



## ATLANTIC OSPREY SPECIFICATION

### REGISTRATION

- Built: Halifax Shipyard 2003
- Flag: Canadian
- Official Number: 824923
- IMO Number: 9255907
- Call Sign: CFH 8950
- Vessel Type: UT722-L Anchor Handling, Tug, Supply, Light Intervention Vessel
- Classification: DNV
- Main Class: +1A1 Tug Supply Vessel SF
- Additional Class: FiFi I/II, EO, ICE-1C, EO, DYNPOS-AUTR, DK(+) HL(2.5), TMON

### DIMENSIONS

- Length overall: 80.00 m
- Length BP: 69.30 m
- Breadth, moulded: 18.00 m
- Depth, moulded: 8.00 m
- Design draft: 6.00 m
- Maximum draft: 6.60 m
- Gross Tonnage: 3453 t
- Net Tonnage: 1147 t
- Deadweight: 2750 t

### MACHINERY

- Main Engines: 4 x 4023 BHP = Total 16,092 BHP (12,000KW) Bergen diesel engines. Type B32:40L6P
- Propellers: 2 x 3900mm Ulstein CPP propellers in Kort nozzles
- Rudders: 2 x Ulstein High Lift flap rudders
- Steering Gear: 2 x independent Ulstein Tenfjord electric-hydraulic steering gear.  
Max Angle 45, Max Flap Angle 55
- Thrusters
  - 1 x 1200 BHP (833 KW) Forward swing-up azimuth thruster with CPP
  - 1 x 1200 BHP (833 KW) Forward tunnel thruster with CPP.
  - 2 x 800 BHP (590 KW) Aft tunnel thrusters with CPP
- Generators
  - 2 x Shaft, 2240 KW, 450V, 60/50hz, each
  - 1 x Auxiliary, 1070 KW, 450V/230V, 3-phase, 60hz
  - 1 x Auxiliary, 370 KW, 450V/230V, 3-phase, 60hz
  - 1 x Emergency, 99 KW, 450V/230V, 3-phase, 60hz

### CONTROL SYSTEMS

- Consoles: Full navigation console fwd and full navigation & main winch control console aft, providing full 360 degree view from bridge. 8 CCTV cameras located at fwd and aft consoles providing views of main decks, winch drums, various machinery spaces, etc.
- Joystick: 2 x Ulstein Poscon, independent from DP joysticks with 4 plug in stations
- DP System: Kongsberg SDP 21, Class II, fully redundant system
- Reference Systems
  - 2 X DGPS Simrad Kongsberg DPS 100
  - HIPAP/HPR Simrad Kongsberg 410, with (1) 3,000 m



- depth transponder
- Fanbeam Laser – MDL MK III
- Radius 1000 with (2) battery powered transponders carried onboard
- Sensors: 2 x MRU(s) - Seatek MRU 5
- 2 x Wind Sensors
- 2 x 2 x C.Plath Navigat X MK1.

*Note: DP system utilizes azimuth thruster, three tunnel thrusters, both main propellers, with full integration of rudders.*

### PERFORMANCE

- Maximum Speed: 16.0 knots
- Economic Speed: 12 knots @ 60hz
- Super Economic Speed: 8 knots in combinator mode (50hz)

### FUEL CONSUMPTION

- Steaming maximum: (58) m<sup>3</sup>/ per day
- Economic Speed: (20) m<sup>3</sup>/ per day
- Steaming super economic: (15) m<sup>3</sup>/ per day
- Standby: (6) m<sup>3</sup>/ per day
- Gen. at anchor or in port: (1.0) m<sup>3</sup>/ per day

### CRANE SPECIFICATIONS

- Main Crane: 1 x National Oilwell (50)T SWL Boom Crane, Pedestal Mounted. Active Heave compensation. Variable speed & constant tension modes
- (50)T SWL at (13)m radius. (25)T SWL at (20)m maximum work radius
- Deck Crane(s): (2)x Hydramaskin, (5)T SWL “knuckle” boom crane.(10)m work radius
- Portable Deck Crane: Palfinger Crane 1.0 MT

