### 70.4m Hydrographic Research Ship

**Listing ID:** 1215952

<table>
<thead>
<tr>
<th><strong>DESCRIPTION:</strong></th>
<th>70.4m Hydrographic Research Ship</th>
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<tbody>
<tr>
<td><strong>DATE LAUNCHED:</strong></td>
<td>1967; Refit: 2002</td>
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<tr>
<td><strong>LENGTH:</strong></td>
<td>70.4m (231 ft)</td>
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<tr>
<td><strong>BEAM:</strong></td>
<td>12.7m (42 ft)</td>
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<tr>
<td><strong>DRAFT:</strong></td>
<td>14.5 ft. (4.5m) 19 ft under transducer gondola</td>
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<tr>
<td><strong>DISPLACEMENT:</strong></td>
<td>1,289 tons</td>
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<tr>
<td><strong>LOCATION:</strong></td>
<td>Seattle, USA</td>
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<tr>
<td><strong>BROKER:</strong></td>
<td>John Kearns</td>
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<tr>
<td><strong>PRICE:</strong></td>
<td>Priced to sell at USD 1.75 million</td>
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**General Description**

The 70.4m Hydrographic Research Ship is a USCG inspected hydrographic research vessel. First commissioned as a survey ship for NOAA in 1967, the vessel was purchased in 2001 by her current owners and completely refurbished with the latest in electronics, machinery, and safety equipment. The vessel is ideal for most types of oceanographic research operations including, but not limited to: oceanographic mapping, sub bottom surveys, geophysical research, cable route surveys, and pipeline surveys and is outfitted with today’s most advanced underwater mapping equipment with the ability to map the ocean down to 11,000 meters and maps at speed between 7 and 8 knots. To ensure clean data and reliable performance, the transducers are installed in a gondola to keep them in clean water flow and free from turbulence in all workable sea state conditions. The vessel is equipped with stabilization tanks and anti-roll chocks to eliminate much of the vessel’s natural roll making it an ideal platform for surveying.

**DIMENSIONS**
- **Length Over All:** 231 ft. (70.4m)
- **Breadth:** 42 ft. (12.7m)
- **Draft, Mean:** 13 ft. (3.9m) 17.5 ft under transducer gondola
- **Draft, Max:** 14.5 ft. (4.5m) 19 ft under transducer gondola

**GENERAL**
- **Classification:** ABS + A1 AMS, ACC
- **Designer:** MARAD
- **Builder:** Aerojet General in Jacksonville, FL. Completed in 1967. Refit/Upgraded in 2002 in Port Arthur, TX

**PERFORMANCE**
- **Cruising Speed:** 10.0 - 11.0 knots
- **Flanking Speed:** 14.0 knots
- **Range:** 10,925 nautical miles at cruising speeds
- **Fuel Consumption:** Approx. 2,000 USG/day @ 11.0 knots
- **Endurance:** 45 days at cruising speed; 60 days at survey speed of 7 knots
- **Gross Tonnage:** 1,453 ITC, 1591 Regulatory
- **Net Tonnage:** 436 ITC, 578 Regulatory
- **Light Ship Displacement:** 1,289 tons

**SURVEY ELECTRONICS**
- **Multibeam Sonar**
  - Kongsberg EM120 2 x 2 degree 12kHz depth range to 11,000 meters
  - Kongsberg EM710 2 x 2 degree full performance with FM chirp, depth range to 1000 meters
- **Seachest valve, 500mm hull mounted for installation of Kongsberg HiPAP**
- **Positioning:** Applanix POS MV 320

**PROPULSION**
**Main Engines:** (2) EMD/567C 1200 H.P. Each General Motors Diesels.

**Propellers:** (2) Bird-Johnson Controllable Pitch, (3) Blade, 8.5ft dia. Sound Propeller Quiet Design Stainless Steel

**Bow Thruster:** (1) Detroit Diesel 8V71, 350 H.P., 5,000 lb. Thrust, Controllable Pitch Propeller, Bird Johnson

**Steering:** Autonav 2000 Independent rudder system, Dynamic Positioning compatible

**ACC Console:** Allen Bradley / Rockwell Automation Systems w/ CRT Touch Screens Located:

1. Wheelhouse
2. Engine Control Room

*Classed for partially unmanned engine room

**ELECTRICAL**

Generators: (2) Detroit Diesel 16V71, Model 7163/GE, 300kw/450v
Emergency Generator: (1) Detroit Diesel 471, Model 4150E/Delco, 75kw/450v

