

R/V Phoenix Details

Configuration and Equipment

General Characteristics:

Description	Steel hulled, ice strengthened, expeditionary motor vessel
Builder	Davie Shipbuilding Ltd., Quebec, Canada
Year	1973, complete overhaul/refit 2009
LOA	130'
LWL	114'-10"
Beam	30'
Maximum Draft	15'-0"
Displacement	700 tons
Maximum Speed	10.5 kts
Cruising Speed	9.5 kts
Minimum Speeds (depending on wind and sea states)	approx. 0.1 kts
Range	~ 7000 miles
Laboratory Area	10' x 18' 180 square feet
After Deck Area	30' x 30' 900 square feet
Crane Deck	With winches 568 square feet Without winches 637.5 square feet
Boat Deck	22' x 18' 396 square feet
Crew	Up to 7
Scientific Berthing	Up to 12
Owner & Operator	Downeast Marine Resources, Inc., P. O. Box 106, Castine, Maine 04421 (207)266-2841
Home Port	Castine, Maine
Radio Call Sign	V7RZ2
Machinery:	
Main Engine	Caterpillar 3512
Auxilliary Engine	Caterpillar D353
Bow Thruster	260 hp Thrustmaster retractable and steerable
Screw	LIPPS controllable pitch - 4 blade
Fuel	21,000 gallons diesel fuel
Main Electrical Power	480 VAC 3Ø phase delta
Emergency Generator	99 kW Northern Lights

Hydraulics

Split system - HPU driven by Caterpillar D353 or electrical HPU

Available to Anchor Windlass, Trawl Winch, Sample Winch, U-Frame, Crane, After-Deck

Ship's Service Air

15 cfm at 140 psi

Fresh Water Storage

~4690 gallons @ 40-60 psi

1000 gpd reverse osmosis system

Electronics:

Gyro/Auto pilot

Simrad HS-50 interfaced with AP-50

Compass

Ritchie

Radars

JRC Raster Scan & Furuno FAR-28X7

Fathometer

Furuno FCV 1100L

GPS

Furuno GPS-32 WAAS Enabled

Airmar GPS WAAS Enabled

Simrad HS-50 WAAS Enabled

Furuno AIS FA-150 WAAS Enabled

Furuno FA-150

AIS

GPS Map Plotter

MapTech "The Capn" Electronic Charting System

VHFs

Furuno FM8800

ICOM M401

SSB-HF

ICOM IC-M802

Satellite Weather

XM WxWORXs

Furuno Navtex NX50c

Weather Monitoring

Airmar PB-200

Satellite TV

Motion Compensated KVH C3 Direct TV

Personnel Safety Equipment:

Life Preservers

26 Type I PFD's (minimum)

Survival Suits

20

Life Rafts

Four "SOLAR-Oceans" 20 Persons "SOLAS-Oceans" Automatic Inflatable

EPIRBs

Two

Fire Fighting

Fixed and Portable Dry Chemical and CO2 extinguishers throughout with additional emergency sea-water fire pump capabilities utilizing centrally located fire station, One SCBA

Laboratory:

Area
Appointments

180 square feet (approximately 10' x 18')

Cabinets, storage

Satellite Phone, Satellite Internet

120 VAC and 240 VAC 3Ø phase

Bridge GPS, Depth Sounder

Data input/outputs

After Deck:

Area

900 square feet (approximately 30' x 30')

Freeboard

6'-6" feet

Bulwark Height

3 feet

Stern U-Frame Bulwark Opening

19 feet

Nominal Deck Load Capacity

20 tons (150 lbs/sq. ft.)

Deck Tie-Downs

1"-8 UNC inset sockets on 4 and 2 foot center's (typical)

Electrical

220VAC single and 3Ø phase, 120 VAC single phase

Deep Sea Trawl Winch:

Manufacturer

Lantec

HP

60

Line Pull/Speed

101,000 lbs, variable speed (0 - 68 ft/min)

Wire

5/8" dia.

Control and Monitoring

Winchman's House

Stern U-Frame:

Physical Dimensions:

Uprighted:

- 18 ft. 9 inches height to deck when fully uprighted
- 22 ft. height to sheave from transom (semi-deployed)
- 18 ft. max inboard reach
- 19 ft. wide opening at stern gate

Fully-deployed:

- 23 ft. 6 inches height from sheave to waterline
- 7 ft. 8 inches max outboard reach

Capacity

20000 lbs. load tested through full range of motion

Actuated

Ships hydraulics

Control

Winchman's House

After-Deck Crane:

Manufacturer

Palfinger

Model

PK6000ME SeaCrane

Installed

2007

Standard Outreach

52'

Lift capacities at various outreaches:
(distances from centerline)

- 15' = 22000lbs.
- 20' = 16700 lbs.
- 34' = 9700 lbs.
- 45' = 7500 lbs.

Slewing Angle

400 degrees

Crane Winch Manufacturer

Palfinger

Line Pull

12,121 lbs.

Wire

1/2" dia., non-rotating "torque-balanced", 100 ft.
length

Control

Winchman's House and Wireless Operator
Console

Last updated April 7, 2010