

## R/V Shearwater

Multi-role Survey Vessel



## R/V Shearwater – Multi-role Survey Vessel



R/V Shearwater combines superior stability and maneuverability with state-of-the-art research facilities to provide a flexible, multipurpose platform for marine surveying. The vessel fills the gap between small coastal and large offshore survey platforms providing a cost effective solution for many applications. In addition, the Shearwater allows for a single vessel to complete different tasks, such as geophysical, environmental, and geotechnical surveys, thereby affording our clients the opportunity to save both time and money.

The Shearwater is designed to be flexible enabling it to provide efficient and effective configurations for the completion of its missions. The 110' x 39' aluminium trimaran boasts a hydraulic azimuth drive propulsion system which is fuel efficient while providing superior positioning and line-keeping performance (handling is further enhanced by a 100 HP Bow Thruster). In most instances, this allows the vessel to hold station without resorting to anchoring. The Shearwater also features a large back deck, two equipment moon-

pools, a crane, hydraulic stern A-frame, fixed starboard A-frame, dedicated equipment winches, laboratory and office space with onboard data processing capabilities, and accommodation for up to 20 people on a 24-hour basis.

A professional crew, with extensive experience in offshore survey and construction operations, allows clients to take advantage of the full list of impressive capabilities the Shearwater can bring to a project.

### **R/V SHEARWATER HAS BEEN DESIGNED TO SUPPORT THE FOLLOWING KEY AREAS:**

- / Offshore Structure Surveys (Wind, Oil & Gas, Hydrokinetic)
- / Cable and Pipeline Route Surveys
- / Marine Aggregate and Mineral Surveys
- / Environmental Surveys
- / Oceanographic Instrument Deployment and Recovery
- / Port and Breakwater Development Surveys
- / ROV, AUV and Diver Support
- / Offshore Construction Support and Monitoring Surveys



## Vessel Details

<b>Name:</b>	Shearwater
<b>Type:</b>	Multi-Role Survey
<b>Year of Build:</b>	1981
<b>Reconfigured, Refit and Repowered:</b>	2011

## Dimensions

<b>Length:</b>	110'
<b>Beam:</b>	39'
<b>Draft:</b>	9'
<b>GRT:</b>	198
<b>NRT:</b>	175
<b>Aft Deck:</b>	1175 sq. ft with separate stern rescue deck

## Accommodation

<b>Berths:</b>	20 including crew
<b>Survey Lab:</b>	127 sq ft
<b>Processing Office:</b>	72 sq ft

## Propulsion and Machinery

<b>Main Engines:</b>	2 x 526 HP John Deere Model 6125AFM
<b>Propulsion:</b>	2 x Hydraulically driven "Z" Drives (raise/lower/tilt with 360 degree steering)
<b>Bow Thruster:</b>	Thrustmaster 100 HP
<b>Generators:</b>	2 x John Deere Model 6081AFM/Marathon (Magna Plus) 135 Kw

## Capacities

<b>Desalination System:</b>	Up to 900 gallons/day
<b>Fresh Water Storage:</b>	5000 gallons
<b>Fuel Storage:</b>	13800 gallons
<b>Septic:</b>	Zero discharge with 2000 gallon holding tank
<b>Endurance:</b>	21 days

## Fuel Consumption

<b>Survey 24hrs:</b>	300 gallons/day
<b>Steaming:</b>	500-600 gallons/day
<b>Standby at Sea:</b>	70-100 gallons/day

## Navigation

<b>Radar:</b>	Furuno 1944C/NT Furuno 1935
<b>Charting System:</b>	Garmin 5208 GPS with Chart Plot
<b>Auto Pilot:</b>	COMNAV
<b>Echosounders:</b>	Furuno FCV 620 - color in each hull
<b>AIS:</b>	Furuno FA 150
<b>Navtex:</b>	Furuno NX700
<b>Survey GPS, Heading and IMU:</b>	Applanix POS MV
<b>Acoustic Positioning:</b>	Moon Pool mounted USBL

