DRONESHIELD

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

DroneShield Limited (ASX:DRO)
Investor Presentation
23 October 2023

3Q23 Update

- Record contracts and rapidly growing cash receipts
  - **$48.2 million cash receipts** YTD to 20 Oct 2023, **up 3x** vs entire FY22
  - **$43.3 million revenue** YTD to 20 Oct 2023, **up 2.5x** vs entire FY22
  - **$10.2 million record quarterly cash receipts** (incl $2.5 million in grants)
  - $33 million US Government sale announced in July, already substantially delivered (full delivery by end of year), with the next milestone payment in November – approx. $16 million in payments remaining

- **Cash balance of $50.1 million** as of 20 October, no debt or convertibles

- $51 million contracted backlog and pipeline of over $400 million[*]

- Substantially completed expansion of the team to enable build, delivery and support of materially larger orders
  - Moving to a larger Sydney facility (2.5x current floor space) prior to year-end, plus supply chain partners been rapidly expanding
  - Positions the company for $300-400m annual production capacity for 2024
  - 95 team members including over 75 engineers

- Favourable macro 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

DroneShield at AUSA 2023 exhibition in October 2023.

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

Continued Rapid Growth ($m, Dec YE)

The business stands at an inflection point

Strong Revenue Growth (A$m)

~7x growth over Q3 2022

					43.3
1.2	3.6	5.6	10.6	16.9	39.7
				5.7	
2018	2019	2020	2021	2022	2023

■ FY ■ Q1-Q3 ▨ Up to 20 Oct 23
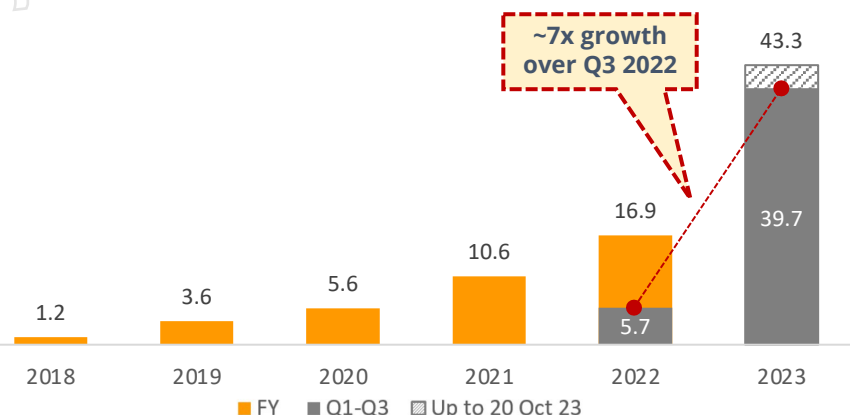
Rapid Cash Receipt Growth (Sales + Grants) (A$m)

~2.5x growth over Q3 2022

					48.2
1.8	3.7	5.4	14.8	15.7	25.5
				10.9	
2018	2019	2020	2021	2022	2023

■ FY ■ Q1-Q3 ▨ Up to 20 Oct 23

SaaS Revenue (A$000)

~3x growth over Q3 2022

					663
38	2	17	189	331	
				214	
2018	2019	2020	2021	2022	2023

■ FY ■ Q1-Q3

Rapidly Improving P&L (A$m)

