



V-BAT

ISR + Targeting Done Differently

V-BAT delivers combat-proven, expeditionary, strategic-level ISR and targeting at a fraction of both the cost and logistical footprint of larger Group 4 and 5 drones with similar capabilities. Designed, tested, and deployed for the

electronic warfare battlefield, V-BAT is the only vertical takeoff and landing aircraft to demonstrate real-world mission impact in GNSS-denied and comms-contested environments.



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Highlight Overview

01/ Fully Unassisted Launch and Land

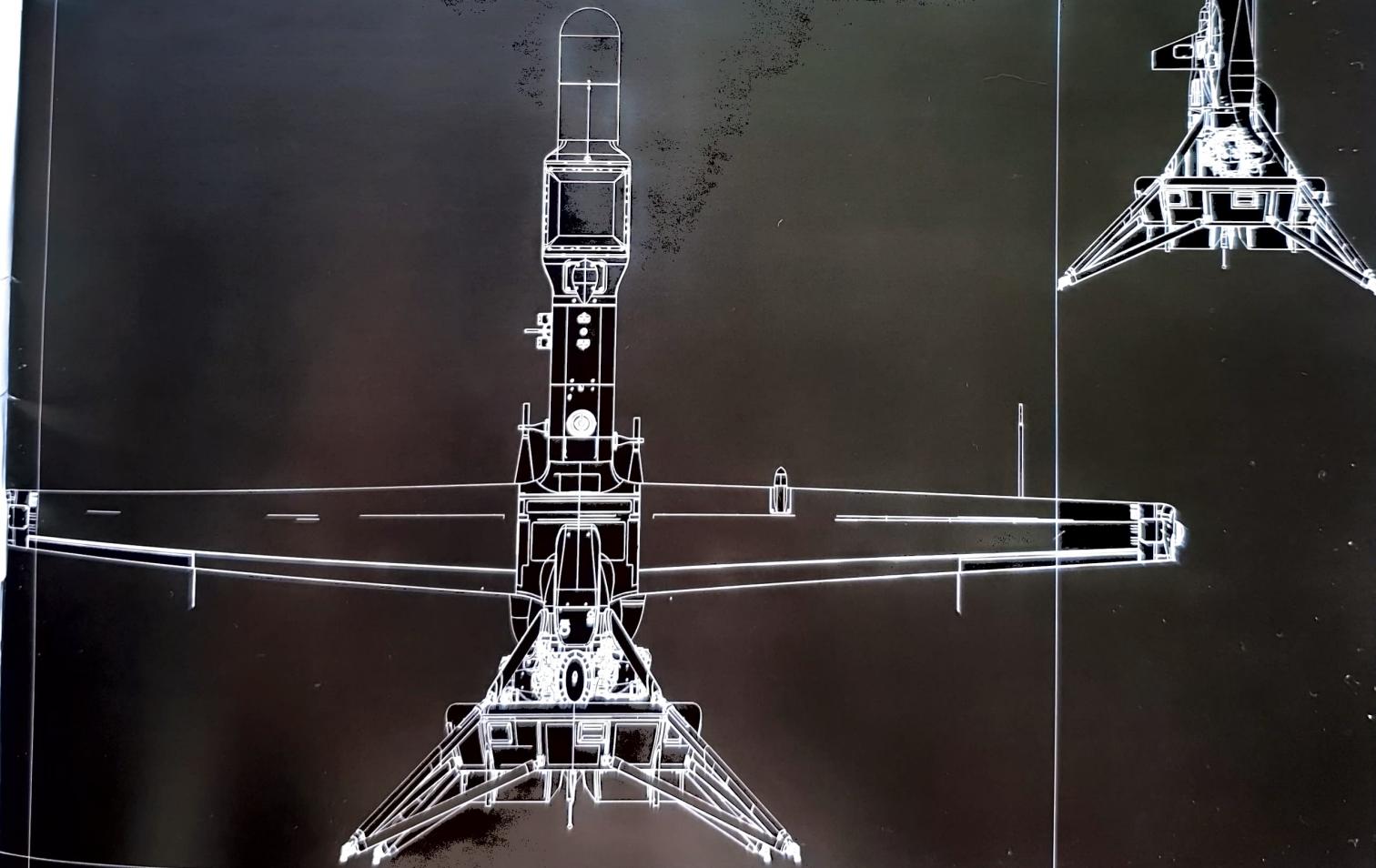
04/ 12+ hour Endurance

02/ Heavy-Fuel Engine

05/ Remote Ground and In-Air Engine Start

03/ SATCOM

06/ Hivemind Pilot and Autonomy Ready



Fully Unassisted Launch + Land

Precision launch and land capability in the safest and smallest tactical footprint imaginable. True expeditionary capability enables missions from small boats to rooftops with the highest degree of safety, in the toughest environmental conditions.

