



Wave Glider Operations in the West

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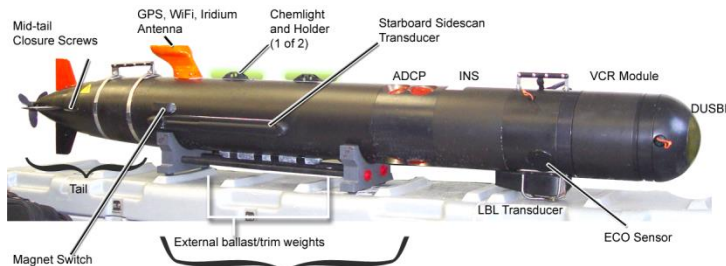
- Offshore Oil & Gas
- Defence
- Oceanographic/Hydrographic
- Offshore Renewables
- Water Resources
- Trenchless Technology





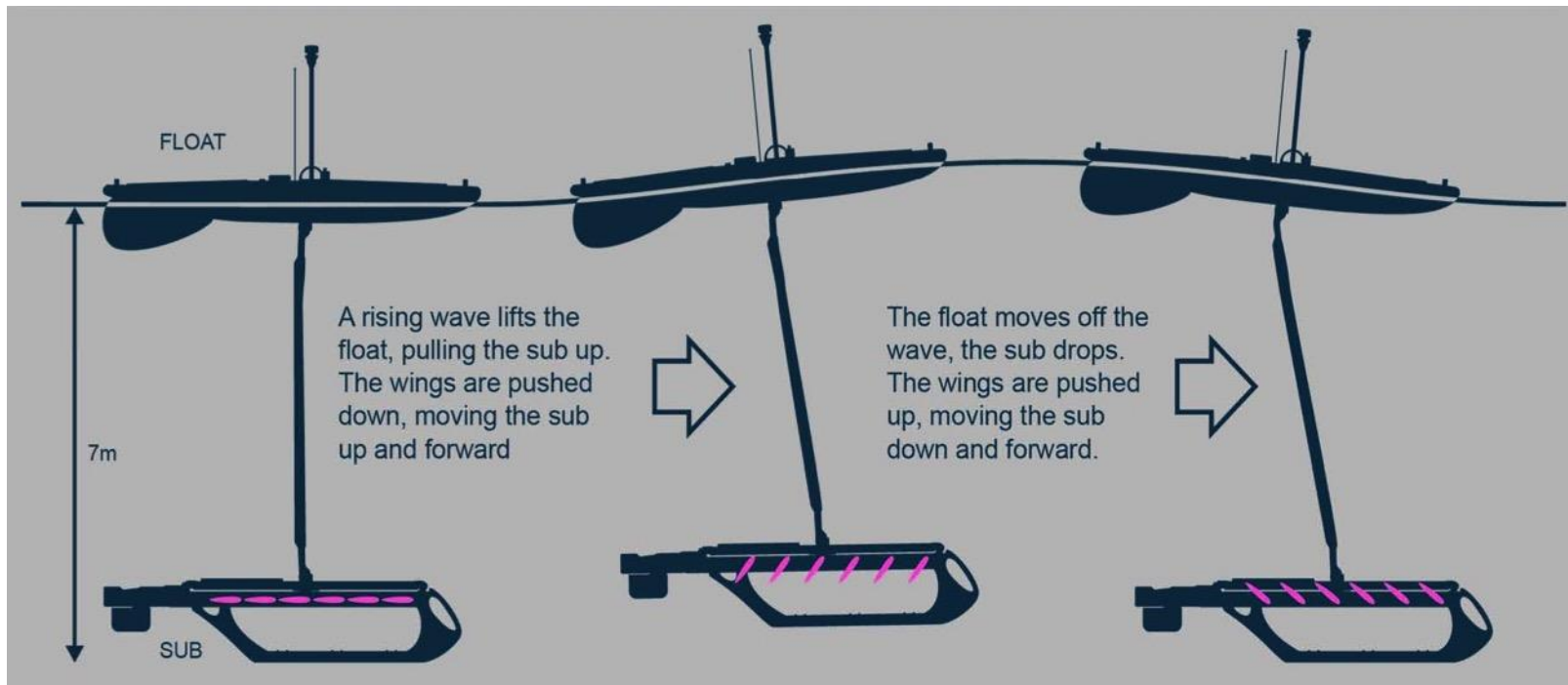
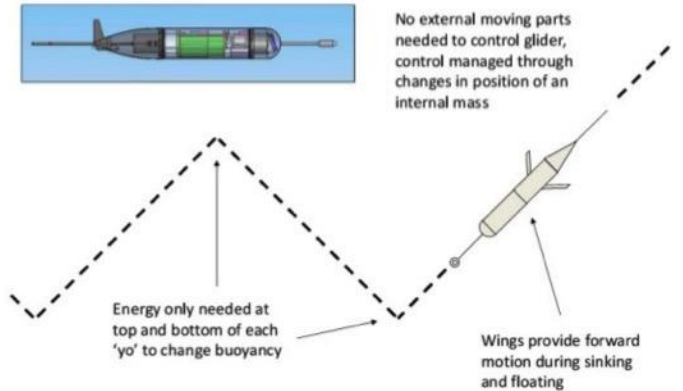
UVS Subsea Technology

