



## SURVEY / ROV SUPPORT VESSEL

### GENERAL

Owner	Bold Horizon, LLC.
Vessel Management	Eclipse Group, Incl
Vessel Type	Survey Vessel - Cargo Misc.
Year Built	1978
Yard Built	Atlantic Marine Shipyard
Flag State	United States of America
Port of Registry	San Diego, CA
Official Number	1265983
Classification Society	American Bureau of Shipping (ABS)
Class Certifications	* A1, * AMS*, Loadline
Class Number	1265983
Call Sign	WKWB
IMO Number	7723821
MMSI Number	303273000
Selective Calling No.	71478
Operations	World Wide
USCG Designation	Work Vessel
SOLAS	Pending
FCC Registration Number (FRN)	0025079617 (FRN)
INMARSAT No.	1501554

### GENERAL

Maximum Endurance	40 Days
Maximum Range nm	9600 nm
Maximum Speed	10 knots
Economic Cruising Speed	8 knots
Minimum Speed	Variable to 0 knots
Rudder	2 ea. Flap Rudders
Total Horsepower	1,700 Hp
Bollard Pull	16.7 Long Tons (Estimated)
Number off Propellers	2 ea, CCP Variable Pitch Propellers
Additional Thrusters	1 ea. Bow Thruster
Jones Act	Compliant
Crew	8 Total
Client Berthing	12 Total
Crew Nationality	United States Citizens
Fuel	Low Sulfur No. 2 Marine gas oil

### DIMENSIONS

Length Overall LOA	170' - (52m)
Breadth Moulded	36' - (11m)
Draft Light	9.35' - (2.85m) Lightship 12.18
Loadline Draft	ft. (3.71)
Max. Free Board	4 ft. (1.2)
Min. Free board	2.64 ft. (0.8) - Tropical
ITC Gross Tonnage	Loadline 797 tons
ITC Net Tonnage	239 tons
Registered Tonnage, Gross	202 tons
Loaded Displacement	1,007 Long tons
Lightship Displacement	663 Long tons

### GENERAL

<b>Contact Information</b>	
24-Hour Response Number:	001-410-533-3041
Vsat Satellite Phone Numbers:	001-954-538-7802 001-954-538-7803
In Port Ship Phone Number:	001-619-488-2383*
*(voip technology)	
<b>Main Vessel Emails</b>	
Managing Director:	ssaintamour@eclipse.us.com
Sales Director:	tweller@eclipse.us.com
Vessel Manager:	cyoung@eclipse.us.com
Bridge Email:	bridge@eclipse.us.com
Captain's Email:	captain@eclipse.us.com

# M/V BOLD HORIZON

## PROPULSION/MACHINERY

Total Horse Power	1700 hp (1268 kW)
Main Engines	2 ea. Caterpillar model D398, 850 hp (634 kW) main engines
Propulsion	2 ea. CPP Variable Pitch Propellers
Bow Thruster	LIPS Variable-Speed Electric Tunnel Thruster 250 hp (186 kW)
Main Generators	2 ea. Detroit Diesel 460 VAC, 3-Phase, 230 kW generators
Clean Power	16.8 KW Katon "clean power" generator
Emergency Power	6 kW Onan emergency generator (port aft deck house)

## FUEL CONSUMPTION

Fuel Use Transit / Max Speed	Marine Diesel 1,000 gal/day (3 MT/day) est.
Fuel Use Cruising Speed	Marine Diesel 800 gal/day (2.5 MT/day) est.
Fuel Use In Port	72 gal/day (.25 MT/day)
Fuel Use at San Diego Home Port	Shore Power

## TANK CAPACITIES

Marine Diesel	44,366 gal (139 MT)
Fresh Water	2,095 gal (6.6 MT)
Lube Oil	500 gal (1.57 MT)
Wash Water	6,498 gal (20.44 MT)
Desalination Plant Total Capability	1,600 gal/day (6,057 l/day)
Reverse Osmosis Plant	800 gal/day (3,028 l/day)
Evaporator Plant	800 gal/day (3,028 l/day)
Sewage Treatment System	MSD Type II
Holding Tank	3,700 gal (11.64 MT)