### TOWING AND ANCHOR HANDLING:

- Bollard Pull: (176.4) Tonnes Continuous Bollard Pull DNV certified
- Towing/AH Winch: 1 x Ulstein Brattvaag (500)T SWL declutchable Tow /AH drum, with hydraulic spooling gear

**Drum Size Main/Socket:**

Socket Portion: (2800)mm diameter x (4050)mm depth x (900)mm width

Main Portion: (2800)mm diameter x (4050)mm depth x (4250)mm width

Wire Capacity: (4250)m length x (83) mm diameter

Dividing Flange opening: (300)mm

**Low Gear:**

1st layer: (500) tonnes @ 0-18 m/min,

lowering 0-18 m/min,

Mid layer: (440) tonnes @ 0-21.5 m/min,

lowering 0-21.5 m/min

Top Layer: (350) tonnes @ 0-25 m/min,

lowering 0-25 m/min

**Dynamic Braking:**

1st layer: (125-625) tonnes @ 0-24 m/min,

Top layer: (090-440) tonnes @ 0-33 m/min

**High Gear:**

1st layer: (250) tonnes @ 0-35.5 m/min,

lowering 0-35.5 m/min,

Mid layer: (205) tonnes @ 0-43 m/min,

lowering 0-43 m/min

Top Layer: 175 tonnes @ 0-50 m/min,

lowering 0-50 m/min

**Dynamic Braking:**

1st layer: (62-312) tonnes @ 0-48 m/min

Mid layer: (50-255) tonnes @ 0-56 m/min

Top layer: (45-220) tonnes @ 0-66 m/min

- **Work Winch**

1 x Ulstein Bratvaag (400)T SWL declutchable work drum, with hydraulic spooling gear.

**Drum Size Main/Socket:**

Socket Portion: (1500)mm diameter x (3750)mm depth x (900)mm width

Main Portion: (1500)mm diameter x (3750)mm depth x (4100)mm width

Wire Capacity: (5800)m length x (83) mm diameter

Dividing Flange opening: 300mm

**Low Gear:**

1st layer: (400) tonnes @ 0-15 m/min,

lowering 0-15 m/min

Mid layer: (235) tonnes @ 0-25 m/min,

lowering 0-25 m/min

Top Layer: (170) tonnes @ 0-35 m/min,

lowering 0-35 m/min

**Dynamic Braking:**

1st layer: (100-500) tonnes @ 0-30 m/min

Mid layer: (60-300) tonnes @ 0-50 m/min

Top layer: (45-210) tonnes @ 0-70 m/min

**High Gear:**

1st layer: (200) tonnes @ 0-30 m/min,

lowering 0-30 m/min

Mid layer: (115) tonnes @ 0-50 m/min,

lowering 0-50 m/min

Top Layer: (85) tonnes @ 0-70 m/min,

lowering 0-70 m/min

**Dynamic Braking:**

1st layer - (50-250) tonnes @ 0-60 m/min

Mid layer - (30-150) tonnes @ 0-100 m/min

Top layer - (22-105) tonnes @ 0-140 m/min

- **Secondary Winches:**

2 x Ulstein Bratvaag (170)T SWL winches, with hydraulic spooling gear

**Drum Size Main/Socket:**

Socket Portion: (1500)mm diameter x (4500)mm depth x (900)mm width

Main Portion: (1500)mm diameter x (4500)mm depth x (4500)mm width

Wire/Rope Capacity: (4000)m x (76)mm wire or

(1600)m x (8)inch synthetic rope

**Work Duty:**

1st Layer: 138 tonnes line pull @ 0-22m/min, 170

tonnes dynamic braking at max. 44 m/min

Last Layer: 56 tonnes pull @ 0-54 m/min, 70 tonnes dynamic braking at max.106 m/min

- **Spare Tow Wire:** (1) - 83 mm x 1350m. Stored on below deck drum

- **Cable Lifters:** 2 x non-declutchable cable lifters, two for 76mm chain and two for 84mm chain, fitted outside of the towing drum

- **Chain Lockers:** 4 x chain lockers (136.25) m<sup>3</sup> each. Total (545) m<sup>3</sup>

- **Locker Capacities each at 30% broken stowage**  
2.5" = 6841', 3.0" = 4396', 3.25" = 3800', 3.5" = 3238', 4.0" = 2608' 4.5" = 2200'

