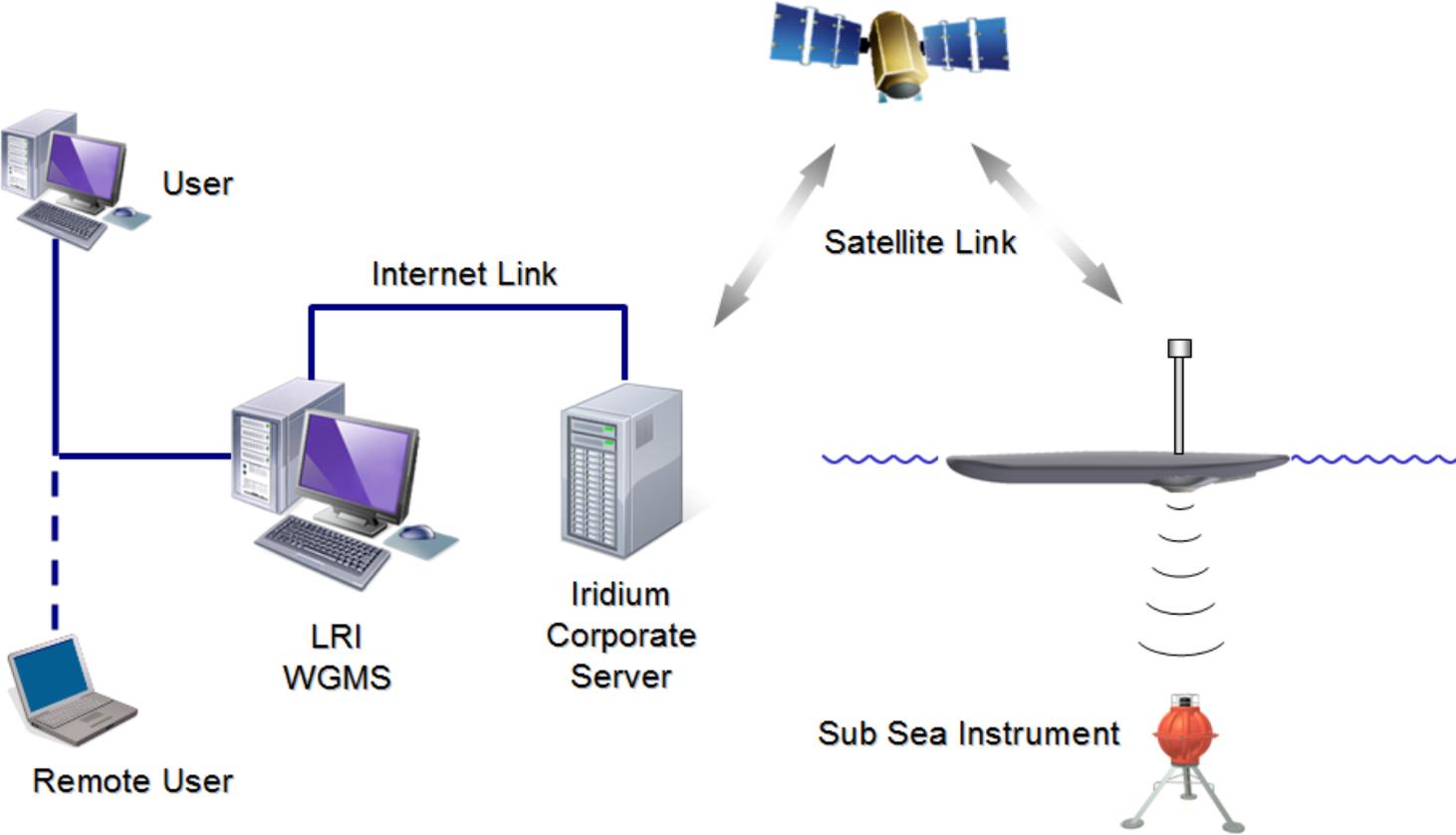


The waveglider as a link to subsea instruments



Tom Bennetts



Wave Glider® sv2



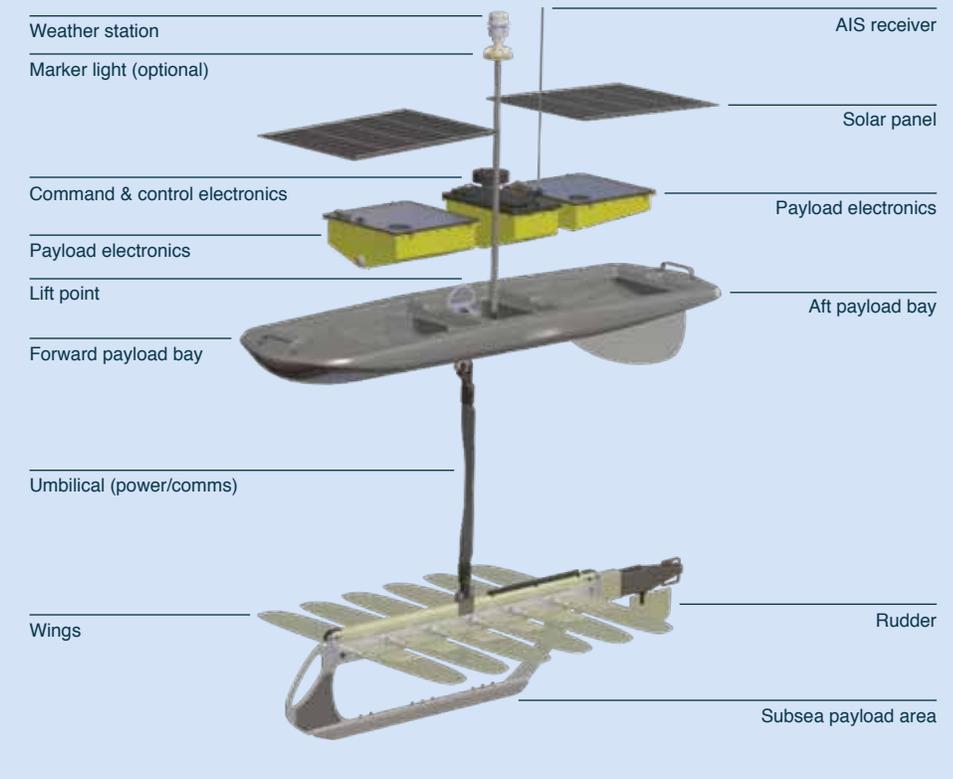
Wave Glider SV2

Proven

With over 200 Wave Glider SV2s produced, five hurricanes and three cyclones survived, and over 300,000 nautical miles under its belt, the SV2 platform's rugged performance has brought the revolutionary Wave Glider technology to bear on the success of over 100 customer missions to date.

Optimized

The Wave Glider SV2 is optimized for individual or small group deployments carrying preconfigured suites of sensors for specific science and security missions. With enough power to support a broad array of cross-compatible sensor payloads, WiFi and cellular communications options, as well as significant onboard processing power, the Wave Glider SV2 is a reliable and flexible long-endurance platform.



Wave Glider SV2: Basic specifications

GENERAL

Vehicle configuration

Sub & Float joined by 4m (13ft) tether

Dimensions

Float:
210cm x 60cm (83in x 24in)
Sub:
40cm x 191cm (16in x 75in)
Wings:
107cm wide (42in)

Weight

90kg (200lb)

Endurance

Operate for years at sea (with regularly scheduled maintenance)

Water speed

0.5kts (SS1) - 1.6kts (SS4)

Depth rating

Continuous wash and spray
Brief submergence to 2m (6.5ft)

Observability

Silent propulsion system
Visibility mast with flag and marker light
Radar target enhancer

Transportation & shipping

Air freight compatible
Ships in 3 wooden crates
Crate dimensions: 305cm x 61cm x 61cm (10ft x 2ft x 2ft)
Crate 1: 118kg (260lb)
Crate 2: 98kg (215lb)
Crate 3: 73kg (160lb)

POWER

Propulsion

Mechanical conversion of wave energy into thrust