## DECK FEATURES

Free Work Deck Space	
Main Working Deck	1,730ft <sup>2</sup> (160m <sup>2</sup> )
01 Deck	840ft <sup>2</sup> (78m <sup>2</sup> )
Total Open Deck	2,570ft <sup>2</sup> (238m <sup>2</sup> )
Deck Load	
Main Working Deck	500lbs/ft <sup>2</sup> (2.4MT/m <sup>2</sup> )
01 Deck	500lbs/ft <sup>2</sup> (2.4MT/m <sup>2</sup> )
Maximum Cargo Capacity	130 Long Tons
Deck Tied Down Points	
Main Working Deck	2' x 2' Baxter Bolt Pattern @ 800 lbs. ea.
01 Deck	2' x 2' Baxter Bolt Pattern @ 800 lbs. ea.
Available Deck Electrical Supply	
480 VAC	3 ea. 480 VAC 3 phase, 50 Amp outlet plugs
208 VAC	3 ea. 208 VAC 3 phase 30 Amp outlet plugs
Deck Hydraulic Connections	Multiple Hydraulic Connections with Local and Remote Control
Hydraulic Pressure and Volume	Working Pressure 2200 PSI With Output of Upto 70 GPM
Hydraulic Power Units	2 ea. Independent Hydraulic Systems Providing 100% Redundancy
Deck Fresh Water Supply	2 ea. Fresh Water Hook Ups With Shore Water Supply
Deck Salt Water Supply	1 ea. Salt Water Hook Up
Deck Pressure Washer	1 ea. Permanently Installed 2,200 PSI High Pressure Washer
High Pressure Air	2 ea. Quincy Model 325A Air Compressors
Stern Trawl Ramp	12 ft wide With Removable Deck Cap
Moon Pool	41" Diameter Transducer Well Located on The 01 Deck
Removable Cable Chute	Available as needed
Deck Refrigeration unit	5' x 7' Walk-in Scientific Ref/Freezer Located Fwd of J-frame
HAZMAT/Chemical Storage	Located on the Main Deck

# M/V BOLD HORIZON

## SURVEY & DECK EQUIPMENT

### **Stern A-Frame W/Multiple Sheave Positions**

Tow Static Safe Working Load  
Dynamic & Lifting Safe Working Load  
Vertical Clearance  
Horizontal Clearance  
Travel

### **1 ea. Vessel A-Frame**

18,000lbs (8,165kg) - Outboard against stops 12,000lbs  
(5,443kg)  
18.5ft (5.6m)  
14ft (4.3m)  
16ft (4.9m) forward of transom to 9ft (2.7m) aft of transom

### **Stbd J-Frame**

Static Safe Working Load  
Dynamic Safe Working Load  
Vertical Clearance  
Inboard Reach  
Outboard Reach

### **1 ea. Vessel J-Leg**

9,200lbs (4,173kg) SWL  
9,200lbs (4,173kg) SWL  
17.5ft (5.3m)  
5.6ft (1.7m)  
7.5ft (2.3m)

### **Telescoping Deck Crane**

Max. Reach  
Max. Safe Working Load  
Max. Safe Working Load - 1st Extension  
Max. Safe Working Load - 2nd Extension  
Slew Range

### **1 ea. Nautilus 3400-051**

70ft (21m) - Pier Side, 50ft (15m) - At sea  
15,000lbs (6,804kg) SWL @ 14ft (4.3m)  
4,000lbs (1,814kg) SWL @ 50ft (15m)  
500lbs (226kg) SWL - Pier Side Use Only  
360 Degrees Range

### **Trawl/Survey Winch 01 Deck**

Capabilities  
Wire Capacity  
Line Pull  
Speed

### **1 ea. Dynacon Traction Winch**

Capable of Lifting, Towing, Side Scan Sonar or ROV Operations  
32,810ft (10,000m) of 9/16" cable or .680 coax or electro / fiber optic umbilical  
30,000lb (13,608kg)  
100 ft/min (30m/min)

### **Hydrographic Winch**

Wire Capacity  
Line Pull  
Speed

### **1 ea. Markey DUSH-6 CTD Winch**

32,810ft (9,100m) 0.322" Conductor Wire (CTD) Lebus Grooving  
13,734lbs (6,300kg) bottom layer  
161ft/min (49m/min)

