

# TECHNICAL SPECIFICATION

## Bourbon Topaz

PSV Plattform Service Vessel

P 105



Revision: 15.02.2006

IMO no: 9325829

DNV id no: 25678

MMSI: 258552000

Call Sign: LMXS

### MAIN DESCRIPTION

|                   |  |
|-------------------|--|
| Type:             | P 105  |
| Classification:   | DnV + 1A1, Supply Vessel, SF, E0, DYNPOS-AUTR, LFL*, CLEAN, COMF-V (3), DK(+), HL(+), OILREC, NAUT-OSV (LOC) |
| Yard:             | Ulstein Verft AS   |
| Yard built no:    | 267  |
| Place built:      | Ulsteinvik   |
| Country built:    | Norway   |
| Delivered:        | February 2005  |
| Flag:             | NOR  |
| Port of registry: | Fosnavåg   |
| Owner:            | Bourbon Ships AS   |

### MEASUREMENT

|                    |                            |
|--------------------|----------------------------|
| Lenght oa:         | 86,20 m                    |
| Lenght bpp:        | 75,40 m                    |
| Breath moulded:    | 19,00 m                    |
| Depth moulded:     | 8,00 m                     |
| Draught max:       | 6,65 m                     |
| Gross tonnage GT:  | 3745 GRT                   |
| Corresponding DWT: | 4847 DWT                   |
| Net tonnage NT:    | 1146 NT                    |
| ISM-Responsible:   | Bourbon Offshore Norway AS |

### CARGO CAPACITY

|                     |   |
|---------------------|---|
| Deck cargo:         | 2840 T, VCG 1m ab. Main deck  |
| Deck area:          | 960 m <sup>2</sup>  |
| Deck strength:      | 10,0 t/m <sup>2</sup> aft of fr. 47, 5,0 t/m <sup>2</sup> elsewhere and 12T axle load |
| Fuel (gasoil):      | 1375,8 m <sup>3</sup>   |
| Liquid Mud:         | 837,1 m <sup>3</sup>  |
| Brine:              | 634,8 m <sup>3</sup>  |
| Drillwater/Ballast: | 580,2 m <sup>3</sup> / 1520,2 m <sup>3</sup>  |
| Base Oil:           | 355,3 m <sup>3</sup>  |
| Dry Bulk:           | 288,00 m <sup>3</sup> , 6 x 48m <sup>3</sup> vertical tanks                           |
| Fresh Water:        | 1009,6 m <sup>3</sup>   |
| Glycol (MEG,TEG):   | 202,60 m <sup>3</sup>   |
| Methanol:           | 163 m <sup>3</sup>  |
| Oil Recovery:       | 1095 m <sup>3</sup>   |
| Slop:               | 313,8 m <sup>3</sup>  |

### DISCHARGE RATES

|                             |  |
|-----------------------------|--|
| Loading/Discharge station:  | 2 each side. 4"/5" Weco/TODO connection                          |
| Fuel discharge rate:        | 2 pumps a' 250m <sup>3</sup> /h and 9 bar, frequency controlled  |
| Mud discharge rate:         | 4 pumps a' 100m <sup>3</sup> /h and 18 bar, frequency controlled |
| Brine discharge rate:       | 2 pumps a' 150m <sup>3</sup> /h and 18 bar, frequency controlled |
| Drillwater discharge rate:  | 2 pumps a' 250m <sup>3</sup> /h and 9 bar, frequency controlled  |
| Dry Bulk discharge rate:    | 2 BHS compressors a' 30 m <sup>3</sup> /min each at 6 bar, 100   |
| Base Oil discharge rate:    | 2 pumps a' 250m <sup>3</sup> /h and 9 bar, frequency controlled  |
| Fresh Water discharge rate: | 2 pumps a' 250m <sup>3</sup> /h and 9 bar, frequency controlled  |
| Glycol discharge rate:      | 2 pumps a' 100m <sup>3</sup> /h and 9 bar, frequency controlled  |
| Methanol discharge rate:    | 2 pumps a' 100m <sup>3</sup> /h and 9 bar, hydraulic motor       |
| Slop discharge rate:        | 1 pumps a' 150m <sup>3</sup> /h and 18 bar, frequency controlled |

### MACHINERY / PROPULSION

|                            |   |                           |   |
|----------------------------|---|---------------------------|---|
| Main Engine set 1:         | 2 x Caterpillar 3516 TA 1825 kW-1800RPM               | Bow Thruster 1:           | 1 x Kamewa Ulstein TT 2200 DNP-CP, 241 rpm 883 kW |
| Main Engine set 2:         | 2 x Caterpillar 3516 TA 1825 kW-1800RPM               | Compass Thruster Forward: | 1 x Ulstein Aquamaster TCNS 73/50-180, 883kW      |
| Propulsion Aft:            | 2 x Rolls & Royce Azipull Thrusters, AZP 120, 2500 kW | Main Generators set 1:    | 2 x Siemens 1FJ3564-4, 2028kVA/440V/60Hz          |
| Total BHP:                 | 9789 BHP  | Main Generators set 2:    | 2 x Siemens 1FJ3564-4, 2028kVA/440V/60Hz          |
| Total Kw:                  | 7300 kW   | Emergency Generator:      | 1 x Caterpillar C9, 200kW, 3x440V, 60Hz           |
| Garbage handling facility: | Incinerator plant                                     | Shore Connection:         | 50m 3x440V, 350A                                  |

**PERFORMANCE / CONSUMPTION**

|                               |                                  |
|-------------------------------|----------------------------------|
| Max Speed/Consumption:        | 15,5 knots, 1388 l/h - 4 engines |
| Service Speed/Consumption:    | 13 knots, 800 l/h - 2 engines    |
| Economical Speed/Consumption: | 12 knots, 700 l/h - 2 engines    |
| Standby Mode:                 | 290 l/t                          |
| Port Consumption:             | 1,0 m <sup>3</sup>               |