82% improvement

2018	2019	2020	2021	2022
(6.3)	(7.7)	(5.9)	(5.3)	(0.9)
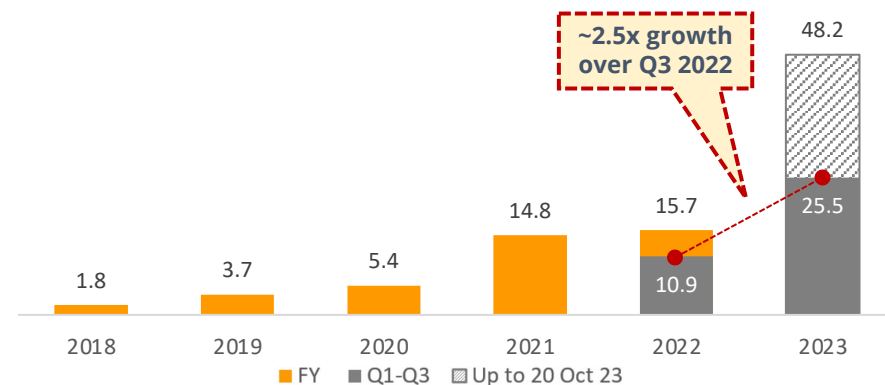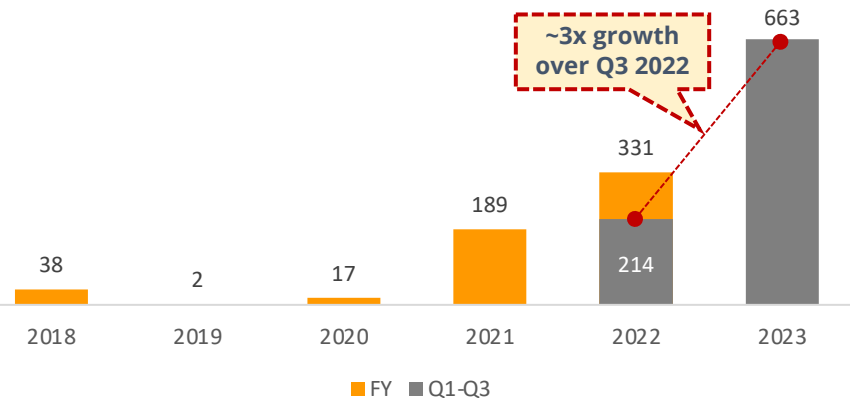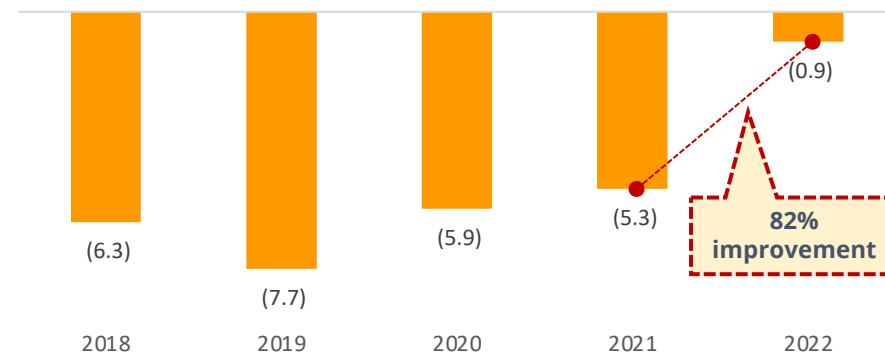
* SaaS model was fully introduced in 2021

3

DroneShield "Secret Sauce"

C-UAS pioneer, full in-house suite of products, with a 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

- ✓ **75+ in-house engineers (out of team of 95) 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 counterdrone 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/effectors, and have its sensors easily integrated into larger systems**

- ✓ **Global presence in around 100 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**

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 Voitovych and Yulia Kesaieva, CNN
Updated 3:09 PM EDT, Mon October 17, 2022

Drone activity at Augusta Correctional Center in Craigsville causes lockdowns

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

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

LOCAL NEWS

Unauthorized drone causes temporary ground stoppage at Pittsburgh International Airport

KDKA NEWS

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.

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

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.

Death by DRONE

THEY'RE CHEAP,
EASY TO GET AND POTENTIALLY LETHAL—
A BAD COMBO
IN THE WRONG HANDS

Saudi Arabia Reveals Extent Of Damage To Oil Plants After Drone Strike

THE WALL STREET JOURNAL.

Russia Hits Ukraine's Kyiv Region With Drone Attack

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

Why is the Malicious Use of Drones a Threat?

The widespread adoption of drone technology has increased the risk and prevalence of disruptive use

Payload Delivery

- **Attacks:** Dropping harmful / explosive payloads (including chemical or biological substances) or creating damage via collision
- **Smuggling:** Moving contraband into sensitive zones such as prisons

Intelligence Gathering

- **Directing Attack:** Reporting enemy target location on the battlefield to direct forces
- **Spying and Tracking:** Obtaining video, images and track movements of personnel
- **Surveillance:** Using drone images and other payload data to enable reconnaissance

Nuisance Activity

- **Infrastructure Disruption:** Using drones to jeopardise the safe operation of major facilities such as airports
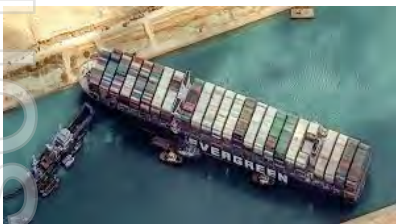
Cyber and Ransom Attacks

- **Corporates, Ships, Facilities:** Hack into control networks via proximity intrusion with a drone, and demand ransom or cause terrorist attack