- **Karmforks:** 2 x 750T SWL. Remote control from Bridge and aft deck

- **Towpins:** 4 x 240T SWL. Remote control from Bridge and aft deck

- **Stern Roller:** 1 x Twin Stern Roller 550T SWL, 2996 mm width x 3.5m diameter

- **Grapnel:** 1 x 250T SWL, Ansel Jones Forgings

- **J-Hook:** 1 x 250T SWL, Ansel Jones Forgings

**DECK MACHINERY**

- **Tuggers:** 2 x hydraulic, Port and Stbd Main Deck

1st Layer: 20 tonnes @ 0-22m/min,

2nd Layer: (10) tonnes @ 0-33m/Min,

Light line: 0- 70m/min, hydraulic

Capacity: 600m x 76mm wire

- **Movable Guideline Winches:** 2 x National Oilwell (6.5)T SWL Normal and Constant Tension modes

- **Capstans:** 2 x hydraulic, Port and Stbd Main Deck Aft.

10 tonnes @ 0-22m/min combined with drum for 45m x 20mm wire

- **Windlass/Mooring Winch:** 1 x 15 tonnes 0-16.5m/min, hydraulic

- **Anchors:** 2 x Stockless anchors, 2850 kg each.

- **FRC Davit:** 2 x Hydramaskin heave compensated davits

**DISCHARGE RATES:**

- Potable Water: 250 m<sup>3</sup>/hr - 9.0 bar Pressure Relief @ 9.7 bar
- Drill Water: 250 m<sup>3</sup>/hr - 9.0 bar Pressure Relief @ 9.7 bar
- Fuel: 250 m<sup>3</sup>/hr - 9.0 bar Pressure Relief @ 9.7 bar
- Mud: 2 x 75 m<sup>3</sup>/hr - 18.0 bar Pressure Relief @ 19 bar
- Brine: 2 x 75 m<sup>3</sup>/hr - 18.0 bar Pressure Relief @ 18.7 bar
- Base Oil: 125 m<sup>3</sup>/hr - 9.0 bar Pressure Relief @ 9.7 bar
- Dry Bulk: 80 ton/hr - 5.6 bar, 4 aeration jets per tank  
(2) Tamrotor compressors, 22.8 m<sup>3</sup>/min each, pressure 5.6 bar.
- Pressure Relief @ 6.1 bar.

*Note: Discharge rates for dry bulk will differ with product, ie; Gel discharge rates will be much higher. All pumping arrangements are totally redundant with equivalent backup standby pump.*

**CAPACITIES/TANKAGE**

- Clear Deck Space: 550 m<sup>2</sup> (may vary due to ROV containers)
- Deck Cargo: 1100 tonnes
- Deck Loading: Cargo deck - 5 tonnes/m<sup>2</sup>  
Anchor handling deck - 10 tonnes/m<sup>2</sup>
- Fuel: 1143 m<sup>3</sup>
- Potable Water: 500 m<sup>3</sup>
- Ballast Water: 1670m<sup>3</sup>
- Drill Water: 1130 m<sup>3</sup>
- Brine/Glycol: 550 m<sup>3</sup>
- Liquid Mud: 450 m<sup>3</sup>
- Base Oil: 170 m<sup>3</sup>
- Dry Bulk: 4 tanks totaling 10,000 ft<sup>3</sup>. (283m<sup>3</sup>)
- Tank Washing: 4 x Butterworth, hot and cold water mud tank washing.
- Tank Recirculation: All tanks are capable of recirculation
- Tank Agitators: 4 x Electric agitators in mud tanks  
Also capable of individual recirculation

*Note: Vessel tankage and piping arrangements are extremely flexible, allowing for reconfiguration to the Charterer's operational requirements.*

**EXTERNAL FIRE FIGHTING (Fi Fi I/II)**

- Pumps: 2 x Unitor Z22-500/400-80, 4122 m<sup>3</sup>/hr.  
(Total: 8,244 m<sup>3</sup>/hr)
- Monitors: 2 x Unitor FIRECHIEF FC3600, 3,600 m<sup>3</sup>/hr,  
(Total 7,200 m<sup>3</sup>/hr) Bridge remote controlled.