## Communication

<b>VHF:</b>	2 x Icom IC-M504
<b>SSB:</b>	SEA 245 HF/SSB
<b>SART:</b>	Sevenstar Electronics S.701
<b>Satellite (Phone/Data):</b>	Intellian v80G VSAT

## Equipment Handling

<b>Equipment Moon Pools:</b>	Port and Starboard 3 foot diameter moon pools
<b>Hydraulic Stern A-Frame:</b>	2 Ton Capacity Can operate as two separate davits
<b>Fixed Starboard A-Frame:</b>	5 Ton Capacity
<b>Crane:</b>	14 Ton Maximum Capacity 5 Ton w/ single part line 2 Ton at 40' Extension.
<b>Geotechnical Winch:</b>	5 Ton Capacity
<b>Survey Equipment Winch:</b>	2500m (11mm diam.) Capacity

## Survey Capabilities

### Hydrography and Geophysics

Multibeam and Single Beam Echosounders  
Side Scan Sonars  
Subbottom Profilers  
Boomers  
Sparkers  
Mini Air Gun  
Multi-Channel Streamers  
Magnetometers and Gradiometers

### Benthic and Oceanographic

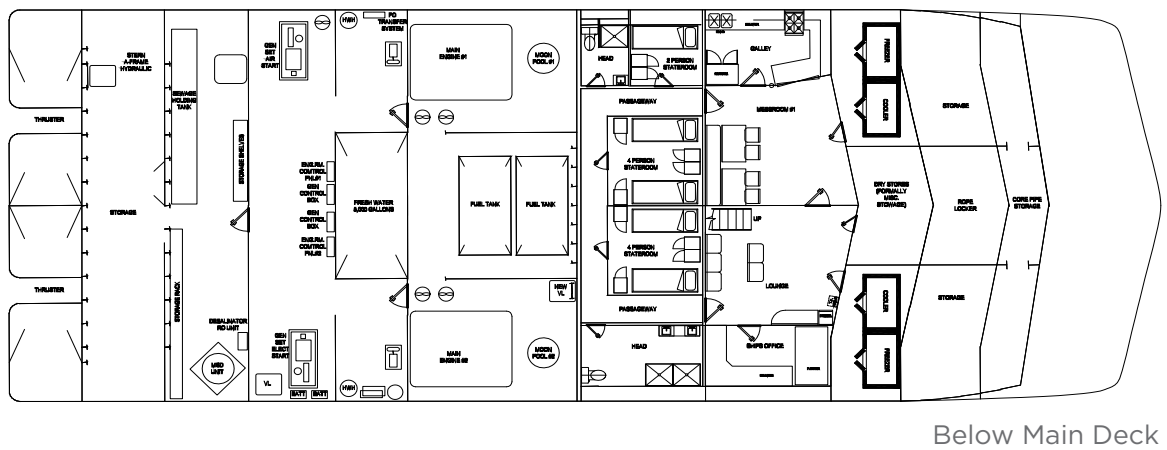
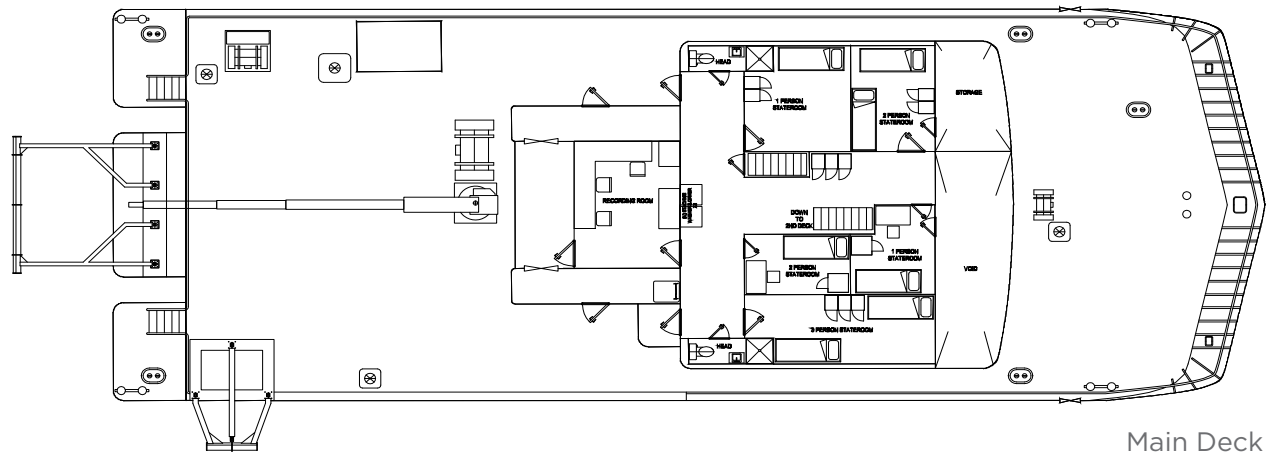
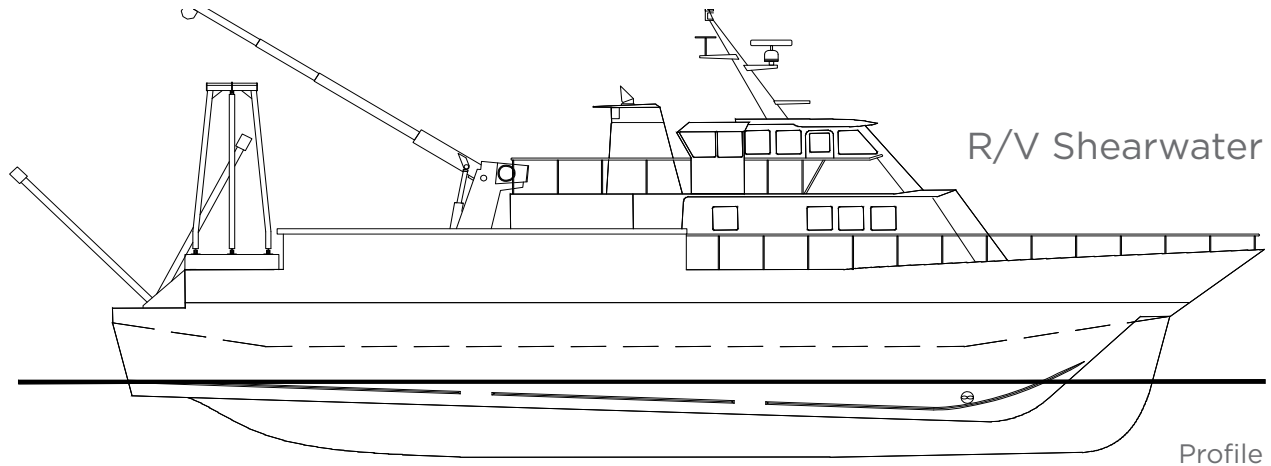
CTD and SVPs  
Water Sampling Systems  
Turbidity Monitoring Systems  
Benthic Grabs  
Box Corers  
Drop Down Cameras

### Geotechnical

10 to 30' Pneumatic and Electric Vibracores  
Mini-CPTs  
Piston Corers  
Drop Corers  
Grab Samplers

### Other

Deployment and Retrieval of Inspection Class ROVs and Compact AUVs  
Dive Platform Capable  
Permanently Installed Networked Server



**Alpine Ocean Seismic Survey, Inc.**  
155 Hudson Avenue, Norwood, New Jersey 07648 USA  
Tel: 1-201-768-8000  
Email: info@alpineocean.com

[www.alpineocean.com](http://www.alpineocean.com)

**Alpine Ocean Seismic Survey, Inc.**  
1500 Bingle Road, Houston, Texas 77055 USA  
Tel: 1-713-973-0068  
Email: info@alpineocean.com