Counterdrone: US$10bn Diverse Addressable Market

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
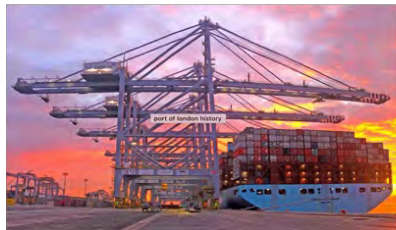
Rescue / Fire Response

Correctional Facilities

How a Counterdrone System Works

DroneShield performs all 3 steps of the process

Step 1	Step 2	Step 3

Detect

Assess

Respond

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

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

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

Geopolitical Environment Providing Market Tailwinds

- Increased expenditure by Western Governments in response to the war in Ukraine
    - US DoD increasing 2023 budget to over US$800bn, a record peacetime amount[1]
    - Germany increasing spending to over 2% of GDP (from 1.53% in 2021), including a new EUR100bn fund to modernise military[2]
    - Poland have announced a record 2023 Defence budget at 3% of GDP[3]
    - Australia completed Defence Strategic Review, with expectations to increase the allocations to asymmetric, high-tech and greyzone warfare

- 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

Lord Bebo @MyLordBebo

🇮🇱🇵🇸 BREAKING: DRONES USED!

The Palestinians managed to knock out an Israeli Merkava Mk4 tank with a grenade from a copter.

Judging by the footage, the tank's mechanical maintenance compartment, located at the front, caught fire.

0:00 / 0:41
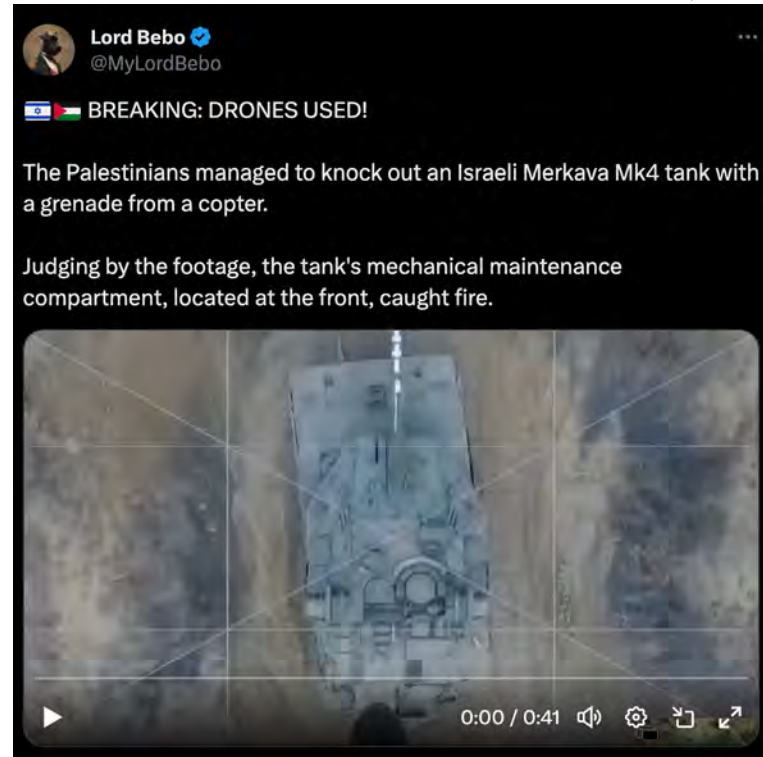
Iranian Shahed drones used by the Russian military

[1] https://news.am/eng/news/711941.html
[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

DRONESHIELD

personal use only

DroneShield Overview

Executive Summary

DroneShield Overview	• Founded in 2014 and listed on the ASX in 2016, DroneShield provides **Artificial Intelligence platforms** for **protection against drones** • **Hardware and software** to detect and safely neutralise small drones used for warfare, terrorism, contraband delivery, and airport disruptions • **Key customers** include military, intelligence community, Homeland Security, law enforcement, critical infrastructure, prisons and airports globally
Business Model	• **Three streams of revenue**: hardware (drone detection and defeat devices), SaaS (device software updates) and R&D • Sales through an **experienced in-house veteran salesforce with distribution partners across over 100 countries** • SaaS is expected to become a **significant proportion of overall revenue** over the next 5 years • R&D contracts are adjacent to the core technology, and contribute advanced capability in-house
SaaS via Proprietary AI Software Engines	• **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 threats • The 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 systems • Customers receive **regular software updates** via enrolling in a SaaS model at the time of purchase of their systems • All solutions except for radars and cameras hardware fully developed in-house, with no reliance on third party IP
Addressable Market	• **US$10 billion** worldwide addressable market • Rapidly improving and easily available drone technology is **driving demand for counterdrone solutions** • **Current geopolitical conflicts make extensive use of drones by all sides**
Growth Strategy	• Today, over **75% of revenues is derived from defence** • Defence, 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