01/ Unmatched Safety

02/ Reinforced Carbon Fiber Legs

03/ Rapid Landing Sequence

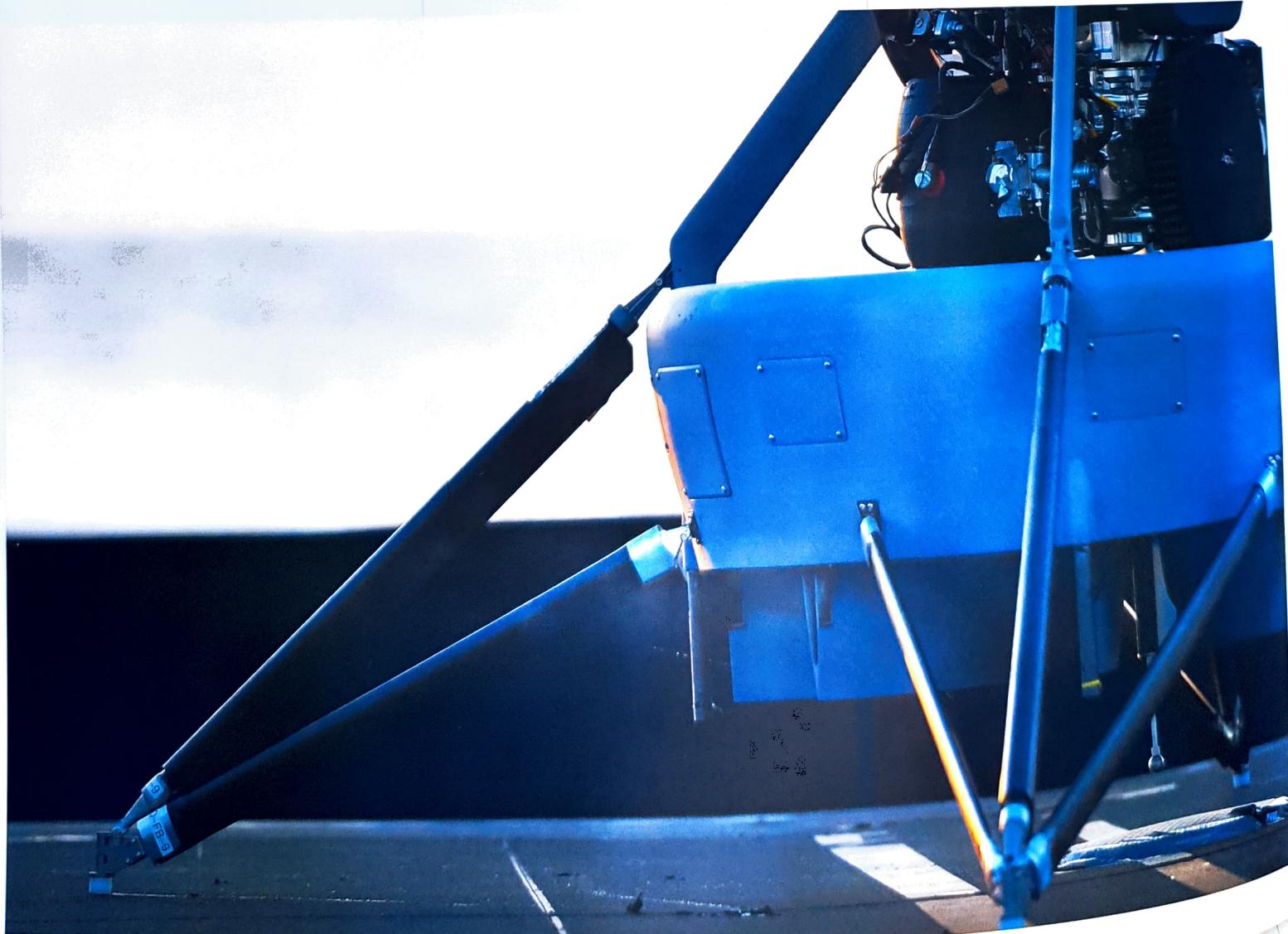
04/ Expeditionary Footprint

Operational Envelope

Sea state 3-4

Max Winds 20 kts sustained /
15 kt gusts/
25 kt total

Ship Speed 10 kts



SATCOM

Beyond Line of Sight (BLOS) capability with V-BAT SATCOM

V-BAT integrates satellite communications (SATCOM) technology to provide resilient beyond-line-of-sight (BLOS) command and control (C2) and full-motion video (FMV) capabilities at a fraction of the cost of traditional SATCOM services, making it an unparalleled solution for global missions.

01 / Unmatched Mission Reach

Enables BLOS real-time C2 and FMV streaming, offering unparalleled operational flexibility.

02 / Expansion Coverage

Leverages a vast Low Earth Orbit (LEO) satellite constellation, providing greater operational flexibility.

