like devices that force drones out of the sky says investors should overcome ethical concerns and get behind the defence industry because rising global tensions mean World War III is likely in our lifetimes.

Oleg Vornik, chief executive of ASX-listed DroneShield added that although his drone guns don't hurt people or even the flying robots they bring down, Australia needs to be as self-reliant as possible, which meant building a strong private defence industry.



DroneShield boss Oleg Vornik warns Australia is the target of "grey zone warfare" that is being waged via cyber attacks. Bruce Gilman

DroneShield (ASX:DRO) selected for ISREW panel



Shares soar as US government buys up Aussie company's anti-drone tech

Nick Bonnybody
Technology writer

Jul 17, 2023 - 5:13pm

Save Share

Shares in ASX-listed defence technology company DroneShield have soared 19 per cent, after it struck a \$33 million deal to sell equipment to the United States Department of Defence, underscoring the importance of the versatile unmanned vehicles to modern warfare.

DroneShield makes systems that stop drones from communicating with

RELATED QUOTES

DRO \$0.220

1 year 1 day

0.420



The Aussie 'drone gun' bringing Mexican cartels down to earth



Homegrown defence company helping Ukraine take out Russian drones

afr.com • 1 min read

Legal Disclaimer



These presentation materials (the Presentation Materials) have been prepared by DroneShield Limited (the Company). By receiving the Presentation Materials, you acknowledge and represent to the Company that you have read, understood and accepted the terms of this disclaimer. It is the responsibility of all recipients of these Presentation Materials to obtain all necessary approvals to receive these Presentation Materials and receipt of the Presentation Materials will be taken by the Company to constitute a representation and warranty that all relevant approvals have been obtained.

NOT AN OFFER

These Presentation Materials are for information purposes only. The Presentation Materials do not comprise a prospectus, product disclosure statement or other offering document under Australian law (and will not be lodged with the Australian Securities and Investments Commission) or any other law. The Presentation Materials also do not constitute or form part of any invitation, offer for sale or subscription or any solicitation for any offer to buy or subscribe for any securities nor shall they or any part of them form the basis of or be relied upon in connection therewith or act as any inducement to enter into any contract or commitment with respect to securities. In particular, these Presentation Materials do not constitute an offer to sell or a solicitation to buy, securities in the United States of America.

NOT INVESTMENT ADVICE

The Presentation Materials are not investment or financial product advice (nor tax, accounting or legal advice) and are not intended to be used for the basis of making an investment decision. Recipients should obtain their own advice before making any investment decision.

SUMMARY INFORMATION

The Presentation Materials do not purport to be all inclusive or to contain all information about the Company or any of the assets, current or future, of the Company. The Presentation Materials contain summary information about the Company and its activities which is current as at the date of the Presentation Materials. The information in the Presentation Materials is of a general nature and does not purport to contain all the information which a prospective investor may require in evaluating a possible investment in the Company or that would be required in a prospectus or product disclosure statement or other offering document prepared in accordance with the requirements of Australian law or the laws of any other jurisdiction, including the United States of America. The Company does not undertake to provide any additional or updated information whether as a result of new information, future events or results or otherwise.

FORWARD LOOKING STATEMENTS

Certain statements contained in the Presentation Materials, including information as to the future financial or operating performance of the Company and its projects, are forward looking statements. Such forward looking statements:

- a) are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies;
- b) involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward looking statements; and
- c) may include, among other things, statements regarding estimates and assumptions in respect of prices, costs, results and capital expenditure, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions.

The Company disclaims any intent or obligation to publicly update any forward looking statements, whether as a result of new information, future events or results or otherwise.

The words “believe”, “expect”, “anticipate”, “indicate”, “contemplate”, “target”, “plan”, “intends”, “continue”, “budget”, “estimate”, “may”, “will”, “schedule” and similar expressions identify forward looking statements.

All forward looking statements contained in the Presentation Materials are qualified by the foregoing cautionary statements. Recipients are cautioned that forward looking statements are not guarantees of future performance and accordingly recipients are cautioned not to put undue reliance on forward looking statements due to the inherent uncertainty therein.

NO LIABILITY

The Company has prepared the Presentation Materials based on information available to it at the time of preparation. No representation or warranty, express or implied, is made as to the fairness, accuracy or completeness of the information, opinions and conclusions contained in the Presentation Materials. To the maximum extent permitted by law, the Company, its related bodies corporate (as that term is defined in the Corporations Act 2001 (Commonwealth of Australia)) and the officers, directors, employees, advisers and agents of those entities do not accept any responsibility or liability including, without limitation, any liability arising from fault or negligence on the part of any person, for any loss arising from the use of the Presentation Materials or its contents or otherwise arising in connection with it.



DRONESHIELD

Artificial Intelligence For Multi-Mission Threat Protection and C-UAS Defence

DroneShield Limited (ASX:DRO)
Investor Presentation

Oleg Vornik
CEO and Managing Director
oleg.vornik@dronesield.com
+61 2 9995 7280

