

WHAIUSV

Persistent Maritime Presence. Zero Personnel Risk.

New Zealand designed & built | All-electric 48VDC jet-drive | Indopacific ready

- 100% New Zealand designed & manufactured | JOSCAR registered

30kt

MAX SPEED

3.4m

LENGTH

350kg

PAYLOAD

SS4

SEA STATE

48VDC

ELECTRIC DRIVE

0

CREW AT RISK

OVERVIEW

A sovereign USV capability — built for the Indopacific

Whai is a compact, all-electric unmanned surface vessel designed and built in New Zealand for NZDF and ADF maritime operations. With a 350kg payload capacity in a 3.4m hull, triple-redundant global communications, and three selectable autonomy modes, Whai delivers persistent maritime presence without crew risk or fuel logistics overhead.

ISR

PATROL

MULTI-MISSION

Now available for trials & procurement evaluation.

Contact EDGE Defence to discuss your operational requirements.

PROVEN ON THE WATER

Autonomous navigation confirmed

Waypoint following, RTH, and obstacle avoidance demonstrated in NZ open

30-knot sprint validated

Maximum speed performance confirmed across multiple trial runs in New Ze

Sensor integration tested

Camera, comms, and navigation systems successfully operated in autonomou

PLATFORM SPECIFICATIONS

Classification	Unmanned Surface Vessel (USV)
Length overall	3.4 m
Propulsion	All-electric 48VDC jet-drive
Max speed	30 knots
Endurance	35 nm @ 15 kt (base config)
Sea state	Operable to Sea State 4
Payload capacity	350 kg incl. 48VDC power supply
Communications	Starlink / 4G / RF LOS
Autonomy	Auto / HITL / Remote
Hull options	CF / GRP / Aluminium / HDPE
Origin	New Zealand — JOSCAR registered



INTELLIGENCE, SURVEILLANCE & REC

ISR / Surveillance

Persistent over-the-horizon ISR via Starlink with real-time data relay. 350kg payload bay accommodates EO/IR and radar suites. Silent electric drive minimises acoustic & IR signature.

PATROL & AREA DENIAL

Force Protection

Autonomous perimeter patrol at up to 30 knots in Sea State 4. Continuous coverage of HVAs, ports, and anchorages without crew fatigue, risk exposure, or fuel overhead.

CONFIGURABLE PAYLOAD

Multi-mission

Open architecture 350kg payload bay with integrated 48VDC power. Accommodates sensors, EW packages, and comms relay — mission-configured by the operator.

PROPULSION ADVANTAGE

All-electric. No fuel. No signature.

AUTONOMY MODES

Operator control on your terms

Low acoustic signature

Electric drive + jet propulsion = no engine noise, no propeller cavitation. Significantly reduced acoustic detection profile.

Reduced IR signature

No combustion exhaust or hot surfaces. Minimal infrared signature vs. diesel/petrol platforms.

Zero fuel logistics

Charges from ship power, shore power, or renewables. No fuel storage or supply chain required for forward deployment.

Shallow draft & safe

Jet-drive = shallower operating draft. No exposed propeller — safe around divers, swimmers, and small craft.

MODE 1

Autonomous

Pre-programmed mission execution. Operates independently across waypoints and patrol zones with minimal operator workload.

MODE 2 — RECOMMENDED

Human-in-the-loop

Autonomous execution with operator oversight and approval gates. Designed for ROE-compliant operations in contested environments.

MODE 3

Remote operation

Full manual control via encrypted Starlink, 4G, or RF LOS. Direct handling for close-in manoeuvring and port operations.



Ready to evaluate Whai? Request a classified briefing:

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