Investment Highlights

Leader in Counterdrone	World leading provider of state-of-the-art counterdrone solutions and electronic warfare systems used in a diverse array of critical end markets
Proprietary AI-Based Platform	Full-scale hardware and SaaS offering used to detect, assess, and safely counteract threats from unmanned aerial systems
Large and Growing Market	Leverage to the global defence and security technology sector; $10bn counterdrone addressable market, in addition to electronic warfare and defence AI markets
High Quality Sales Pipeline	Sales pipeline of over $400m with over 80 qualified projects at different stages; over $51m in contracted orders currently being fulfilled
Recurring Customer Base	Best-in-class customer base including the Australian Department of Defence, US DoD, US State Department and others
Rapidly Scaling Financial Profile	The business is at an inflection point, with a record $42m in YTD cash receipts
Fully Funded for Growth	Fully funded for growth with $40m raised in March 2023; spending geared towards rapid scaling of inventory and operations to meet high demand

DroneShield: Complete Proprietary Hardware and Software

High IP, yet mass-production hardware, with a software subscription platform and Electronic Warfare work

- Company-owned production facility, supplemented by outsourced manufacturers, to ensure ability to manage large hardware orders
- The focus is on software subscriptions, with hardware fleet serving as an enabling platform

Hardware with Embedded Software and Associated Services

Dismounted & Body-Worn Counterdrone Solutions				Vehicle / Ship / Fixed Site Counterdrone Solutions	
DroneGun Mk3	DroneGun Mk4	DroneGun Tactical	RfPatrol Mk2	DroneSentry-X Mk2	DroneSentry
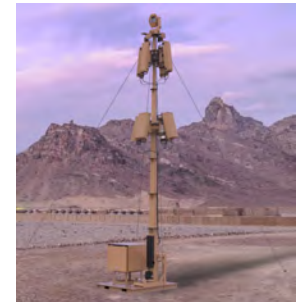
Software (SaaS and R&D contracts)

Electronic Warfare and SIGINT	RFAI (Radiofrequency AI engine)	DroneSentry-C2 and DroneOptID
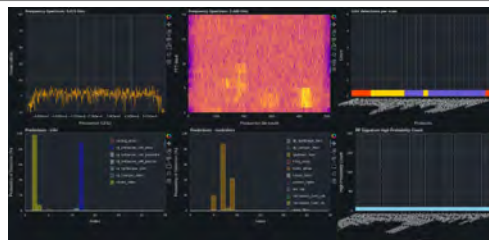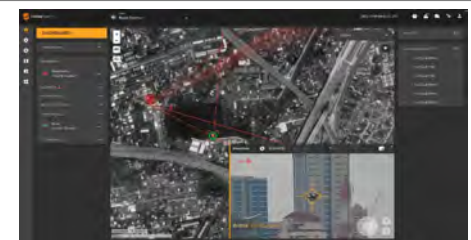
Explosive Growth Based on a Strong Foundation

2014-2017 Building the Foundation	2018-2022 "Green Shoots"	2023 Explosive Growth	2024-2028 Transforming to Next Level

• Setting up in Australia and US
• ASX IPO (raising $7m)
• R&D and productizing the initial product family:
  - 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
	• 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:
	  - 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
		• $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
		• 95 staff in Sydney and Virginia
		• Exploding market, with Ukraine highlighting the need for C-UAS products
		• $51m order backlog
		• $400m pipeline
			• 5-year target*:
			  - $300-$500m annual revenue
			  - 50% of revenue in SaaS and software R&D
			• This revenue is expected to be supported by 120-150 staff

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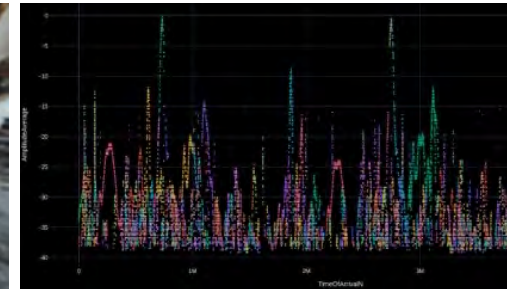
Competitor Analysis