03 / Streamlined User Experience

Provides accurate positioning and timing ensuring success in critical operations.

04 / High Bandwidth

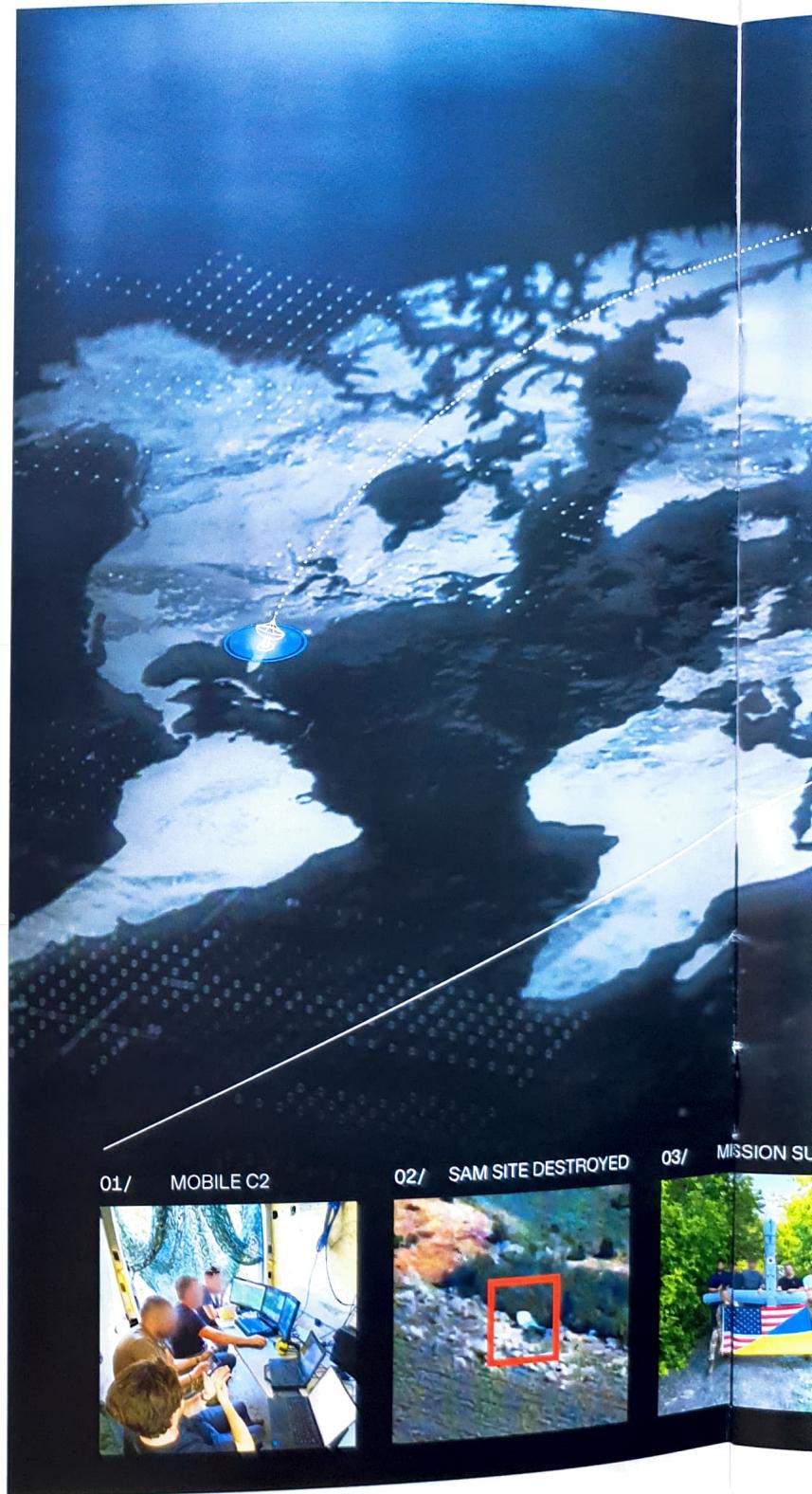
Delivers 2-10Mbps speeds, depending on location, for robust data transmission.

05 / Cost-Effective Excellence

Offers advanced SATCOM capabilities at just 1/3rd the cost of traditional solutions.

06 / Global Accessibility

Available in most regions worldwide—contact representative for details.



GNSS-Denied + Comms Degraded

One of the Only Group 3 UAS to Perform in EW-Contested Battlefields

The V-BAT ensures precise GNSS-denied navigation in contested environments by integrating resilient communication hardware with the Hivemind Pilot State Estimator and advanced onboard technologies.



V-BAT has successfully conducted land and maritime ISR and targeting deep into heavily EW-contested, Russian-held territory.

Export Warning: Equipment described may be subject to U.S. export regulations and may require authorization prior to export, re-export, or transfer. Diversion contrary to U.S. or Australian law is prohibited.