### **Hydrographic Winch**

Wire Capacity  
Line Pull  
Speed

### **1 ea. Markey DUSH-4 Hydrographic Winch**

32,810ft (9,100m (10,000m)) 0.322" Conductor Wire (CTD) Lebus Grooving  
13,734lbs (6,300kg) (6230 kg) bottom layer  
170ft/min (51.8m/min)

### **Electric Vertical Capstan**

Line Pull  
Low Speed  
High Speed

### **1 ea. New England Trawler Equipment Model X-1238 Electric Vertical Capstan**

5,000lbs (2,268kg)  
20ft/min (6m/min)  
40ft/min (12.2m/min)

### **Hydraulic Vertical Capstan**

Static (Bollard) Pull

### **1 ea. Schoellhorn-Albrecht's SA1014 Vertical Capstan**

35,000lbs.(15,875kg)  
40ft/min (12.2m/min)

Nominal Line Speed (FPM)

### **Hydraulic Tugger / Winch**

Line Pull  
High Speed

### **1 ea. Pull Master Model M**

55,060lbs (2,268 kg)  
84ft/min (25.5m/min)

### **Anchor & ground tackle**

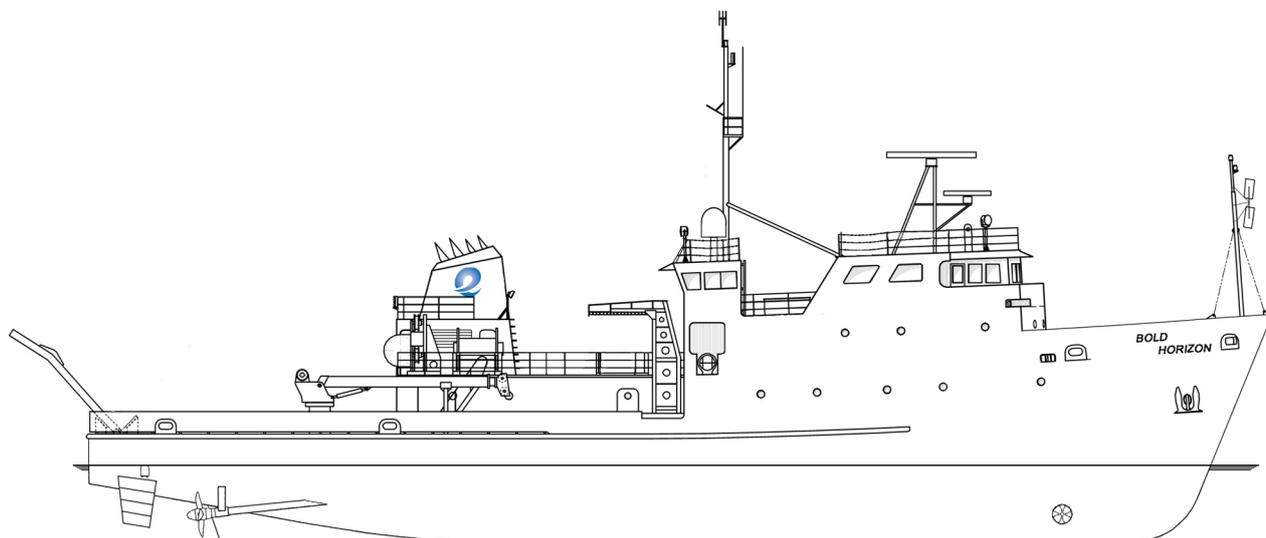
**2 ea. 2,000lb (907kg) Navy Danforth anchors with 9 shots of 1" chain rode**