Competitor Analysis

DroneShield is the only global provider of its own individual sensors, integrated into a complete system, fully in-house

	DroneShield	Anduril	CACI	Liteye / Black Sage	Dedrone / Aerial Armor	Electronic Warfare	Radio Hill	BlueHalo	SRC	D-Fend
Origin	AUS / USA	USA	USA	USA	GER / USA	USA	USA	USA	USA	ISR
Integrator	✓	✓	✓	✓	✓	-	-	-	-	-
Detect										
Dismounted	✓	-	-	-	-	-	-	-	-	-
Vehicle	✓	-	✓	-	-	-	-	✓	✓	✓
Fixed Site	✓	✓	✓	-	✓	-	-	✓	✓	✓
Defeat										
Dismounted	✓	-	-	✓	✓	✓	✓	-	-	-
Vehicle	✓	-	-	-	-	-	-	✓	-	-
Fixed Site	✓	✓	-	✓	-	-	-	✓	✓	✓
Comment										
Platform information	✓ Most extensive product range in the market ✓ Large IP portfolio ✓ Leading performance	✓ Integrator-only via its Lattice platform	• Substantially an integrator • Acquired AVT, a smaller integrator	• Highlander Partners (Texas PE) acquired both Liteye and Black Sage • Integrator/C2 supplier	• Lower-performance technology • Focus on law enforcement • Acquired Aerial Armor Jan 23	• Handheld Dronekiller jammer gun • Lacks a full product suite	• Handheld DroneBuster jammer gun • Lacks a full product suite	• Titan RF detect-and-defeat (via Citadel acquisition) • LOCUST laser defeat • Acquired Verus Mar 23	• Offer an expensive, competing product to DroneSentry	• Use protocol manipulation approach – similar legal restrictions to jamming, but less reliability and no swarm protection
Detect	RF, EO / IR, Radar	RF, EO / IR, Radar	RF, EO / IR, Radar	RF, EO / IR, Radar	RF, EO / IR, Radar	-	-	RF	EO / IR, RF, Radar	Protocol manipulation
Defeat	RF smart jamming	Drone on drone – Anvil product	-	Catching net, RF jamming	RF jamming	RF jamming	RF jamming	RF jamming, Laser	RF jamming	Protocol manipulation
Geography	Global	USA, UK, Australia	USA	USA	Global	USA	Global	USA	USA	Global
Technology Portfolio	RF, EW, AI, sensorfusion, computervision	Sensor integration	EO / IR sensors, gimbals, RF	Sensor integration	RF	Waveforms	RF	RF, Laser	RF, EW, radar	Protocol manipulation

Key Execution Priorities and Growth Strategy

Leadership in Counterdrone, Grow Adjacent Capabilities and SaaS

Mission: Making the world a safer place through mass deployments of drone detection and neutralization systems

Three-part Strategy

Continue Leadership in the Counterdrone/Unmanned Threat Sector

- The counterdrone market is growing rapidly, especially in the US
- DroneShield is well positioned as the industry pioneer, with on-the-ground US team, and Australia being part of the Five Eye intelligence alliance (US, UK, Australia, NZ and Canada)
- Continue to embed hardware and SaaS with key customer systems globally

Grow Adjacent Electronic Warfare Capabilities

- Executing on the third, $9.9m 2-year contract with a Five Eyes Department of Defence
- EW includes obtaining intelligence of the radiofrequency signals on the battlefield and applying directed energy to jam, degrade, disrupt or neutralise an adversary capability
- The work is almost entirely software-based, assisting with scale and margins
- Medium term opportunities for broader dissemination amongst AUKUS (Australia / US / UK alliance)
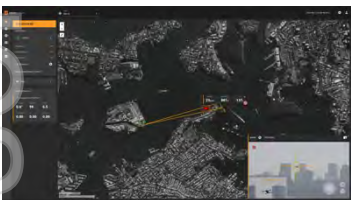
Grow SaaS (Software as a Service)

- Existing counterdrone detection products include a meaningful ongoing subscription, which will continue to grow with the number of deployed devices in the field – DroneShield provides quarterly software updates
- Two key SaaS products: RFAI (RF devices AI engine) and DroneSentry-C2 (incl SFAI sensorfusion and DroneOptID electro-optical AI engine))