**ACCOMODATION**

|                     |  |
|---------------------|--|
| Cabins/Beds:        | 13 x 1M, 6 x 2M                            |
| Crew/Passengers:    | Accomodations for 25 persons               |
| Mess/Dayroom:       | 1 x messroom, 2 x dayroom, 1 x deck pantry |
| Cool store/Freezer: | 4,5 m <sup>2</sup> / 4,5 m <sup>2</sup>    |
| Dry Provision:      | 12 m <sup>2</sup>                          |

**DECK EQUIPMENT**

|                            |  |
|----------------------------|--|
| Tugger winch:              | 1 x Hydrakraft 15T, 1 x Hydrakraft 20T, Reduced to 2 x 10T |
| Crane 1:                   | 1 x Pallfinger Marine, PK 120000 MA                        |
| Capacity 1:                | 10T SKL, 8,0m (maks range 17m w/reduce load)               |
| Crane 2:                   | 1 x TTS Marine AS, GPK 260-10-10                           |
| Capacity 2:                | 10t / 10m  |
| Anchors conventional:      | Spek anchors 2 x 3060kg                                    |
| Chain cables conventional: | 495m (total length), stud link ø44mm NV K3                 |
| Windlass:                  | 1 x Rauma Brattvåg, LBFMG6-304-4-C                         |
| Capstans:                  | 2 x 10T Hydrakraft, 200252                                 |

**RESCUE EQUIPMENT**

|                           |   |                     |  |
|---------------------------|---|---------------------|--|
| Rescue class:             | Prepared for FI-FI II                     | Radar transponders: | 2 x Jotron Tron Sart                   |
| Hospital:                 | 16 m <sup>2</sup> incl. Toilet            | Emergency Beacon:   | 1 x Jotron 40S,FB-4                    |
| Fire Fighting equipment:  | Co <sup>2</sup> /Water mist in eng. rooms | GMDSS VHF's:        | 3 x Jotron Tron TR20                   |
| MOB Boats:                | 1 x Mare Safety GRP 700                   | Survival Suits:     | 25 x survival suits, 4 x working suits |
| Heave compensated davits: | 1 x Servi Technics HRT 3200               | Life Jackets:       | 29 x SeaMaster adult                   |
| Rescue Regulation:        | NMD                                       | Life rafts:         | 4 x Viking 25DK                        |

**NAVIGATION AND COMMUNICATION EQUIPMENT**

|                            |   |                       |                                    |
|----------------------------|---|-----------------------|------------------------------------|
| Radar 3 cm:                | 1 x Furuno FAR-2827 X-band, Arpa/AIS/Interswitch  | GMDSS Sea Area:       | A3                                 |
| Radar 10 cm:               | 1 x Furuno FCR-2837S S-band, Arpa/AIS/Interswitch | MF/HF Radio:          | 1 x Skanti TRP 1250                |
| Radar slave:               | 1 x 17" monitor aft. w/control                    | DSC Receiver:         | Interfaced in TRP 1250             |
| Gyro:                      | 3 x Anschutz std 22 gyrocompass                   | VHF 1:                | 1 x SKANTI VHF 1000 DSC            |
| Compass:                   | 1 x Plath Reflecta                                | VHF 2:                | 1 x SKANTI VHF 1000 DSC            |
| Autopilot:                 | 1 x Anschutz Pilotstar D                          | VHF 3:                | 1 x SKANTI VHF 1000 P              |
| Chart Plotter:             | 2 x Furuno TECDIS / CONNING                       | VHF 4:                | 1 x SKANTI VHF 1000 P              |
| Navtex:                    | 1 x SRH NAV-5                                     | UHF:                  | 3 x Motorola GM-360                |
| Joystick:                  | 1 x Kongsberg Simrad                              | Portable VHF:         | N/A                                |
| AIS:                       | 1 x Furuno FA-100 interfaced to electronic charts | Portable UHF:         | 3 x Motorola GP 900                |
| VDR:                       | 1 x Furuno voyage data recorder VR-5010           | Mobile Telephone 1:   | 1 x NOKIA 22, interfaced to PABX   |
| SSAS:                      | N/A   | Mobile Telephone 2:   | 1 x NOKIA 22, interfaced to PABX   |
| Echo Sounder:              | 1 x Furuno FE-700                                 | Mobile Telephone 3:   | 1 x NOKIA 30, interfaced to Raydex |
| Speed log:                 | 1 x Furuno DS-80 doppler log                      | Iridium:              | N/A                                |
| Satellite Navigator (GPS): | 1 x Furuno GP-90, 12 channel                      | Sat C 1:              | 1 x Thrane & Thrane TT-3020C       |
| DP:                        | 1 x Dynpos AUTR,Kongsberg SDP21                   | Sat C 2:              | 1 x Thrane & Thrane TT-3020C       |
| DP Reference 1:            | 1 x DPS 700 (consists of DPS132/DPS200)           | Fleet 77:             | 1 x Thrane & Thrane TT-3038C       |
| DP Reference 2:            | Inmarsat / IALA                                   | Vsat Data/Phone link: | 128kb up/down-stream, 2 x voice    |
| DP Reference 3:            | 1 x Fanbeam Mk4                                   | Intercom System:      | UlsteinCom Data/Phone/TV           |
| DP Reference 4:            | 1 x MRU 2 / 1 x MRU 5                             |                       |                                    |
| Wind Sensors:              | 2 x Gill WindObserver II Anemometer               |                       |                                    |