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She is equipped with a **large tow/troll winch, large deck crane, dive center** with professional dive equipment and is **helicopter-capable**. She accommodates 60+ for sleeping. Some of the many noteworthy achievements of her unparalleled history are described in the full specification.

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Atlantis II is a **special and highly respected, totally proven, all-ocean, all-weather** vessel with enormous and wide ranging capabilities. Atlantis II could be configured to continue her superlative research career or used as a successful expedition or exploration yacht. Truly a magnificent vessel!



### Additional Specs, Equipment and Information:

<b>Builder/Designer</b>		
Builder: Maryland Shipb	uilding & Drydock Co.	
Dimensions		
LOA: 220'	Beam: 44'	Draft: 14'
Ballast: 271 Tons		
Engines		
Engine(s): Twin EMD	Engine(s) HP: 2 x 1245	Engine Model: 12-567
Detroit Diesels		EA-S
Cruising Speed: 12 Knot	s Max Speed: 14 Knots	
Tankage		
Fuel: 90,000 Gallons	Water: 50 Tons	

### Accommodations

There are seven decks. The top deck sky lounge has a bar, 42 **\diamond \diamond \diamond \diamond \diamond** flat screen TV, numerous sofas, and a piano. The dining room has a fireplace and seating for 30. There is a conference room, and the ship is equipped with telephone, Internet, fax and satellite TV system.

There is a full commercial galley with amenities, and the equipment includes a large walk-in freezer, two small chest freezers, a large walk-in cooler and a smaller walk-in cooler with enough storage for 120 days of food. There are 6000 gallon per day fresh water makers. There is a BBQ and fire pits.

There are 32 staterooms, most of which have a private en suite bathroom with shower. There are various configurations of double or single staterooms, and are also bunk rooms for crew. Sixteen of the staterooms have been fully renovated, and sixteen have been stripped, resurfaced and are in the process of being completed.

The vessel is in a process of a refit and much of the interior has been redone. Some of the interior is commercial grade finish; some areas have been converted to "yacht" finish.

#### Features:

- Underwater observation chamber with six viewing ports in bulbous bow
- Full gym with free weights, Bow Flex, bike, stretch and treadmill
- Diving center, fully updated, with latest gear & racks for 30/60 divers, including: 2 dive compressors, full SCUBA facilities, tanks, BCDs, wet suits, regulators, weights, UW dive lights for night work
- Fully equipped hospital with surgery and defibrillators
- Full laundry facility
- Retail store



### **Electrical & Electronics**

- AC Voltage: 110V, total 600 kVa, 3 phase, 60 Hz
- DC Voltage: 550V, total 750V
- Electrician's Shop

- Radar/navigation/GPS equipped
- Surveillance/security system

# **Engine Details & Mechanical**

The engines were inspected and tested by Detroit Diesel technicians and their documentation indicates that the engines are within 10% of being brand new. Relatively low hours were logged on the engines as the vessel's use was winding down after her conversion from steam to diesel.

The steam boilers are still on board and could either be used for running large equipment, i.e., huge watermakers, etc., or they could be removed providing a large area for another purpose.

Equipment:

- Twin EMD Detroit Diesels, 12-567 EA-S, 2 x 1245 hp
- Auxiliary diesels, 750 hp
- Caterpillar 250 kW generator, in process of being fully rebuilt
- Caterpillar 250 kW generator, very good condition
- Emergency generator, 125 kW, with newly rebuilt Detroit 671 diesel
- GE 600 hp Bow thruster, articulating, variable speed, DC electric, runs off PTO from main engines; this unit can be used as an emergency propulsion system
- New water separators
- All new sewage pumps
- All new potable water pumps
- New or rebuilt valves
- Special "Navy" type bilge compartment control system
- Full machinery shop with lathes, milling machines, welding equipment, etc.

