

## **R/V Argo Maine Details**

### Configuration and Equipment

#### **General Characteristics:**

Description	Steel hulled oceanographic motor research vessel
Designer	John J. Schubert, Seattle, WA
Builder	Albina Machine Works, Portland, OR
Year	1968
LOA	79'-10"
LWL	73'-6"
Beam	24'
Maximum Draft	10'
Displacement	173 tons
Maximum Speed	10 kts
Cruising Speed	9 kts
Minimum Speeds (depending on wind and sea states)	approx. 3 kts on main engine approx. 0.5 kts on bow thruster
Range	~ 4500 miles
Laboratory Area	357 square feet
After Deck Area	400 square feet
Crew	Up to 7
Scientific Berthing	Up to 8 (4 two-person staterooms) (*depending on crew size, additional science berthing available)
Owner & Operator	Downeast Marine Resources, Inc., P. O. Box 106, Castine, Maine 04421 (207)266-2841
Home Port	Castine, Maine
Radio Call Sign	WDA 6952
Maine Registration	ME 193 F

#### **Machinery:**

Main Engine	Caterpillar D353D-T/A ~ 380BHP/1225 rpm with Twin Disc MG-521 3.03:1 reduction reverse gear
Bow Thruster	60 hp SRP 30 Schottel retractable and steerable
Screw	One, fixed pitch, 3-bladed bronze
Fuel	10,500 gallons diesel fuel
Main Electrical Power	Two 60kw 115/208VAC 3Ø phase, 4-wire Lima generators driven by Caterpillar D330A-T/A engines with electronic governors and paralleling capabilities
Emergency Generator	One 6 kw Onan (6DJB) 3Ø phase 115/208VAC
Hydraulics	Available to Anchor Windlass, Trawl Winch, Hydrowinch, A-Frame, U-Frame, Crane, After-Deck Windlass and After Deck at 1800 and 4300 psi capacities
Ship's Service Air	15 cfm at 140 psi
Fresh Water Storage	~1500 gallons @ 30 psi

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### **Electronics:**

Gyro/Auto pilot  
Compass  
Radars  
Fathometer

GPS

GPS Map Plotter  
VHF's

SSB-HF  
Satellite Weather  
Satellite TV

Wood-Freeman 500-B Sperry MK-37 Mod E Gyro  
Danforth "Constellation"  
Sitex-Koden MD 3210 and Raytheon R40 Raster Scan  
Furuno FCV 1100L (with NMEA-0183 output to Dry  
Laboratory)  
Northstar 941X Differential GPS & Furuno GPS-32 WAAS  
Enabled  
MapTech "The Capn" Electronic Charting System  
ICOM M100 and Standard Horizon  
ICOM IC-M700  
XM WxWORXs  
Motion Compensated KVH C3 Direct TV

### **Personnel Safety Equipment:**

Life Preservers  
Survival Suits  
Life Raft  
EPIRBs  
Fire Fighting

32 Type I PFD's (minimum)  
16  
Viking 20 Persons "SOLAS - Oceans" Automatic Inflatable  
One #406, One ARC Class A and One ARC Class B  
Fixed and Portable Dry Chemical and CO2 extinguishers  
throughout with additional emergency sea-water fire pump  
capabilities utilizing centrally located fire station

### **Wet Laboratory:**

Area  
Appointments

170 square feet (approximately 9' x 19')  
Cabinets, benches, storage, stainless sink (w/ fresh and sea  
water)

### **Dry Laboratory:**

Area  
Appointments  
Data input/outputs

187 square feet (approximately 11' x 19')  
Cabinets, benches, storage  
Bridge GPS and Depth Sounder via multiplexed NMEA 0183  
and Hydrowinch 4-conductor signal cable

### **After Deck:**

Area  
Freeboard  
Bulwark Height  
Port A-Frame Removable Bulwark Section Width  
Stern U-Frame Bulwark Opening  
Nominal Deck Load Capacity  
Deck Tie-Downs  
Electrical

400 square feet (approximately 22' x 24')  
4 feet  
39 inches  
41 inches (bulwark removable immediately aft of A-Frame)  
10 feet (w/removable safety wire)  
10 tons (150 lbs/sq. ft.)  
1"-8 UNC inset sockets on 4 foot center's (typical)  
208VAC 100A 3Ø phase, 208VAC 50A 1Ø phase and  
115VAC 30A 1Ø phase receptacles (460/480 VAC 3Ø phase  
available via onboard general purpose transformer)  
1800 and 4300 psi capacities available

Hydraulics

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#### **Hydrowinch:**

Manufacturer  
HP  
Actuated  
Line Pull/Speed  
Wire

Union Machine Works, Inc.  
25  
1800 psi hydraulics  
900 lbs., variable speed (0 - 400 ft/min)  
7/32" dia., 600M length 4350 lbs. breaking strength, four conductor via slip ring  
Winchman's house, remote readout depth/speed capabilities

Control and Monitoring

#### **Port A-Frame:**

Physical Dimensions:

- 11' height at sheave
- 13'-4"; height overall
- 76"; width at base
- 68"; maximum outboard reach
- 36"; maximum inboard reach
- 41"; width opening at bulwark gate immediately aft of A-frame
- 39"; height of bulwark

Actuated  
Control

1800 psi hydraulics  
Winchman's House

#### **Deep Sea Trawl Winch:**

Manufacturer  
HP  
Actuated  
Line Pull/Speed  
Wire

Union Machine Works, Inc.  
60  
1800 psi hydraulics  
6000 lbs (bare-drum), variable speed (0 - 300 ft/min)  
3/8" dia. torque balanced, 3000M length, 16000 lbs. breaking strength, no conductor  
Winchman's House

Control and Monitoring

#### **Stern U-Frame:**

Physical Dimensions:

Uprighted:

- 16'-8" height to sheave
- 5'-2" max inboard reach
- 10' wide opening at stern gate

Semi-deployed:

- 16' height from sheave to waterline
- 6'-4" horizontal clearance to transom

Fully-deployed:

- 12'-9" height from sheave to waterline
- 9'-3" max outboard reach

Capacity  
Actuated  
Control

6000 lbs. load tested through full range of motion  
1800 psi hydraulics  
Winchman's House

#### **Stern U-Frame Mounted Hoist:**

Manufacturer  
Capacity  
Actuated  
Control

Rotzler  
4000 lbs. 3/8 inch wire rope  
1800 psi hydraulics  
After-Deck

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#### **After-Deck Crane:**

Manufacturer	Palfinger
Model	PK14080MB SeaCrane
Installed	12/2004
Standard Outreach	35'
Lift capacities at various outreaches: (distances from centerline)	<ul style="list-style-type: none"><li>• 7' = 12570 lbs.</li><li>• 15' = 5760 lbs.</li><li>• 21' = 3880 lbs.</li><li>• 28' = 2850 lbs.</li><li>• 35' = 2270 lbs.</li></ul>

Slewing Angle	410 degrees
Crane Winch Manufacturer	Palfinger
Line Pull	4400 lbs
Wire	1/2" dia., non-rotating "torque-balanced", 100 ft. length
Actuated	4300 psi hydraulics
Control	Winchman's House

#### **After-Deck Windlass:**

Manufacturer	Macro W-4051
Line Pull	6900 lbs.
Line Speed	Variable (0 - 115 ft/min)
Actuated	1800 psi hydraulics
Control	After-Deck

Last updated August 9, 2008