System complies with DNV FiFi II specifications for operational throw distances and is complete with external drenching system, foam generator portable Turbex MKII producing 200 m<sup>3</sup>/min consumption 4.5 L/min, (8) fireman's suits/(10) breathing apparatus, spare BA bottles, and recharging compressor.

**LIFESAVING**

All equipment as per SOLAS, CCG, and Standby Vessel Letter of Compliance

- Survivor Capacity: 300 persons
- Rescue Craft: 2 x Springer MP 741, 20 person capacity, diesel jet FRC
- Liferafts: 6 x (25) per liferafts, total capacity (150) persons
- Rescue Frame: 1 x Dacon Scoop
- Rescue Basket: 1 x Empra, (6) person capacity
- EPIRB: 1 x Hydrostatic Release
- SARTS: 2 x McMurdo S4
- GMDSS VHF: 3 x Skanti, portable with long life batteries

**ELECTRONICS**

- Radars: 1 x Furuno (X- Band) Model #FR 2105  
1 x Furuno (S-Band) Model # FAR / FR- 2805
- Auto Pilot: 1 x Robertson AP 9. Fully integrated with ECDIS & Radars
- Electronic Chart: 1 x Norcontrol SeaMap 1021 Integrated with autopilot, radar, and DGPS
- Gyro(s): 2 x C.Plath Navigat X MK1. Integrated with DP system
- Depth Sounder: 1 x Skipper GDS 101
- DGPS: 1 x Shipmate GN 30
- Speed Log: 1 x Consilium
- VHF DF: 1 x Taiyo TD-L1550 A
- Weather Fax: 1 x Furuno Fax-207
- Navtex: 1 x Furuno NX-700

**EXTERNAL COMMUNICATIONS EQUIPMENT**

- GMDSS: Sailor, compliant for areas A1, A2, and A3  
Telex / Email: 2 X Sailor Sat "C" with Telex and Email
- Aeronautical Radio: 1 x Jotron TR-601
- Portable UHF's: 4 x Motorola
- Portable VHF's: 3 x Motorola
- Aeronautical Radio: 1 x Jotron PSU-7001
- Iridium: 2 x Bridge
- Cell phone/fax: 2 X Telular & 1 X Motorola Portable
- Fleet 77 phone: 1 X Sailor

**INTERNAL COMMUNICATIONS EQUIPMENT**

- Internal phone THEC PBX system throughout with phones in all cabins and areas with complete access to each other and all external communications.
- P.A. system covering all areas of the vessel both inside and outside including all sleeping areas if required.



#### ACCOMMODATION

- 2 x (1) berth cabins
- 16 x (2) berth cabins
- 2 x (4) berth cabins
- Total: 42 berths. All cabins with ensuite washrooms.
- Additional Spaces:
  - 1 x Ship's Office, complete with computer system (networked to Wheelhouse and Engine Control room) and photocopier.
  - 2 x Lounges
  - 1 x Messroom
  - 1 x Hospital, complete with separate berth, examination table, and all associated medical equipment required by SOLAS and CCG stand-by regulations.
  - Freezer (8) m<sup>3</sup>
  - Cooler (8) m<sup>3</sup>
  - Dry Stores (22) m<sup>3</sup>

#### MISCELLANEOUS

1. Design complies to latest rules and regulations from SOLAS 74, with amendments in force and IMO 469 (XII) *Guidelines for the design and construction of offshore supply vessels.*
2. Rolls Royce/Coastal 3D Stability Program fitted. Program software is interactive with vessel UMAS tank sounding system. Provides accurate and up-to-date stability info during all vessel loading and lifting operations.
3. 2 x passive roll "stability" reducing tanks fitted below the main deck. Also interactive with vessel UMAS system.
4. ISM certificate issued from Lloyds and Transport Canada.
5. Approved for the Carriage of Noxious liquids (DNV)
6. Approved for the Carriage of Dangerous Goods (Transport Canada).
7. ROV Operation with 1 x 150HP and 1 x 200HP Millennium Class ROV systems with over side launch in wave heights of 6 metres.