Appendices

Counterdrone Detection Solutions

	Radio frequency	Radar*	Cameras*	Acoustic*
Imagery				
Overview	• Foundational layer • Detects drone comms protocols (via conventional RF library or an AI engine)	• Motion tracker - emits signals which are then reflected back to the radar by targets	• Electro-Optical (EO), Infrared (IR) and Thermal • Video analytics and image capture identification of drone activity	• Compares noise of drone blades or motor to a database of acoustic signatures
Advantages	✓ No interference with other sensors ✓ Tracks multiple targets ✓ Passive – cannot be "seen" ✓ Low false alarm rate ✓ Direction-finding capability ✓ Long ranges ✓ Cost effective	✓ Picks up drones without RF emissions ✓ Tracks multiple targets	✓ Best used for verification, classification and tracking of a target detected by other sensors ✓ Potential identification of payloads ✓ Provides "eye on target"	✓ Passive, cost effective ✓ Supporting sensor, filling gaps from other sensors
Disadvantages	✗ Doesn't pick up RF-silent drones ✗ Requires firmware updates	✗ False alarms (birds etc) ✗ Is "seen" as emits energy ✗ Longer range detection is expensive ✗ Struggles with hovering drones	✗ Not well suited for detection on its own due to field-of-view vs distance trade-off ✗ Short ranges	✗ Short range ✗ False alarms ✗ Cannot locate or track ✗ Requires signature database updates

DroneShield uses multi-sensor drone detection for optimal results, unaffected by time of day or weather

* 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" *No intentional damage to the drone*		Kinetic – "hard kill" *Physical force used with potential for destructive damage*		
	Smart Jamming	**Spoofing/Cyber/ Protocol Manipulation**	**Counter-Drone Drones**	**Projectile Fire Kinetic Systems**	**Directed Energy (Laser or Microwave)**
Imagery					
Overview	• Radio waves force a drone to fly back, hover, or land	• Hijacks the control of a drone	• "Kamikaze" or "catching" drones	• Remote weapons systems shoot down drones	• Lasers and high-power microwave systems "dazzle" or destroy a drone
Advantages	✓ Universal effectiveness ✓ 360-degree defeat coverage ✓ Effective against swarms ✓ Civil and military environments	✓ Allows for the re-routing and re-direction of malicious drone flight paths ✓ Applications in both civil and military environments	✓ "Catching" the drone is available to a wider range of customers	✓ Effective against Govt-grade drones ✓ Established technology for military operations	✓ Effective against Govt-grade drones ✓ Systems can be mounted on naval vessels for complex defence systems
Disadvantages	✗ Potential for collateral interference (for a "dirty" jammer)	✗ Not effective against all drones ✗ Higher chance of collateral damage ✗ 30-90sec per drone to engage, can't engage multiple drones same time	✗ Generally slow to deploy ✗ Not effective against swarms	✗ Collateral damage ✗ Unsuitable for use in a civil environment	✗ In early stages ✗ Only available for military applications

DroneShield Offering

Exotic Tech, Limited Reliability

Large Defence Primes Dominance Area

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

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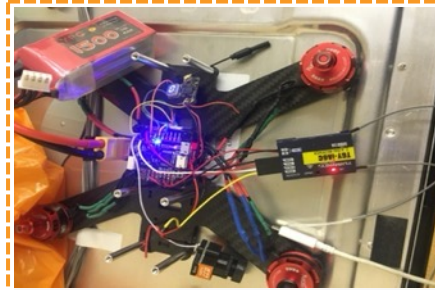
- Drones can often carry sensitive instruments or technology
- When forced to land, this technology can be exploited by military personnel to aid in intelligence gathering operations

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^{TM} engine

- The RFAI^{TM} 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 optimise 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 optimisation about any one algorithm

Wifi | Wifi | Bluetooth | Cell Tower | Emitter | THREAT | Interference | Antennae | Interference

Software Defined Radio Records and Converts to Digital Signal
Convolutional Neural Network (CNN) Analyses the Data
Threat Signal
Threat Detection Alert!