Battery

665 Wh rechargeable Li-Ion

Solar power

112W (peak)

SAFETY

Emergency location

Shore-activated light
Redundant RF beacons
2-Year redundant Iridium® tracker

Health sensors

Pressure, temperature & leak sensors

Battery compliance

Individual batteries isolated from each other
Automatic charge/discharge cut-off (for temperature and/or voltage)

NAVIGATION

Heading

Solid state magnetometer

GPS

12 channel WAAS capable

Accuracy

3m radius CEP50

Station keeping

40m radius CEP90
(SS3: current <0.5kts)

PAYLOAD

Architecture

Standard mechanical, electrical & software Modular Payload Unit (MPU) architecture for easy integration and configurability

Base integration

Water speed sensor
AIS receiver
Radar reflector, light, and flag

Continuous available power

System max.: 10A
Continuous at 13.2V

Payload ports

Float: 3; Sub: 1
8-pin 5/8" wet mateable connector
13.2V, 3A, RS232/422/485, GPS, PPS

Power expansion ports

Float: 1
6-pin 5/8" wet mateable connector
13.2V, 6A

Max. discrete payloads

2 (Payload boxes in float)

Max. payload weight (float)

18kg (40lb)

Max. payload volume (float)

40L (1.4ft³)

Peak payload power

40W

OPERATION

Mission control

Chart-based GUI
Multi-vehicle display
Waypoint & course generation

Status monitoring

Text & visual status indicators accessible via web interface
SMS and email alerts
Programmable inclusion & exclusion zones

Autonomous navigation

Programmable waypoint course
Follow course and hold/loop
Station keeping at target

COMMUNICATIONS

Over-the-horizon

Iridium® 9602
RUDICS (option)
Cellular (option)

Local

802.11g WiFi

All specifications are accurate at time of printing and are subject to change without prior notice.