# M/V BOLD HORIZON

## NAVIGATION EQUIPMENT

<b>Radios</b>	2 ea. Sperry Marine Compact VHF Radios-RT2048 2 ea. Sperry Marine Compact VHF DSC - RM2042 1 ea. Standard Communications VHF Radio - GX1250S 1 ea. Furuno SSB Radio - FS-1562-25 1 ea. Furuno SSB Radio - FS-1503 1 ea. Furuno MF/HF DSC Terminal - DSC-6 1 ea. Furuno MF/HF DSC Receiver - AA-50 1 ea. Simrad-Taiyo, TD-L1620 Automatic Digital Direction Finder (ADDF)
<b>Navigation Radar</b>	1 ea. Furuno 21X7 ARPA Radar 1 ea. Furuno 28X8 ARPA Radar
<b>Compasses</b>	2 ea. Sperry Mk 37 Gyros Compasses 1 ea. Sperry Magnetic Compass 1 ea. Furuno 21X7 ARPA Radar 1 ea. Furuno 28X8 ARPA Radar
<b>Auto Pilot</b>	1 ea. Robertson
<b>Echosounder</b>	1 ea. Furuno FCV-382
<b>Deep Water Echosounder</b>	1 ea. Knudsen 320B/R 3.5 and 12 kHz dual frequency
<b>Doppler Speed Log</b>	1 ea. Furuno DS-50
<b>GPSs</b>	2 ea. Furuno GP-90 1 ea. Furuno GP-36
<b>DGPS</b>	1 ea. Trimble NT 300
<b>Weather Station</b>	1 ea. Furuno 208 Weather System
<b>Charting System</b>	1 ea. Nobeltec Trident - Chart / Tracking System and Fixed Electronic Positioning System.
<b>Survey System</b>	1 ea. QINSy QPS, a hydrographic data acquisition, navigation and processing system
<b>Subsea Positioning System</b>	1 ea. Sonardyne Lodestar GyroUSBL Ultra Short Base Line Tracking System (Rental)
<b>Communications VSAT</b>	GMDSS Fully Compliant VSAT & Fleet Broadband/LTE Intellian v100GX V3-11A-P-Ku to Ka Band convertible antennas system with 103cm reflector, X-pol and Co-pol
<b>INMAR Sat C</b>	1 ea. Furuno Felcom 15 1 ea. Furuno Felcom 16
<b>High-frequency, single-side band transceivers</b>	1 ea. ICOM M800 1 ea. Harris 230M- Continuously Monitors 2182 kHz



# M/V BOLD HORIZON

## NETWORK COMMUNICATIONS

Wi-Fi	All Decks
Wi-Fi Network Security	iDirect platform, X5 modem currently on board uses AES256bit encryption
Cisco Switch network	High security vlan configurations to isolate various ships networks (corporate, security, guest, and client networks)
Wi-Fi Network Security	Unifi 4 SSID wireless AP's, Unifi 4 SSID wireless AP's configurable as needed to each vlan in ships network. Complete ship coverage using AES encryption
Voice Communications	2 vsat voice lines. 1 voip line will near shore
4G Lte	4G modem for near shore broadband network communications.
Intellian v100GX V3 antenna	iDirect platform with X5 modem using MTN Satellite provider, System capability 1024 ship to shore and 1024 shore to ship using ka band Inb. Burstable speeds up to 1.5 Mbps depending on satellite traffic.
Communications Speed	Multiple VPN encryption designs to meet requirements,
Vsat security	Tricaster 855 16 c h video production device- capable of multiple encoding formats to stream to shore over VSAT.
Video & Data Ship to Shore Communications	13 dbi i Onmi directiona l antenna's mounted on ships mast for near shore WiFi connections/bridges.
5.4 Ghz and 2.4 Ghz ship to shore	Ability to monitor nine (9) interior and exterior cameras with motion sensing from any shore location.
Vessel Video System	

## INTERIOR WORKING SPACES

Ocean Lab with Direct Deck Access	355ft2 (33m2)
Wet Lab	160ft2 (14.8m2)
Dry Lab/Survey Room	405ft2 (37.6m2)
01 Office / Lab Space	200ft2 (18.6m2)
Conference Room	198ft2 (18.4m2)
All Available Lab Space	1,318ft2 (122.4m2)