- Full air conditioning, 4 units
- 6,000 gal/day Watermakers
- Manuals for all equipment

## Hull & Deck

- Underwater observation chamber with 6 viewing ports in bulbous bow
- Heavy equipment lift vessel supported by:
- 30' Pettibone 20 ton hydraulic deck crane, fully rebuilt 2007
- Trawl winch on deck with 8 miles of cable
- Stern capstan, newly rebuilt
- Windlass, newly rebuilt
- Fully equipped safety features and life rafts
- 22' Skiff
- Equipment and prop storage space
- Possibility for helipad capability

## History

Research Vessel "Atlantis II", built to United States Navy specification with a grant from the National Science Foundation in 1962, went directly into service in with the Woods Hole Oceanographic Institution as a member of their research fleet and the national academic research fleet. She followed in the footsteps of the R/V "Atlantis", after which a NASA Space Shuttle was named. R/V "Atlantis II" served as a model for future generations of research vessels, and housed 25 scientists and as many in crew. Her achievements were stellar.

Her second mission, in 1963, was interrupted when the U.S. Nuclear Submarine "Thresher" sunk in 8,000 feet of water and she proceeded to the site where she aided in the search and recorded the first photographs, earning her a commendation from the U.S. Navy.

In 1975, she embarked on a 573 day voyage of roughly 80,000 miles around the world performing marine research and engineering projects, the most mileage per trip of all of the Institution's vessels. In 1979, she underwent a major refit, converting her power source from steam to diesel, thereby reducing her operating cost, increasing her range of travel, and increasing her selection of ports. In 1983, a deck hangar and A-frame were installed enabling her to handle the launch and recovery of a submersible oceanographic vehicle. She set a record for days at sea in 1992, with 894 days away, 575 days at sea, and 73,097 miles. She was among the first of all research vessels to employ female officers and crew, and to welcome female scientists. She visited 78 nations and over 112 ports, hosting numerous world leaders and dignitaries.

Her most well known achievement was to serve as support vessel for the deep sea, 3-person diving submersible Alvin at the wreck of the R.M.S. Titanic in the North Atlantic in 1984. R/V "Atlantis II" arrived with the new towed imaging system Argo developed by the WHOI Deep Submergence Laboratory, where 12 Alvin dives ensued, utilizing deep sea imaging systems and the prototype remotely-operated vehicle, Jason Jr.

She subsequently continued in general oceanographic research, with a focus on biological,

geological and geochemical studies of the Mid-Ocean Ridge in the Atlantic and Pacific Oceans.

R/V "Atlantis II" was retired from the Wood Hole Oceanographic Institution in 1996. She sailed over a million miles in service on 468 cruises and spent 8,115 days at sea in every ocean of the world. She proceeded to Louisiana, where her stern A-frame for submersible launch and recovery was removed. She was sold to a private U.S. firm for fisheries research, with the approval of the National Science Foundation, and subsequently to a private firm for expedition voyaging. State-of-the-art technologically advanced equipment has been added to further enhance her exploratory capabilities.

This ship's archival documentation includes her full historical record including all plans and modifications.

#### **Design & Construction**

The vessel was originally built to U.S. Navy specification with super redundancy out of special German high tensile steel alloy to ABS and Ice Class. She had her international load line and COI until 1996. At the completion of the ongoing refit, she will be able to be either re-classed and/or receive COI or load line.

From Marine Survey Report of November 1999:

"The vessel was built of all welded steel construction by Maryland Shipbuilding Company, Baltimore, Maryland, in 1961/62. The vessel underwent extensive refitting in 1979, converting the vessel from steam to diesel power. A stern deck equipment hanger and a large ROV tending A-frame were added in 1983 for use with a large submersible. The A-frame has since been removed, but the foundation and hydraulic systems remain. The vessel is presently undergoing refurbishment and modernization.

The vessel is of a typical ocean service, research design with a model bow, transom stern, sheer main deck with forward forecastle, and a two-and-one-half-deck steel superstructure containing quarters, and spaces that have in the past been used for laboratories and research.

The vessel is framed longitudinally and transversely in accordance with good marine practice for a vessel of its size and intended service. Reportedly, the vessel was originally built to American Bureau of Shipping scantlings as Maltese Cross A-1 Circle E.