Corporate Headquarters

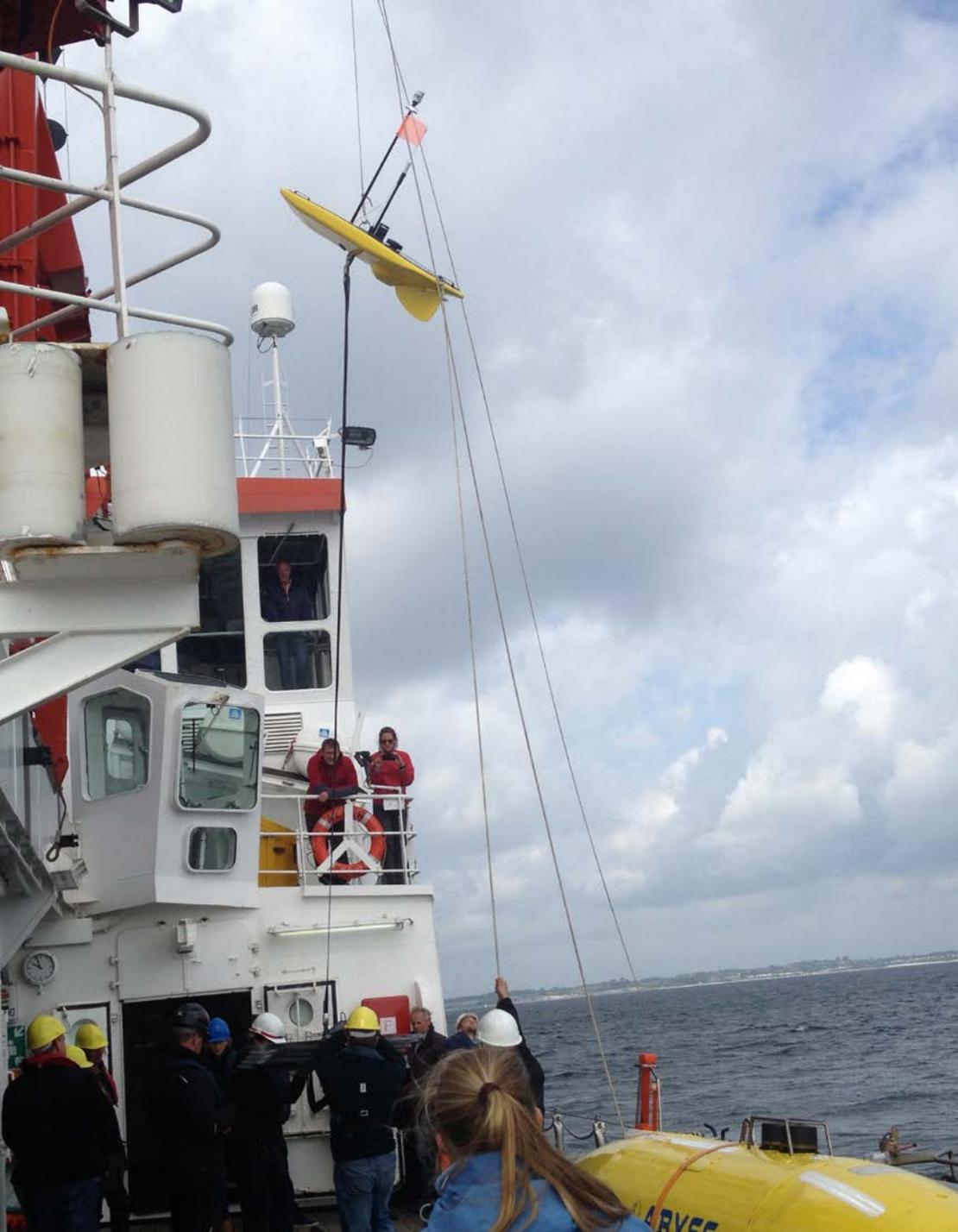
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Recovery of the waveglider.