## ACCOMMODATIONS

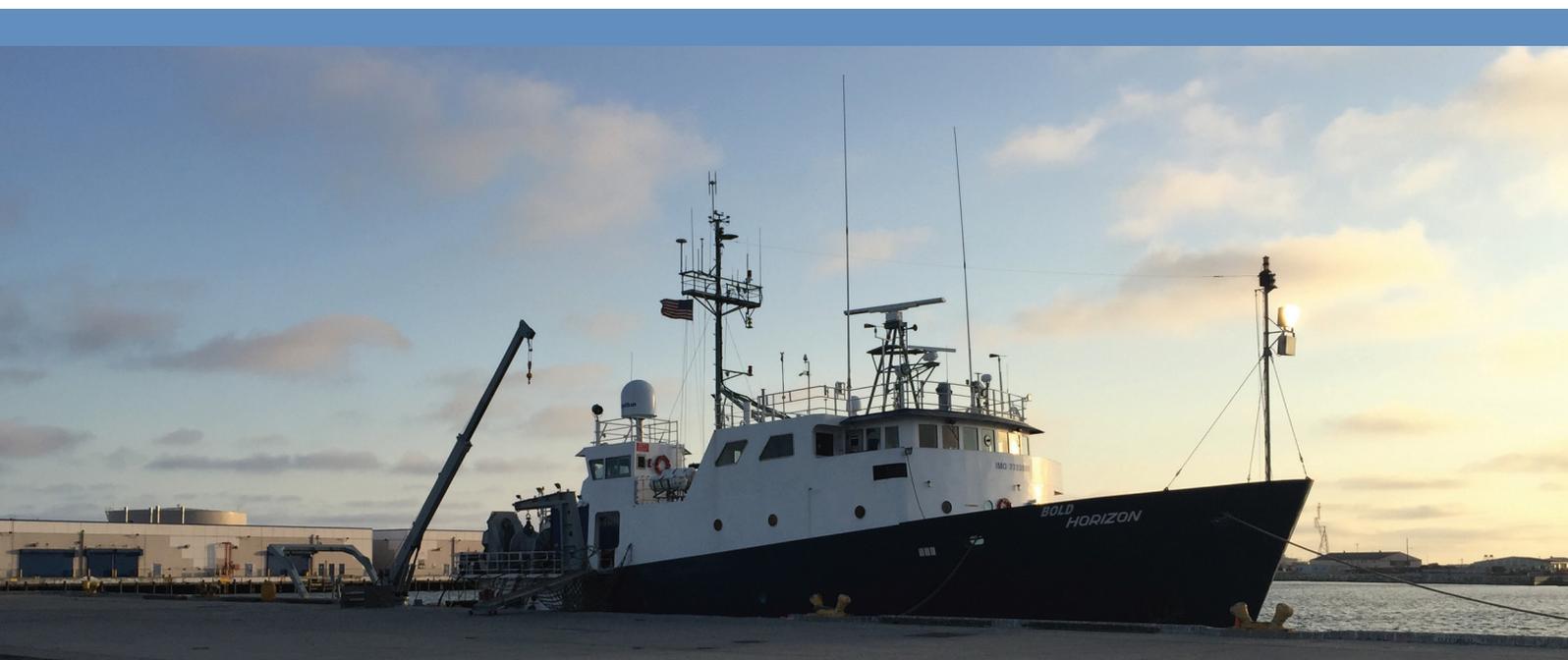
<b>Total Number of Cabins</b>	<b>22 ea.</b>
Single Man Staterooms	11 ea.
Two Man Staterooms	9 ea.
Independent cabins	2 ea. Separate personnel berths for female or VIP Berthing
<b>Total Number of berths</b>	<b>31 Bunks</b>
Crew	8 ea
Charterers	12 ea.
Galley	Seating for 17
TV Lounge / Conference Room	12 person, 198 sq. ft. conference room with wireless internet access
Office	200ft2 (18.6m2)
<b>Heads</b>	<b>14 ea. Total:</b>
Public heads w/shower	4 ea.
Public heads w/o shower	2 ea.
Private heads w/shower	8 ea.
<b>Showers</b>	<b>12 Total:</b>
Public Showers	4 ea.
Private Showers	8 ea.
Climate Control	Full A/C and heating
Laundry	1 ea. Washer and Dryer