- Cameras, sonars & lights
- Cables & connectors
- Multiplexers & slip-rings
- ROV: Double Eagle
- AUV: REMUS 100
- Gliders: Wave Glider



Introduction

Gilders – Buoyancy or Wave Engines



Other vehicle types





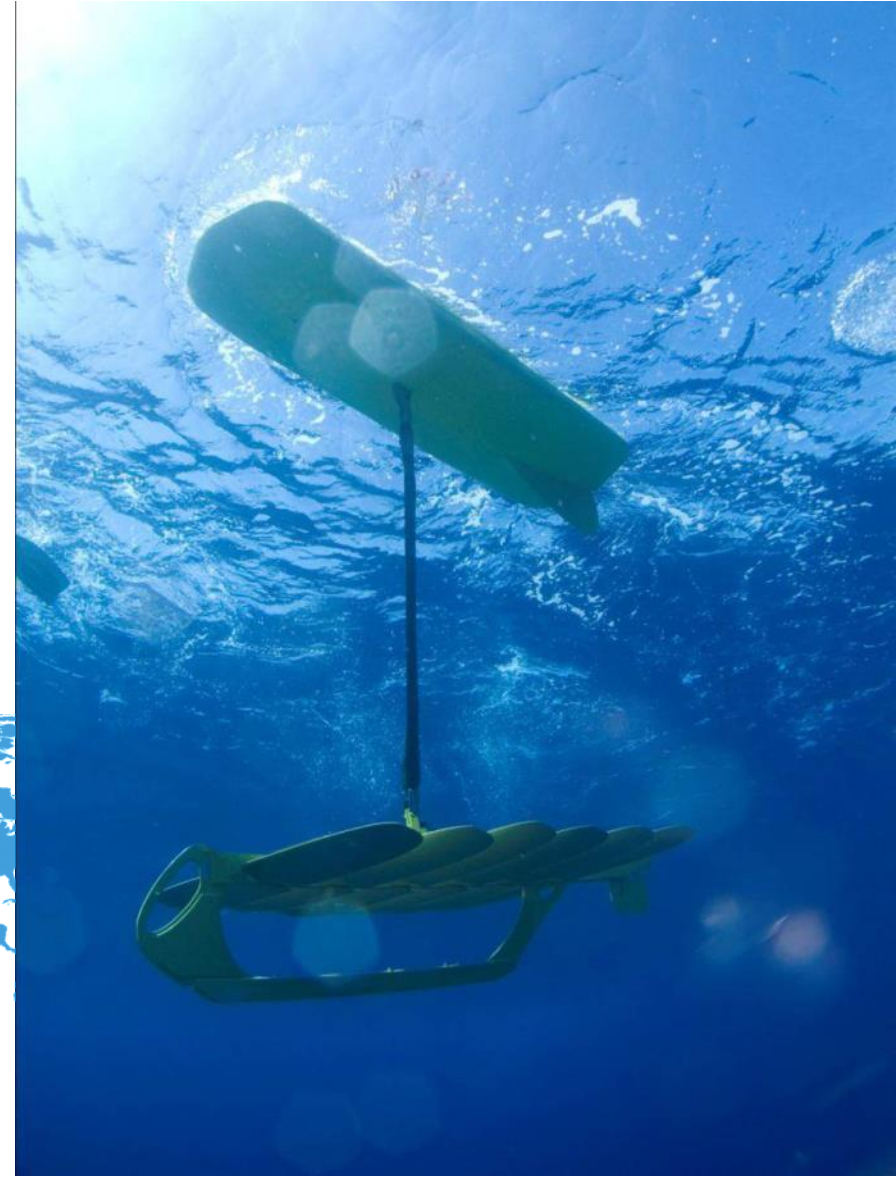
LIQUID ROBOTICS
instrument the ocean