**ELECTRONICS**

**Radar & Navigation:**

1. Furuno FAR 2835 w/ 28” color CRT
2. Furuno PM-50 IMO Compliant Performance Monitor
3. Furuno FR2115 (3cm, X-Band 96nm, IMO Compliant ARPA w/ 21” color monitor
4. Furuno FE 700 IMO Compliant, Color Depth Sounder, 50 khz
5. JRC JLN-203 Doppler Speed Log
6. Young Marine Wind Tracker, Model 06206
7. Transis Navi-Sailor ECS-1 w/ AIS charting and plotting software
8. Furuno GP-37 Differential GPS w/ WAAS Technologies
9. Sperry SR 180 MK1 Gyro Compass
10. Furuno AD 100 Digital Gyro Repeater
11. Liley &Gillie MK2000 10” Ocean Magnetic Compass
12. Robertson AP 9 MK 3 Autopilot System
13. Furuno GP-37 Differential GPS w/ WAAS Technologies
14. Liley & Gillie MK2000 Ocean Magnetic Compass
15. Robertson AP 9 MK 3 Autopilot System
16. Furuno Felcom 82B Inmarsat “B” w/ high speed data phone, fax & email.
17. SeaTel 4006 Ku-band VSAT internet connection
18. Skanti Scansat 7701 Iridium Satellite Telephone
19. JRC-NRC 330A Navtec Receiver
20. Furuno DFax 207 Weather Fax Receiver

**External Communications:**

1. Skanti Scanbridge 1250 A4 GMDSS System
2. Skanti VHF 1000 DSC Radios
3. Skanti VHF 1250 SSB Radio with DSC, Telex, MF/HF 250w
4. Furuno FS1570 SSB with DSC, Telex, MF /HF 250w
5. Scansat Inmarsat STD. “C”
6. PCU 9000 NBDP Telex ICOM M700 DSC VHF Radio
7. Nat Axis 30 GMDSS Handheld VHF
8. Furuno Felcom 82B Inmarsat “B” w/ high speed data phone, fax & email.
9. SeaTel 4006 Ku-band VSAT internet connection
10. Skanti Scansat 7701 Iridium Satellite Telephone
11. JRC-NRC 330A Navtec Receiver
12. Furuno DFax 207 Weather Fax Receiver

**Internal Communications:**

1. Toshiba Strata CTX 670, w/ 68 telephone lines, in all Cabins and Work Spaces
2. Vingtor VSP Battery-less Phone System, Emergency Shipboard Communications w/ 8 Stations
3. Raytheon Ray 430 Loudhailer System
4. Extensive LAN (Local Area Network) System throughout the ship with 2 CAT5 lines per work station and stateroom for multiple networks or servers. Networked via Ethernet Active Hubs. High Speed Data via VSAT at 512 kb down 256 kb up

**Visual Monitoring:**

1. Sony Color Camera System
2. Sony SSCDC 134 Color Cameras in Weather Resistance Heated Enclosures

**Fire Detection:**

1. Siemens MXL-CG Addressable Fire Alarm Control System
2. All other appropriate SOLAS approved safety equipment as required by USCG

**Fire Stations:**

1. 1 ½” x 50’ Fire Hose, Fire Fighting Stations
2. Scott Air Packs
3. Fire Fighting Suits
Rescue:
USCG Approved Life vests and Immersion suits to accommodate full compliment of crew and personnel  
(10) 30” Life rings w/ 50’ Line  
(2) DATCI13452P 15 minute Smoke Buoys  
(2) ACR3940 Man Overboard Strobe light  
(6) 25-Man Inflatable Life Rafts Viking Solas A Pack  
(1) 19’ RIB Rescue Boat  
(1) Nat1510 406 EPIRB w/GPS Transceiver  
(2) NAT 9420 SART 9ghz Transponder Search & Rescue

