



INSPECTION MAINTENANCE AND REPAIR VESSEL

| GENERAL INFORMATION | | |
|----------------------------|--|--|
| IMO: | 9747182 | |
| Call Sign: | V7IJ7 | |
| MMSI: | 538007886 | |
| Off Number: | 7886 | |
| Year Built | 10th 2018 | |
| Classification | American Bureau of Shipping (ABS) №A1, Offshore Support Vessel(FFV 1, OSR-C1, SPS, SSR GR C 19, Supply-HNLS), ⓒ, ⊕AMS, ACCU, DPS-2, RW, UWILD. | |
| Port of Registry / Flag | Marshall Islands / Majuro | |

| MANEUVERING & PROPULSION SYSTEM | |
|---------------------------------|---|
| D-Electric Power | 4 units Caterpillar 3516C USA with 2095BKW/1800rmp Leroy Semor LSA52.2 VL80/4P |
| Capacities | 4 x 2095 kW Engine with 4 x 1800 kW alternator (Total Power (Electric): 7200kW) |
| Bow Thrusters FP | German Schottel STT4 FP and SRP550ZSV FP |
| Capacities | 1 x 900kW 1200rpm Tunnel and 1 x 900kW 1200rpm Retractable Azipull |
| Stern Thrusters FP | German Schottel SRP1520 FP. Twin Azimuth Propellers, 2 x 2206kW; SRP 1520 Fixed Pitch |
| Dynamic Position | DPS 2 Kongsberg Norway K-POS DP21 & Cjoy with HiPaP 300 series |

| CARGO CAPACITIES | |
|-----------------------|--|
| Total Deck Area | 1000m2 |
| Total Deck Strength | 7.5T/m2 |
| Total Fuel Oil | 1764.5m³ |
| Dirty Oil | 13m³ |
| Base Oil | 240m³ |
| Potable Water | 1001m³ |
| Recovery Oil | 1018m³ |
| Drill / Ballast Water | 2024m³ |
| Liquid Mud / Brine | 762m³ |
| Dry Bulk | 1041Ton |
| Length Overall: | 86.00 M |
| Length BBP | 75.60 M |
| Air Draft @ 6.50 M | 30.70 M |
| Max Draft | 7.40M |
| Beam MLD: | 20.00 M |
| Depth MLD: | 9.00 M |
| Draft DESI: | 7.20 M |
| Draft SCA: | 7.40 M |
| Speed | 14.00 Kts |
| Ensuite Accom: | 80 |
| Methanol | 257m³; prior use client will have to install |



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| PUMPING CAPACITIES | |
|------------------------------------|--|
| Fuel Oil/ Base Oil | 2 x 150m³/hr @ 90m head, Ascue Centrifugal pump |
| Potable Water | 2 x 150m³/hr @ 80m head, Ascue Centrifugal pump |
| Drill/Ballast Water | 2 x 120m³/hr @ 80m head, Centrifugal pump |
| Liquid Mud / Brine Recovery Oil | 2 x 100m³/hr @ 20 bar, Allweiler Germany 1 x 100m³/hr @ 5 bar, ORO |
| Bilge/Ballast/Fire G.S. | 2 x 120m³/hr @ 80m head Ascue |
| Dry Bulk | 2 x 75m³/hr @ 5.6 bar, approx. RandAberg |
| Dry Bulk Handling | 2 x 23.4m³/min @60 psi (max) Atlas compressor |
| Methanol | 2 x 50m³/hr @ 80m head Allweilar Germany |
| Base Oil | 1 x 150m³/hr @ 80m head |
| Tank Cleaning Pump | 25m³/hr @ 10 bar |

| Misc. Crane, Towing, Winch, Helideck | |
|--------------------------------------|---|
| Deck Crane (LB) | 160t Huisman |
| Helideck | Helideck , MTOM 9.3 T, D- VALUE 22M |
| Capstan & Tugger | 2 x 10T@ 0-25 m/min, electro-hydraulic |
| Helicopter Winch | Yes, area on main deck marked accordingly |
| Gangway | Up time 23.4m |

| ELECTRIC POWER GENERATION | |
|----------------------------|--|
| Main 4 x 1800kw CAT | |
| Emergency | 1 x 238ekW (440V/3/60Hz)@1800rpm C9 CAT |

ROV / DIVE EQUIPMENT SUPPLIES ELECTRIC LOAD CALCULATION

| Deck Sockets /Rov/Crane/Reefer | As per Electric load Analysis chart – DWG NO.: P-1620-E01 |
|--------------------------------|---|
| Taut wire Winch | As per Electric load Analysis chart – DWG NO.: P-1620-E01 |
| HiPaP Control Unit | As per Electric load Analysis chart – DWG NO.: P-1620-E01 |