01 /

Seamless GNSS-Denied Operation

Intuitive user experience to land, navigate, and recover for GNSS-denied operations.

02 /

Secure, Long-Range Communications

Provides jamming-resistant communication up to 180 km for broader mission coverage.

03 /

Precise Navigation and Targeting

Real-time state estimates ensure accurate navigation and target acquisition.

04 /

Comprehensive Protection

Phased array antennas provide a highly focused C-band RF beam to reduce detection and increase.

05 /

Adaptive Nulling

Hivemind Pilot GNSS-Denied State Estimator supports quick integration of future sensors, including visual-based navigation.

06 /

Durable and Reliable

Expands communication range and boosts positional accuracy for improved mission.

Heavy Fuel Engine

■ 01 02 03

Operate from ships worldwide

Simple logistics and broad compatibility with a wide range of maritime vessels, using standard military fuels for seamless integration

■ 01 02 03

Safer, streamlined operations with JP-5

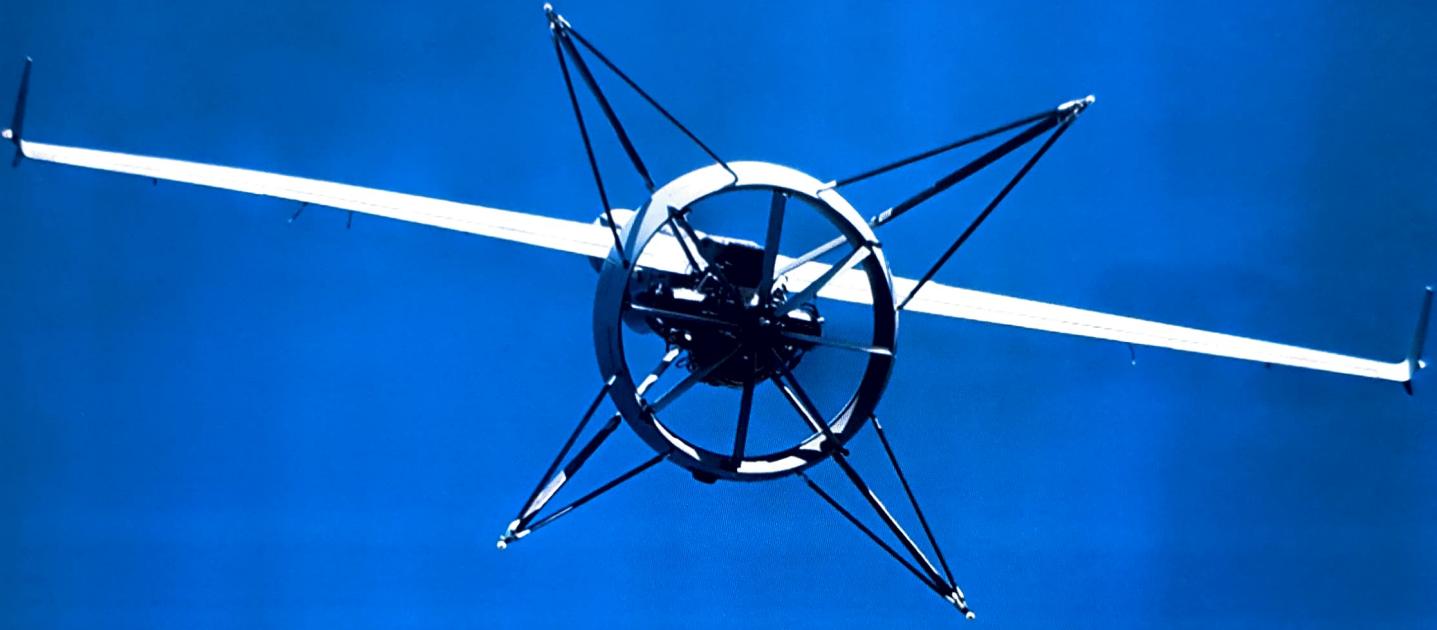
Enhances V-BAT's safety and logistics by using readily available, less volatile fuels like JP-5. This upgrade simplifies maritime operations while maintaining performance with a tailored, high-power solution.

■ 01 02 03

Extended endurance

With optimized fuel efficiency for its size, V-BAT maximizes mission effectiveness by providing extended flight endurance for persistent ISR and targeting.