Wave Glider

- Wave powered
- Autonomous
- Innovate ubiquitous ocean sensing

Wave Glider



Wave Glider SV3 Core Components

Wave and Solar energy harvesting system

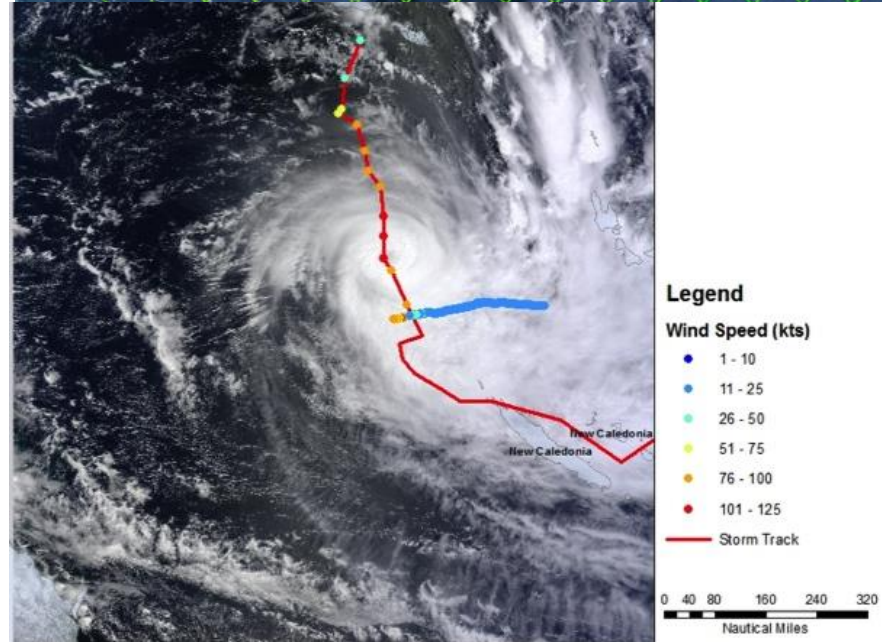
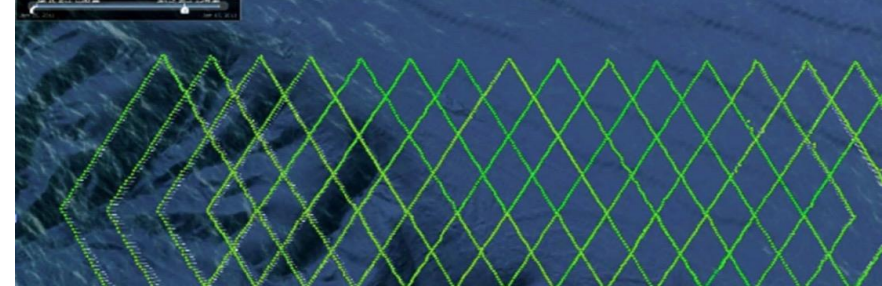
Solar power for computing, communications & sensor payloads