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| NAVIGATION EQUIPMENT | | |
|---|---|--|
| ECDIS | Furuno Electric Co.,Ltd FMD-3200 | |
| Voyage Data Recorder | Furuno Electric Co.,Ltd VR-7000 | |
| BNWAS | Furuno Electric Co.,Ltd BR- 500 | |
| Radars | Furuno FAR-2117 Furuno FAR-2137 | |
| DGPS | 2 x Furuno GP-170 | |
| Auto Identification System | Furuno FA-150 | |
| Echo Sounder | Furuno FE-800 | |
| Wind Anemometer | Kongsberg WindObserver II – Sensor – Gill Instruments IIx2 | |
| Auto Pilot | NautoPilot NP Raytheon Anschutz NP60 | |
| Gyro Compass | Lilley & Gillie Mk 2000s Raytheon Anschutz NP60 | |
| Magnetic Compass | Raytheon Anschutz | |
| Speed Log | Furuno DS-80 | |
| Weather Fax Receiver | Furuno Fax-408 | |
| Communication Equipment other than Standard | | |
| Star-Link Satellite | 2 Units Capable of Wi-Fi, Audio, Video calls & Entertainment (Movies etc.) | |

| DYNAMIC POSITIONING Diesel Electric 2018 Build | | |
|--|--|--|
| | Class DP 2 Kongsberg Norway | |
| | a.) Duplex DP2 workstations with two control and field cabinet | |
| | b.) RADius 1000Q | |
| | c.) VRU or MRU 2 Seatex & 1 Pyro | |
| | d.) 2 x DGPS with correction signal | |
| DP Positioning System | e.) 2 x UPS | |
| | f.) Printer | |
| | h.) Independent joystick - CJoy i,) Cyscan MK4 | |
| | k) HiPAP 1 X 300 Series | |
| | L) HIPAP Hoist control Unit 440v BUS C with connection to HiPaP Computer | |

ANTI-POLLUTION SYSTEM & OIL RECOVERY CLASS VESSEL Dispersant Tank 18m³ FOAM Tank 30.7m³

| SURVIVOR RECOVERY/RESCUE EQUIPMENT / FRC's / LIFE-BOAT'S | |
|--|------------|
| FRC 1 | 1 x 15 man |
| FRC 2 | 1 x 9 man |
| Life-Boat 1 | 1 x 40 man |
| Life-Boat 2 1 x 40 man | |



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| MISCELLENEOUS | |
|----------------------------|---|
| Fresh water maker | 50 m3/day at open sea free sailing (two units) sitrans (Only for use during sailing at high seas) |
| Oily Bilge Water Separator | 1m³/hr, comes with 5ppm alarm |
| Sewage Treatment Plant | 210 POB Capable |
| ссти | Covers Key Area of operations |
| TV In Cabins | All Cabins fitted with AV cable connection TV |
| Conference Room | Yes |
| Common WC 2 | For Conference Room deck |

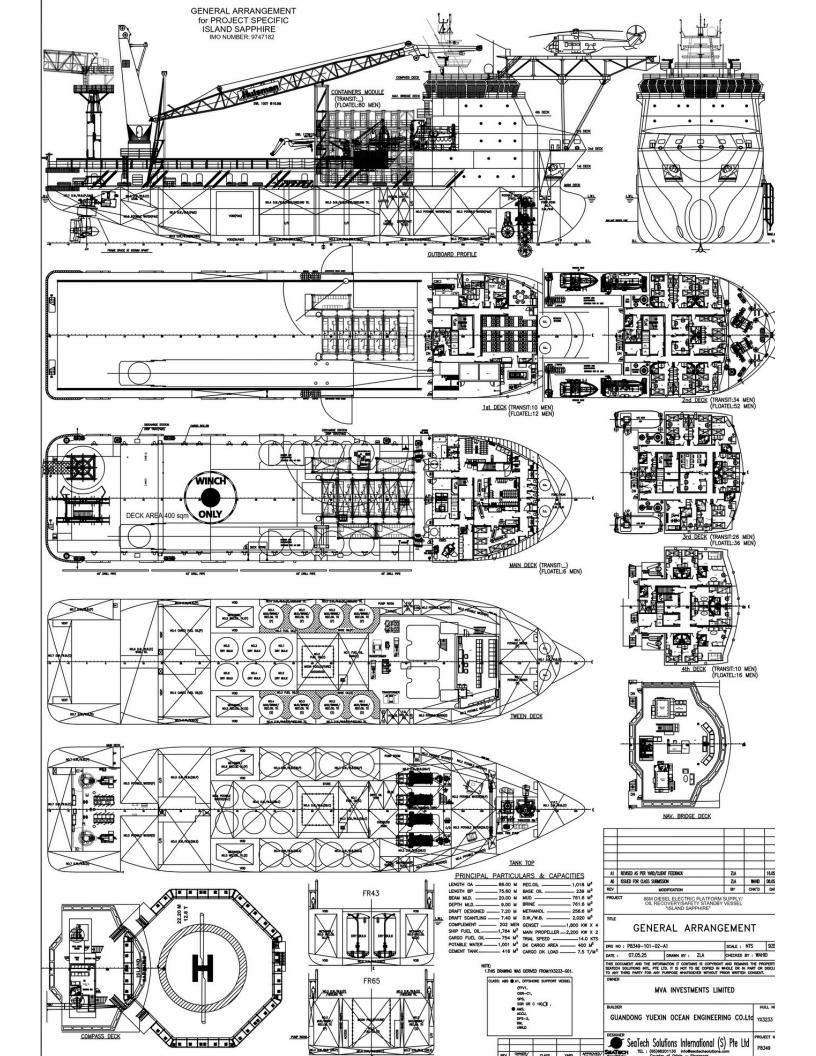
| Common We 2 | Tor comercine Room deck |
|---|---|
| ADDITIONAL SURVIVOR & RECOVERY/RESCUE CARE FACILITIES | |
| Over-side Rescue Zone | SSR Port & Starboard, area clearly marked from outboard |
| Scrambling nets | Scrambling nets fitted at rescue zones |
| Searchlights | 3000W |
| Medical Store | Per flag/class SSR Notation |
| Steel ladder Diver | Two (2) steel boarding ladders |
| De Contamination Showers – Deck | Per flag/class SSR Notation |