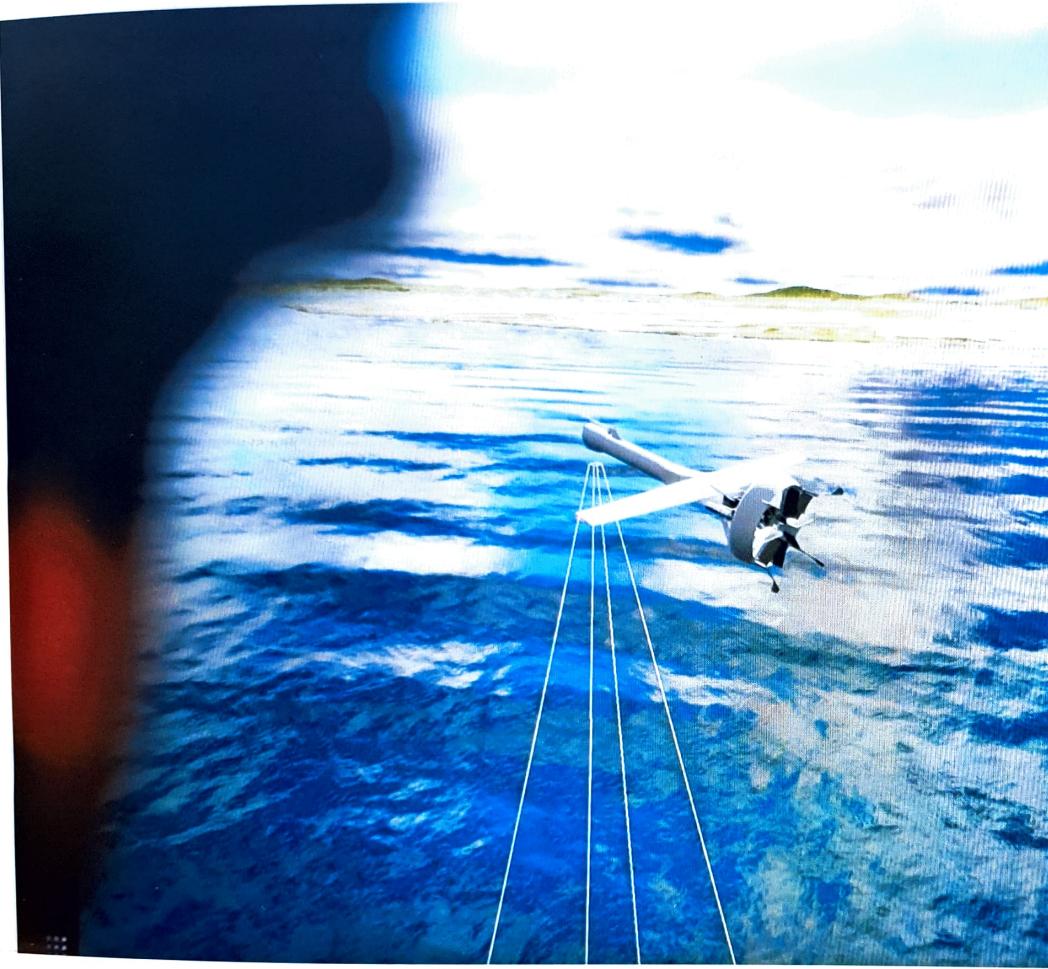


Ducted-Fan Design

Revolutionary Ducted-Fan Design for Superior Capabilities

V-BAT's patented ducted-fan design makes it the only Group 2 or 3 UAV with enclosed blades, ensuring unparalleled safety. Its duct increases thrust by 80%+, enabling takeoff and landing with a single power plant and maximizing payload efficiency.

Thrust vectoring provides rock-solid stability in harsh weather. The enclosed duct eliminates operator safety zones, expanding the tactical employment envelope. With unassisted launch and landing, V-BAT requires no hands-on operator, further simplifying deployment and operations.



```
Shield AI Map Panel panel
Time: 00:00:00
Layer: Open
Click Zoom Level: 100%
Follow Agent: None
Show Debug Log: Off
Agent Types:
agent0
agent3
agent2
agent1
Features:
Ship #338000012
Ship #338000015
Ship #338000018
ID: 1, Type: NAMED_AREA
ID: 10000, Type: NAMED_AREA
ID: 10001, Type: NAMED_AREA
ID: 10002, Type: NAMED_AREA
ID: 10003, Type: NAMED_AREA
Planned Trajectory Route
Planned Trajectory Point
Tracked Object #338000001
_Tracked Object #338000002
_Tracked Object #338000003
_Tracked Object #338000004
_Tracked Object #338000005
_Tracked Object #338000006
Primary Agent agent0
Agent agent0 Footprint
Agent agent3
Agent agent3 Footprint
Agent agent2
Agent agent2 Footprint
Agent agent1
Agent agent1 Footprint
```

■ 01 02 03

Autonomous Operations in Denied Environments

Hivemind Pilot enables V-BAT to launch, fly, localize targets, hover, and recover autonomously, ensuring mission success even in GPS- and comms-denied spaces.

■ 01 02 03

AI-Driven Decision-Making & Swarm Coordination

Real-time decision-making, adaptive sensing, and swarm collaboration reduce operator workload while maximizing coverage and detection.