1 — Total Radio Frequency Band
2
3 — Software Pre-processes the Digital Signal
4
5 — Software Processes CNN Data Output
6
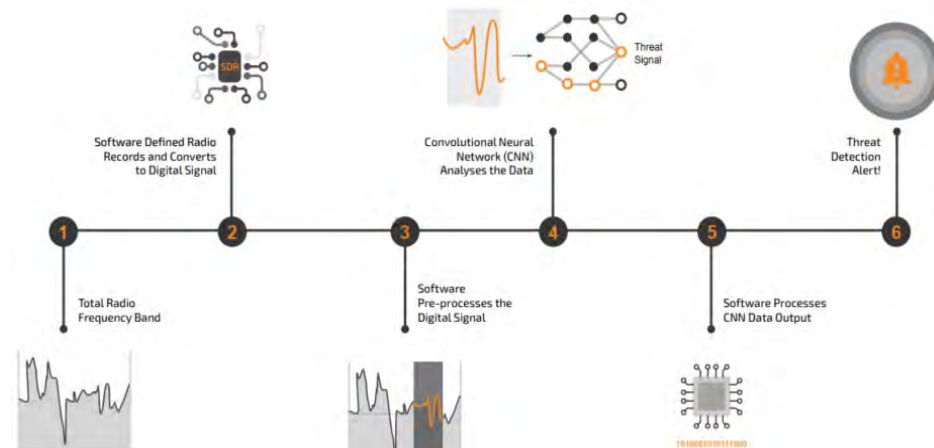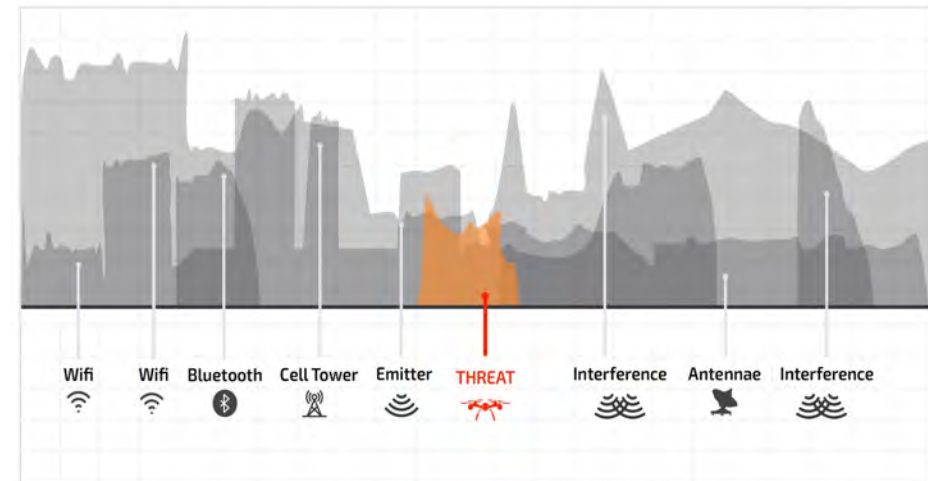
DroneOptID AI Software – Optical and Thermal Spectrum Counterdrone Surveillance

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

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
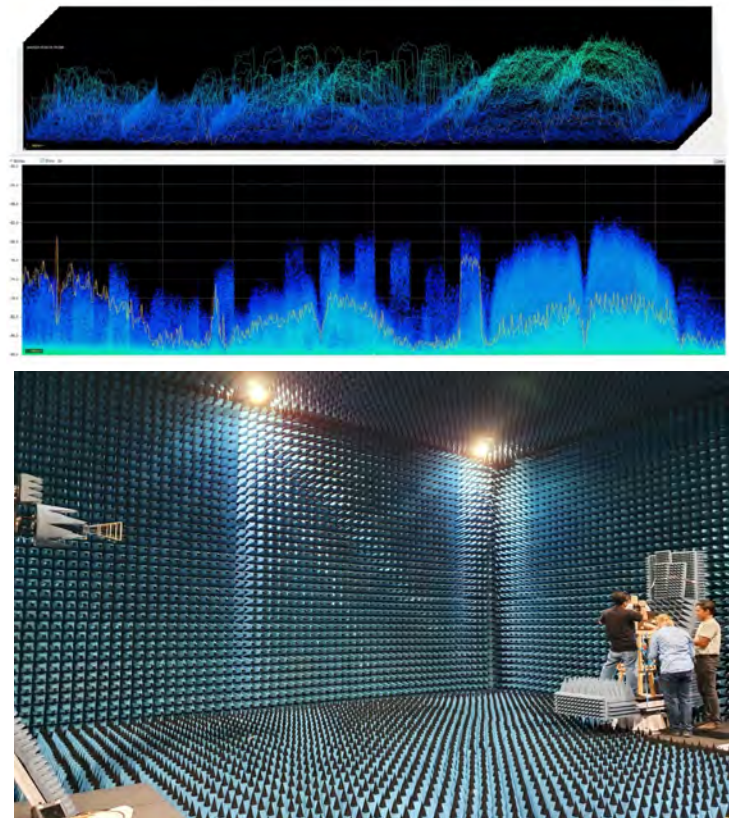
Seasoned Senior Team