# M/V BOLD HORIZON

## SAFETY

Life Rafts	4 ea. Elliot 20-person ISSI life rafts with hydro static releases
Life Rings	9 ea. Life rings (seven with strobes and two with smoke)
Life Jackets	41 ea. type III adult with lights
Immersion Suites	38 ea. Type I adult
Immersion Suites	3 ea. Type I Adult Small (Child)
Immersion Suites	3 ea. Type I Oversize
Rescue Boat	**Coming Soon**
Fire Protection	<p>The vessel has in place a fully functional Simplex 4010 Fire Control System and equipment, including portable and semi-portable fire extinguishers, fire pumps, fire mains, fixed gas extinguishing systems. All fire detection and alarm protection systems and system components installed meet and are in accordance with USCG or SOLAS requirements.</p> <p><b>Additional Fire Protection Features:</b></p> <ul style="list-style-type: none"><li>a) Self-priming power-driven fire pump connected to a fixed fire main piping system with a sufficient number of hydrants to reach any part of the vessel with a single length of fire hose.</li><li>b) A Halon Fixed, gaseous fire extinguishing system that serves the engine compartment</li><li>c) Kidde CO2 fixed, gaseous fire extinguishing system that serves paint locker</li><li>d) A grease extraction hood and extinguishing system that serves galley cooking equipment</li><li>e) A fire detection and alarm system or an independent modular smoke detector or fire detecting unit located in each accommodation space</li><li>f) 2 ea. SCBA with firefighting suits</li></ul>
Emergency position indicating radiobeacon station (EPIRB)	2 ea. Category 1, 406/121.5 MHz float-free, automatically activated EPIRB detectable by satellite anywhere in the world and is recognized by GMDSS. The EPIRB is registered per the NOAA Search and Rescue Satellite Aided Tracking (SARSAT) .
Other equipment	Emergency steering pump, five fire axes, two bolt cutters, emergency lighting, 15 emergency escape breathing devices, watertight door in cabin passageway, rescue swimmer's equipment, life sling, body basket, backboard, two line throwers, Pathfinder SART, emergency lighting system, and day shapes.
Medical	<ul style="list-style-type: none"><li>1 ea. Chemical Shower Station</li><li>4 ea. Eyewash station - Portable Sterile Bottles</li><li>2 ea. Eyewash Station - Fixed</li><li>1 ea. Automated External Defibrillator (AED)</li><li>7 ea. First Aid Stations</li><li>1 ea. Medaire Ship's Medical Chest 3.0 Rx</li></ul> Medical Advisory Service (MAS)
Vessel Alarm System	External siren and flashing light
Vessel Video Security System	16-Channel Network Video Recorder with 12 IP camera's in key locations. Remote alert configurations for motion detection and video tampering. 4 day recording capability 24/7



# M/V BOLD HORIZON

## ROV SYSTEMS

Super Mohawk Work Class ROV  
SERIO Observation Class ROV  
Optional GP60 Work Class ROV

2,000-meter rated system presently installed on the 01 Deck  
300-meter rated hand launched system presently on board  
6,000-meter rated stern launched system  
\*Specification Sheets available upon request

## SIDESCAN SYSTEMS

Klein 3,000 Sidescan  
Bluefin12 Sidescan / AUV  
Optional BF21 Sidescan, Multi-beam AUV  
Optional AMS Towed Sidescan

3,000-meter rated system  
1,500-meter rated system  
4,500-meter rated system  
6,000-meter rated system  
\*Specification Sheets available upon request

## ADDITIONAL FEATURES

Expendable Bathythermograph (XBT)

1 ea. WTP XBT Launcher

Other Vessel Features

1 ea. Surface Mounted 37.5 & 40 kHz Pinger Locator System

1 ea. 5ft (1.5m) by 7ft (2.1m) Refrigerated / freezer, biological containment unit

1 ea. Instrument Moon pool 42in (1.06m) diameter



## COMPREHENSIVE SERVICES



**EXPERIENCE  
IN DEPTH**

— 2,000m

Our professional team is second to none in at sea operations.

— 4,000m

Our experts have worked at the forefront of subsea and ROV operations for over 25 years.

— 6,000m

### Let us help you move forward

Eclipse Group strives to provide our clients with the highly qualified personnel and technical solutions.

#### Our comprehensive service lines include:

- Marine services
- Vessel operations and management
- Subsea services
  - ROV operations
  - Diving operations
- Government services
- Civil and military air crash investigation
- Construction and infrastructure
  - Survey
  - Cable and pipeline installation

Our mission is to become a leader in comprehensive subsea and ROV services worldwide. We welcome the opportunity to discuss our services with your organization.

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