■ 01 02 03

Resilient Against Advanced Threats

Layered sensors, M-Code GNSS, and visual-based navigation enable reliable operations near jammers and in adverse conditions.

Passive, Persistent, Wide-Area Search

Beyond Line of Sight (BLOS) capability with Passive, Persistent, Wide Area Search

With a coverage rate of 3,140 NM²/hr—over 2.5 times its closest WAS competitor—it provides unparalleled situational awareness. Using an integrated EO sensor array and

advanced AI, it autonomously detects and tracks targets, delivering real-time geo-located data for precise decision-making.



■ 01 02 03

Mission Flexibility

V-BAT's integrated ViDAR system features a single camera array that seamlessly operates in both land and maritime environments.

■ 01 02 03

Operator Workload Reduction

Delivers superior performance, reducing time and cost compared to traditional autonomy solutions.

■ 01 02 03

Maximized Capability

Our software eliminates the need to build core autonomous capabilities from scratch, allowing you to focus your resources on your unique innovations.

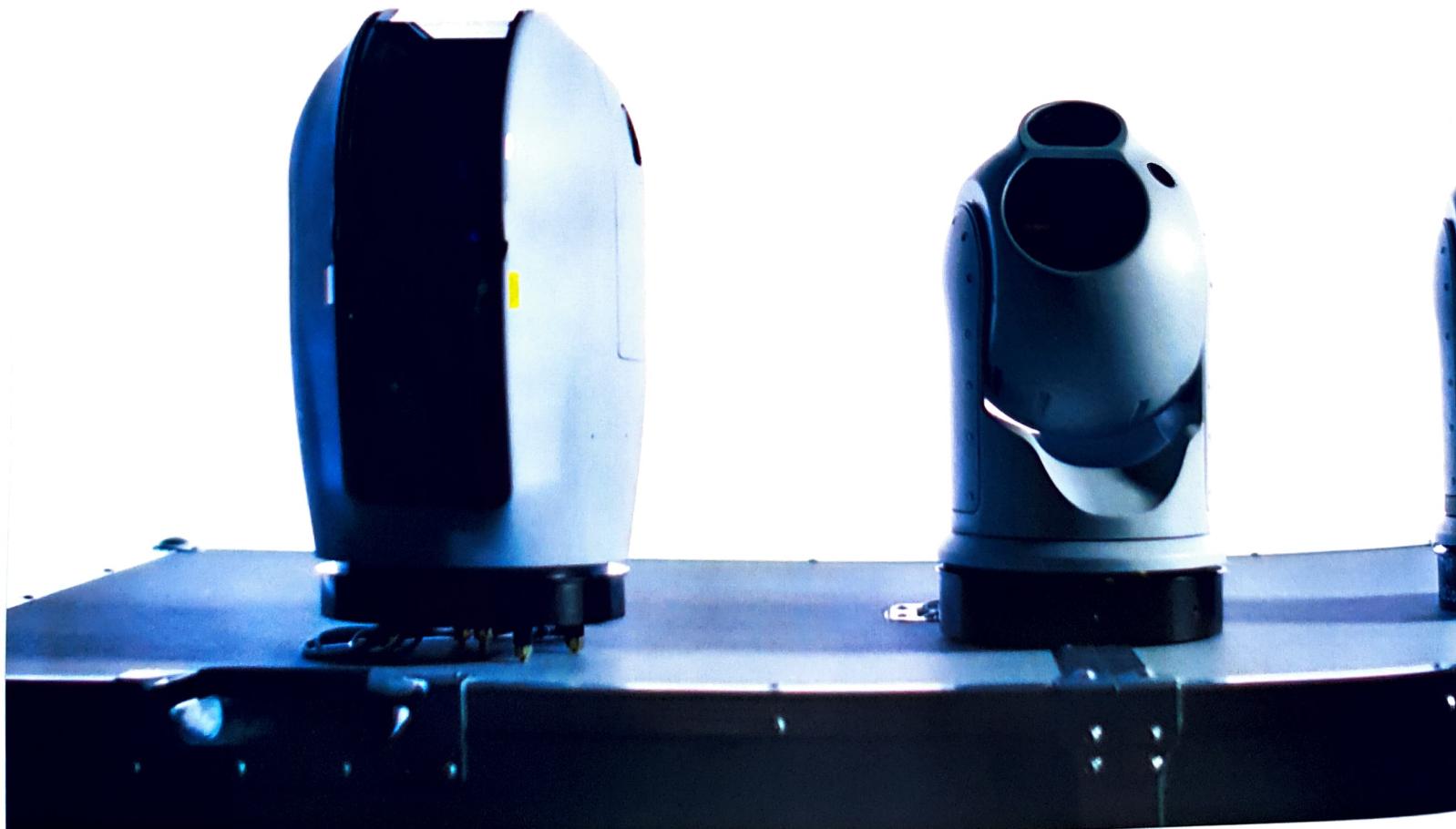
Search Coverage

[OBJECT TYPE]	[EO (NM ² /HRO)]
Land Vehicle	400
Fishing boat	1550
Patrol boat	2620
Frigate	3140