- **Wave Powered Sub**
Wing system converts wave energy into forward thrust
- **Hydrodynamic Float**
Modular design for maximum payload & solar collection capacity
- **High speed Umbilical**
High power connection between the Float and Sub
- **Adaptable Modular Power system (AMPS)**
Advanced power system with large rechargeable battery capacity
- **Solar Powered Auxiliary Thruster**
For thrust and burst speed thru doldrums and high currents
- **Computational Power**
On-board processing power and cloud computing environment



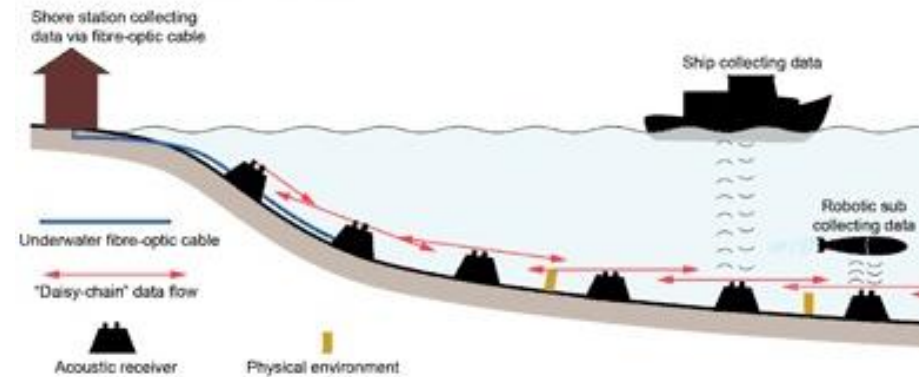
Capabilities

- Ease of launch & recovery
- Sensor integration
- Precision navigation
- Onboard processing
- Survivability



OOG Applications

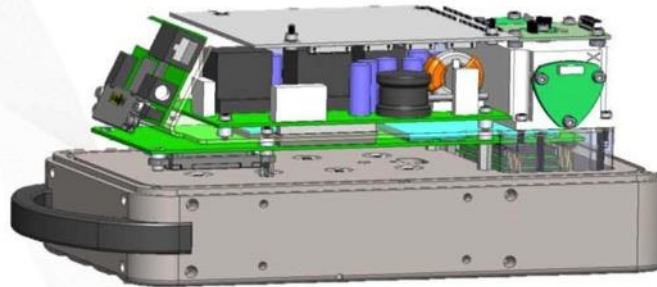
- Data Mule
- Marine mammal detection
- Autonomous survey
- Protecting personnel and ocean



Onboard Equipment



Integrated SVP



Integrated Motion TSS
DMS5-25



Integrated
GPS/Heading



Intel Core i7

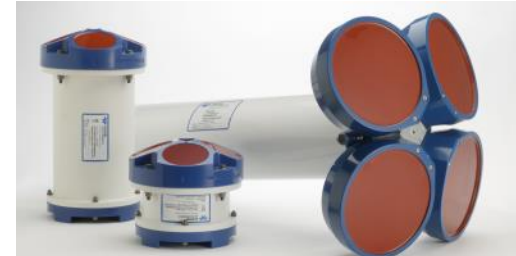


RTA Unit



Wave Glider Operations

- In progress now
- New tools – new capabilities
- Autonomy at sea



Summary



fifteen years.
2000-2015

An underwater scene with a blue background. A dark, rectangular object is suspended from the surface by a thin line. A 3D sign with the word "Thankyou" is attached to the line. The sign is white with a dark outline and is tilted. The word "Thankyou" is written in a sans-serif font. The letters are 3D and have a dark outline. The sign is suspended from a dark, rectangular object at the surface. The background is a blue, textured surface, possibly water or a wall.

Thankyou

The logo for Blue Zone Group. It features a stylized, abstract icon on the left, composed of three interconnected loops or circles. To the right of the icon, the words "blue zone" are written in a lowercase, sans-serif font. Below "blue zone", the word "GROUP" is written in a smaller, uppercase, sans-serif font. At the bottom, the phrase "AHEAD OF THE TIDE" is written in a small, uppercase, sans-serif font.

blue zone
GROUP
AHEAD OF THE TIDE