DroneShield's experienced team carries a solid track record of delivering growth

Peter James
Independent Non-Executive Chairman

- Peter joined DroneShield's Board of Directors in 2016
- Over 30 years of experience in the Technology, Telco and Media Industries
- Chairman of ASX-listed companies including Macquarie Telecom
- Chair of Nearmap, when sold to Thoma Bravo for $1bn in December 2022

Oleg Vornik
CEO and Managing Director

- Oleg joined DroneShield in 2015, and the Board of Directors in January 2017
- Responsible for overseeing DroneShield's market strategy
- Senior executive experience includes Royal Bank of Canada, Brookfield, Deutsche Bank and ABN AMRO

Jethro Marks
Independent Non-Executive Director

- Jethro joined DroneShield's Board of Directors in January 2020
- CEO and co-founder of the Mercury Retail Group
- Extensive commercial experience in successfully scaling a multinational business

Carla Balanco
CFO and Joint Company Secretary

- Carla joined DroneShield in mid-2018
- Instrumental in scaling the company's financial management systems
- Experience working in Chartered, Commercial and Business Development roles

Red McClintock
Sales Director

- Red served 23 years as an officer in the Royal Australian Navy
- Prior to joining DroneShield, Red worked for five years with BAE Systems as a Business Development and Account Manager

Tom Branstetter
U.S. Director of Business Development

- U.S. Navy veteran and former Navy SEAL
- Focus across DoD and other federal agencies
- Tom holds a Bachelor of Arts degree in Entrepreneurship

Angus Bean
Chief Technology Officer

- Angus joined DroneShield in early 2016
- Merges the fields of mechanical hardware, electronics, software, digital interface and technology
- Experience as the development lead for Australia's largest industrial design and engineering consultancy

Lawrence Marychurch
Vice President, Design

- Lawrence joined DroneShield in 2018 and has a background in Industrial Design
- Manages a team of industrial designers and mechanical engineers as well as DroneShield's in-house production team
- Responsible for DroneShield's wide base of Australian and international component suppliers

Paul Cenoz
Counsel and Joint Company Secretary

- Paul joined DroneShield in 2023. He is admitted to practice law in California and NSW.
- Prior to DroneShield, Paul held executive roles at high growth scale-ups, successfully building businesses in the US and Australia. He was COO and General Counsel of OSINT Combine in Sydney

Matt McCrann
U.S. CEO

- Experienced business development executive
- Over 15 years of experience in the Defense and National Security sector
- Served in the US Navy as an Intelligence Analyst and a member of NSA/CSS's Cryptologic Direct Support Element

Raffael Battner
Operations Manager

- Over 15 years of experience in Manufacturing and Operations Management
- Prior management positions in deep-tech start-ups as well as corporate organisations delivering products and projects into the automotive, telecommunications and industrial market

Carl Norman
Vice President, Embedded Systems

- Carl is an experienced embedded product engineer who joined DroneShield early in 2019
- Over 25 years of experience in electronic product design, manufacturing and project management
- Background in RF products, analogue, embedded and high speed digital systems

Industry and Media Recognition

Capital Structure

Capital Structure (approximately 10,000 shareholders) – as at 20 October 2023	
DRO Shares on Issue	611,403,611
DRO Options on Issue	11,290,000
Fully Diluted Shares on Issue	**622,693,611**
Fully Diluted Equity Value	$165m
Cash	$50.1m
Debt	$nil
Fully Diluted Enterprise Value	**$114.9m**

[1] Options issued at various strike price and maturities. For full information please refer to ASX releases
[2] At 26.5c per share, as at 20 October 2023

Director and Employee Shareholdings

Oleg Vornik, CEO and Managing Director	15,027,022 shares	2.41%*
Peter James, Independent Non-Executive Chairman	8,817,522 shares	1.42%*
Jethro Marks, Non-Executive Director	1,750,000 shares	0.28%*
Other Employees	28,210,999 shares 5,590,000 options	5.43%*

*On a fully diluted basis

Research Coverage

BELL POTTER

PELOTON CAPITAL

El Salvador President Nayib Bukele with DroneShield DroneGun Tactical

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 Defense

DroneShield Limited (ASX:DRO)
Investor Presentation

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