The vessel's hull is protected by means of a two-tier rubrail fender system constructed of 6" diameter split pipe. The upper strake is located at the forecastle deck elevation and runs from a point 30' aft of the stern aft to the break of the forecastle on both port and starboard sides. The second strake is located at the main deck elevation and runs from a point 40' aft of the stern aft to a point 24' aft of the break of the forecastle on both port and starboard sides.

Bulwarks are constructed of steel, of the open type, with a height forward in way of the forecastle of 48", tapering to a height of 42" in way of the mid-portion of the forecastle deck, and fairing into a three-tier 42" high pipe safety rail in way of the aft end of the forecastle deck. Bulwarks in way of the aft deck have a height of 30" and are of a similar design. Bulwarks are fitted with adequate freeing ports.

Deck fittings consist of the following: Located to port and starboard on the foredeck are 10" diameter cast steel double bitts with adjacent 16" closed chocks. Located to port and starboard aft on the foredeck are 10" diameter cast steel double bitts with adjacent 16" closed chocks and 12" open chocks. In way of the after end of the forecastle deck level three (3) 6" diameter steel H-bitts range down the port side while one (1) is located on the starboard side. Located to port and starboard on the aft deck are 6" diameter bitts with adjacent 18" closed chocks, each chock fitted with four (4) securing horns, and adjacent 6" diameter closed chocks, each chock fitted with two (2) securing horns. An American Engineering 18" diameter warping capstan is located to starboard on the aft deck.

Ground tackle consists on one (1) each port and starboard bow Baldt 3,300-lb. anchor, each fitted with a reported seven (7) shots of 1-7/16" stud link chain. The anchors are handled by a double wildcat, double 18" diameter gypsy head, Skagit Model WE1HWG-23-6 anchor windlass powered by a 25-HP electric motor.

The vessel also has on board, located on the foredeck, a spare 1,200-lb. anchor.

Bulkheads are constructed of steel and are designed watertight, with watertight doors located at strategic areas throughout the vessel as noted below.

The fuel oil tanks noted above have a total reported capacity of 109,760-gallons and are fitted with approved type filling lines, vents with flame screens, and fuel oil shut-off valves.

Fresh water capacity is reported to be 26,600-gallons with an additional evaporator capacity of 4,800-gallons per day.

Lead ballast is reported to be 271 long tons.

The deckhouse is constructed of steel and is fitted with steel watertight doors, portlights, and fixed windows. The interior of the vessel is centrally air conditioned by means of forward and aft centralized chill water air conditioning units, and heated by means of boiler-heated radiators and electric space heaters.

The vessel is arranged with passenger/scientist accommodation, auxiliary work and support rooms on the lower deck level within the hull; stores, galley/messing, officer and crew accommodation and laboratory spaces on the main deck level; senior officer and passenger/scientist accommodation, a library, gymnasium and a store on the 01 (upper) deck level; ship support, electronic support and crew accommodation on the 02 deck level; the pilothouse, radio room and chart room on the bridge deck; and a full bar/lounge located on top of and behind the pilothouse."

#### ADDITIONAL SPECIFICATION:

- Gross Tonnage = 1,529
- Net Tonnage = 510
- Depth = 21.0'
- Freeboard to Working Deck = 7.21'
- Range = 9,000 Nautical Miles
- Wet Laboratories = 37m2

- Dry Laboratories = 130m2
- Fresh Water Generator Capacity = 8m3
- Free Working Deck Area = 28m2
- Space for Container Laboratory =  $3m \times 12m$

#### Comments

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Additional information is available upon request.

Vessel is offered at a price of \$8 million.

#### Disclaimer

The Company offers the details of this vessel in good faith but cannot guarantee or warrant the accuracy of this information nor warrant the condition of the vessel. A buyer should instruct his agents, or his surveyors, to investigate such details as the buyer desires validated. This vessel is offered subject to prior sale, price change, or withdrawal without notice.