| ACCOMMODATION | | |
|----------------------|---------------------------------------|--|
| Total | 182 POB | |
| Offices | 3 | |
| Hospital / Treatment | 1 Men | |
| Conference Room | 1 Nos | |
| Officer Mess | 3 | |
| Hospital | Yes, Large Survivor Treatment Room | |
| Gymnasium | Yes, Fully Equipped | |

| FIRE FIGHTING (FIFI) EQUIPMENTS External | | |
|---|--|--|
| | | |
| Fire Pump | 2 x 1920m³/hr @ 125 m head @ 1800 rpm | |
| Monitors 2 | Water/Foam: 1200m³/hr Water: 1200m³/hr | |
| Foam Tank capacity | 30.7m³ | |
| Self-drenching system Internal | As per FIFI Class 2 requirement | |
| Internal | | |
| Emergency Fire Pump | 35m³/hr @ 60 m head | |
| CO2 System | Engine Room & RO Pump Room Unitor - Wilhelmsen | |

Rescued survivor waiting / sitting area's etc.

Air Lock Entry, Survivor Reception, Treatment Rooms Morgue, Dedicated survivor showers & toilets, Washing/Cleaning area, Dedicated recovery area, Mechanical Recovery, Emergency Helicopter Winching as marked on deck, Helicopter Boarding Passenger Waiting Room with 12 Passenger Seating – Dedicated washroom above Bridge Deck.







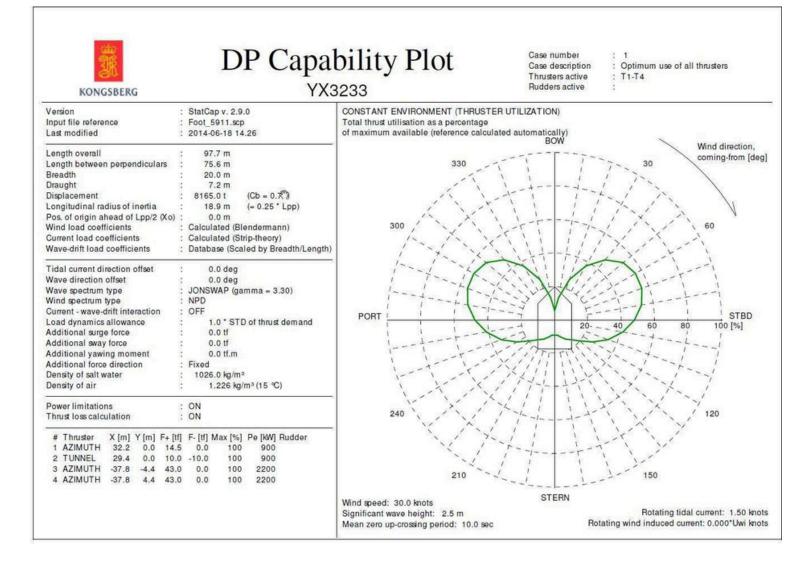
ISLAND SAPPHIRE

SHIP SPECIFIC DYNAMIC POSITIONING OPERATIONS MANUAL

APPENDICE J

DP Capability Plot

| "ISLAND SAPPHIRE" DP Operations Manual : | Revision |
|--|----------|
| APPENDIX J -DP Capability Plots | O |



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