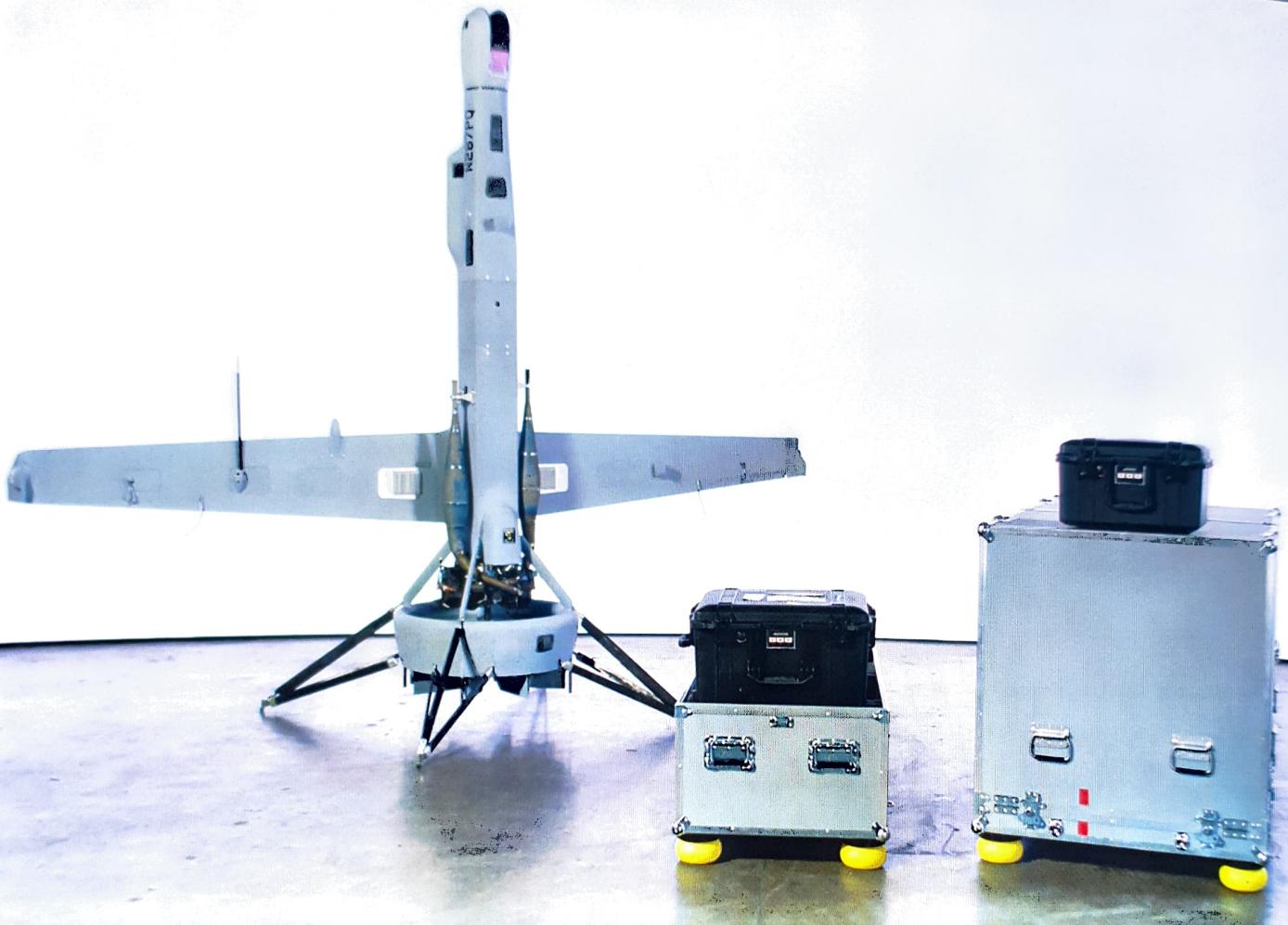
3rd Party Payloads + Sensors

Mix and match payloads across V-BATs and change team size to get the perfect sensor packages for your mission. V-BAT's modularity enables rapid integrations of various payloads to meet mission requirements. V-BAT offers 600 W of power for payload integration.



01/	Hivemind Pilot	07/	GNSS Anti-Jam
02/	IMSAR NSP-3	08/	Aircraft Transponder
03/	Hood Tech 11 & 9 Series	09/	M-CODE GNSS
04/	AIS	10/	Laser Target Designator
05/	SOCOM Mod Payload	11/	Laser Range Finder
06/	SATCOM	12/	Kinetic Munitions - coming soon





No Runway Required

Industry-Leading Design with Ultra-Expeditionary Logistics Footprint

V-BAT does not require a runway or cumbersome launch and recovery equipment. VTOL architecture allows for launch and land in a small clearing, tactical ship, or on a rooftop.