ACCOMMODATIONS:
Berthing for clients:  
Berthing available for up to 48 personnel other than crew all staterooms equipped with thermostats to control individual heat and air conditioning.  
(1) VIP 1-Person Stateroom w/ private bath  
(2) 1-Person Senior Personnel Staterooms w/ shared bath  
(4) 1-Person Staterooms w/ shared bath  
(20) 2-Person Client’s Personnel Staterooms  
(1) Hospital room with sickbed and private bath  
(1) Dispensary room with full suite of medical supplies and equipment

Mess & Lounges:  
34-seat Main Mess with equipment for 24-hours drink and snack service  
Fully equipped Galley and serving station for effortless service of gourmet meals  
Off-galley freezer and chiller for convenient serving. Additional freezer and chiller capacity for extended voyages  
Large Lounge with sofa seating for meetings and leisure  
Conference room within lounge for smaller meetings

Cleaning Facilities:  
(1) Laundry Room w/ 2 commercial grade washers, 2 commercial grade dryers

WORK AREAS
Work Stations:  
(1) 545 sq. ft. Data Processing Area w/ 11 Workstations  
(1) 190 sq. ft Data Processing Area w/ 2 Workstation  
(1) Charter chief office w/ 2 Workstations  
(1) Wet lab workroom 227 sq. ft.

Working Decks:  
Aft Deck Area 1,387 sq. ft.  
Boat Deck Area 1,950 sq. ft.

Power Supply Availability:  
(4) 100 amp, 450V dedicated power sources for on-deck equipment

DECK MACHINERY
Cranes:  
(1) 5 Ton 35 ft. Knuckle Crane on forward deck  
(1) 43 ft. Telescoping Boom Crane on Aft deck  
9 Metric Ton at Full Extension /15 Metric Tons at 33 ft.

Capstan:  
(1) 21” dia. Capstan on after deck 13,500 Lbs pull @ 35 fpm Line Speed / 4,000 Lbs pull at 130 fpm  
Davits:  
(1) Vestdavit, PLR-3600 3.6m Ton. Capacity for 24’ Fast Rescue Boat

A-Frame:  
(1) 20,000 lbs. stern A-frame 20 feet deck clearance with five padeye points

CAPACITIES
Fuel Oil: 105,000 USG  
Lube Oil: 1,626 USG  
Hydraulic Oil: 534 USG  
Potable Water: 16,000 USG  
Black & Grey Water: 2,000 USG  
MSD: (1) Omni-Pure 120 Person Black 12MC 60 Person B/G processing all black and grey water for near shore operations  
Hot Water Heaters:
(2) A.O. Smith, DRE 120 USG 35Kw

**Water Maker:**
(1) 2,650 USG/day Aquamar, Model - 10/2 Evaporator
(1) 1,200 USG/day Reverse Osmosis

**Boiler:**
(1) 8 section Cast Iron Weil-McLain Low Pressure 1.6m/BUH Output

**Incinerator:**
(1) Atlas-200SL Incinerator, 209kw/hr Burning Cap.

**Heat:**
(37) Wall Mounted 120v Electrical Heaters for Back-up to

**Vessel highlights:**
USA Flagged
USCG Sub Chapter U
COI
ABS Certified A1
SOLAS Compliant
Twin 1200 HP GM Diesels;
Variable Pitch Propellers
Bow Thruster
11Knots Cruise
10,925 Nautical Mile Range
Endurance 45 Day/Cruise Speed
Endurance 60 Day/Survey Speed
Multibeam Kongsberg EM120
Kongsberg EM710
Sea chest Valve for Hi-Pap
VSAT Communications
Berthing for 48 Scientists
23 A/C staterooms
Charter Chief Office
227 Sq. Ft. Wet Lab
3,330 Sq. Ft. Deck Space(s)
5 Ton Knuckle Crane
15 ton/9Ton Boom Crane
10 Ton 'A' Frame

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**IMPORTANT:** 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 their agents, or their surveyors, to investigate such details as the buyer desires validated. This vessel is offered subject to prior sale, price change, or withdrawal without notice.

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**70.4m Hydrographic Research Ship Images**

![Image 1](image1)

![Image 2](image2)