Crew size	2
Assembly time	<30 min
Launch diameter	4.6 m



[2 V-BAT SYSTEMS]

Maritime UAS of Choice

V-BAT won the United States Navy and SOCOM MTUAS Increment 2 Program of Record through a highly competitive selection process. Its unique design and controls enable take-off and landing in high winds, on crowded flight decks, and aboard moving vessels with landing zones as small as 4.6 m x 4.6 m.

Selected through a rigorous competition for the U.S. Coast Guard ISR program of record and chosen by Japan's Maritime Self-Defense Force as the country's first-ever ship-based ISR platform, V-BAT is leading the shift toward affordable, intelligent drones for maritime missions. V-BAT has completed more than 20 deployments with the U.S. Navy, Marine Corps, and partner nations.



Features + Specifications

Airframe

Propulsion	Heavy Fuel Engine (JP5)
Height	3.8 m
Wing Span	2.9 m
Max Gross Takeoff Weight	73 kg

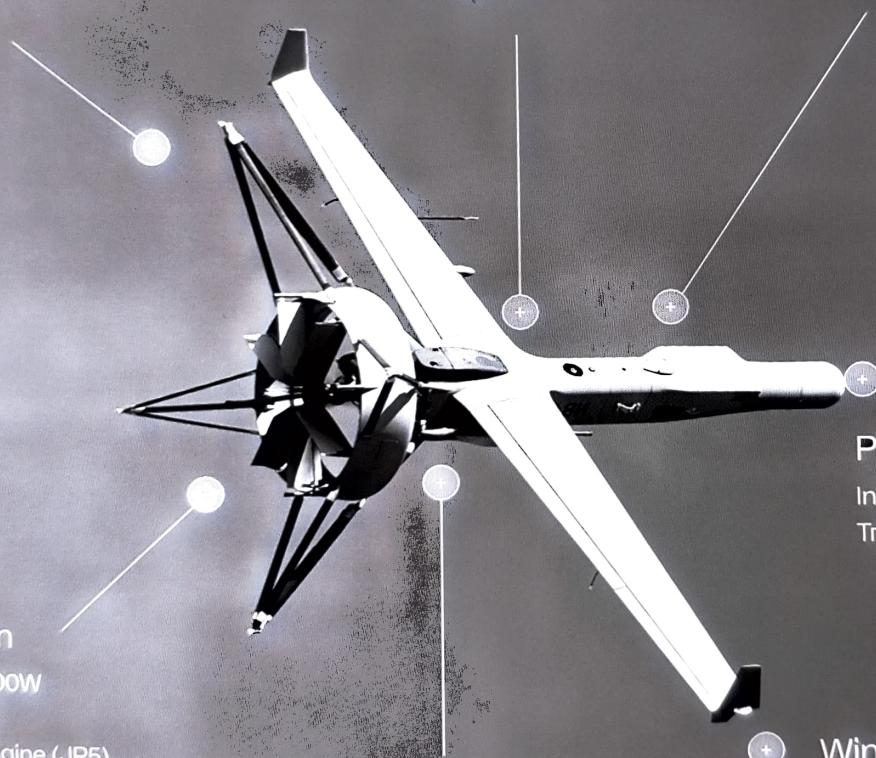
Operating Performance

Max Endurance	12+ hrs (w/ 9kg payload)
Max Payload Capacity	18.1 kg
Max Range (MPU5)	130 km
Max Range (C-Brand Radio)	180 km
Max Range (SATCOM)	Fuel Dependent
Flight Ceiling	5,486 m
Normal Cruise Speed	45 - 55 kts
Landing Zone	4.6 m x 4.6 m
Min / Max Operating Temps	-20°C - 49°C
Max Winds (Sustained / Gust / Total)	20 kts / 15 kts / 25 kts
Max Precipitation	6.35 mm/hr

*Performance varies with system configuration and environments

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Unassisted
Landing



Slice

Comms relay package
Fuel tank
Oil reserve

Fuselage

AIS*
Mod Payload
Anti-Jam*
BLOS/SATCOM*
GNSS

Autonomy Compute
IR Strobe
Resilient C-Band
M-Code*
Vision Based Nav*

Ducted Fan

Generator - 600W
to payloads

Heavy Fuel Engine (JP5)
Remote/Inflight Engine
Restart

Belly Bay

VIDAR*
Future Payloads
NSP-3

Payload/Sensor

Integrated winglet antennas
Transponder*

Wings

Integrated winglet antennas
Transponder*
Integrated pitot/ADU
Aviation lights
Hard point attachments

*Optional payloads and enhancements

ShieldA