

45 m / 2600 BHP / Maintenance Utility Vessel with Telescopic Crane



AOS VALIANT



Atlantic Maritime Group FZE

www.atlanticnavigation.com

GENERAL PARTICULARS

| | |
|-------------------------|---|
| Year of Build / Place | : 2018 / China |
| IMO Number | : 9818436 |
| Call Sign | : HP8627 |
| Flag / Port of Registry | : Panama / Panama |
| Class | : ABS |
| Notation | : ⚠ A1, Offshore Support Vessel, Supply, Ⓢ, ⚠ AMS CRC, MLC-ACCOM, RW, SPS, UWILD |
| GRT / NRT | : 1182 / 354 |
| Vessel Manager | : Atlantic Maritime Group |

DIMENSIONS

| | |
|---------------------------|-------------|
| Length OA | : 45.00 m |
| Length BP | : 40.52 m |
| Breadth | : 14.20 m |
| Depth | : 4.50 m |
| Draft (Maximum) | : 3.50 m |
| Displacement @ Max. Draft | : 1293.36 T |
| Deadweight @ Max. Draft | : 342.36 T |
| Lightship | : 951 T |

MACHINERY

| | |
|---|--|
| Main Engine | : 2 x Caterpillar C32 @ 2100 RPM, V12 – 4 Stroke Total: 2600 BHP; 1939 kW; IMO-TII, Heavy Duty |
| Gear Box | : 2 x REINTJES GMBH-LAF 675L; 970 kW @ 2100 RPM |
| Main Generator (Engine) (Alternator) | : 2 x Cummins KTA19, 380 kW @ 1800 RPM 2 x Leroy Somer, LSAM 47.2 M7 C6/4 475 kVA, 440V, 60 Hz |
| Shaft Generator M6 | : 2 x Leroy Somer, 600 kW, 750 kVA; 60 Hz, LSAM49.3 |
| Emergency Generator | : 1 x Cummins 6BT5.9-D (M); 90 kW, 440 V, 60 Hz |
| Steering Gear | : 2 x Jastram; Electro Hydraulic; Independent Type |
| Propellers (Kort Nozzle) | : 2 x CPP, CAT-MPP 490, 4 Blades, Twin Screw, 280 RPM |
| Rudders | : 2 x High Lift Flap Spade Type |
| Bow Thruster | : 1 x CAT-MTT 113 CL-02, 400 kW @ 1800 RPM 6 T Thrust; 4 Bladed; CPP |
| Sewage Treatment Plant | : 1 x WCMBR – 40(U); Cap. 40 PAX – 5 m ³ / hr @ 3 Bar |
| Fresh Water Generator | : 1 x Type – HSRO-08B; Capacity - 8 T / Day |
| Starting Air Compressor | : 2 x SPERRE; 32 m ³ / hr @ 30 Bar |
| Maintenance Air Compressor | : 2 x RENNER RSF-132 / 22230 lit / min @ 8.50 Bar |
| Compressed Air Dryer | : 1 x Buran Donaldson; 1175 m ³ / hr @ 1.60 Mpa |
| Fuel Oil Purifier | : 1 x Alfa Laval; 900 L / Hr (MDO @ 13 cst @ 40 Deg C) |
| Oily Water Separator | : 1 x OWS YSZ1.0; Separating Capacity – 1 m ³ / hr |
| Search Lights | : 2 x 2000 W & 2 x 1000 W |
| Fixed Gas Detection System | : 5 x H2S & 5 x LEL |

CAPACITIES & PERFORMANCE

| | |
|----------------------------|---|
| Fresh Water Tank | : 161.40 m ³ |
| Fuel Oil Tank | : 352.60 m ³ |
| Drill / Ballast Water Tank | : 251.30 m ³ |
| Lube Oil Tank | : 11.60 m ³ |
| Sewage Holding Tank | : 10.70 m ³ |
| Dirty Oil Tank | : 10.30 m ³ |
| Bilge Holding Tank | : 10.30 m ³ |
| Overflow Tank | : 8.00 m ³ |
| Fresh Water Cargo Pump | : 1 x 90 m ³ / hr @ 30 m Head |
| Fuel Oil Cargo Pump | : 1 x 92 m ³ / hr @ 38 m Head |
| Bilge Pump | : 2 x 35 m ³ / hr @ 25 m Head |
| Daily Bilge Pump | : 1 x 2 m ³ / hr @ 25 m Head |
| Dirty Oil / Sludge Pump | : 1 x 5 m ³ / hr @ 45 m Head |
| Deck Cargo Space | : 200 m ² |
| Design Deck Load | : 5.0 T / m ² |
| Deck Cargo Capacity | : 85 T @ 10 Days Endurance 45 T @ 15 Days Endurance |
| Speed | : 12.4 knots @ 100 % MCR 12.0 Knots @ 85 % CSR |
| Fuel Consumption | : 11.80 m ³ / day @ 100 % MCR 11.00 m ³ / day @ 85 % CSR |

NAVIGATION & COMMUNICATION EQUIPMENT

| | |
|--------------------|--|
| Fixed VHF | : 2 x Furuno – FM – 8900S |
| GMDSS (A1+A2+A3) | : Furuno FS-2575C |
| Radar | : 1 x Furuno; MU-190, X Band |
| Radar | : 1 x Furuno; MU-190, S Band |
| GPS | : 2 x Furuno, GP-170 |
| Echo Sounder | : 1 x Furuno; FE-800 |
| Navtex | : 1 x Furuno; NX-700A |
| Auto-Pilot | : 1 x Anschutz; NP 60 |
| Gyro Compass | : 2 x Anschutz; Standard 22 |
| Magnetic Compass | : 1 x Cassens and Plath GmbH |
| Inmarsat-C | : 1 x Furuno; Felcom 18 |
| SSB Transceiver | : 1 x Furuno; FS-2575 |
| Speed Log | : 1 x Furuno; DS-60 |
| SART | : 2 x Ocean Signal; S100 |
| EPIRB | : 1 x Ocean Signal; E100 |
| AIS | : 1 x Furuno; FA-170 |
| Portable GMDSS VHF | : 3 x Icom; IC-GM1600 E |
| Weather Fax | : 1 x Furuno; FAX-408 |
| Portable VHF | : 2 x Motorola GP328; 2 x Standard Horizon HX400 |
| BNWAS | : 1 x Furuno BR 510 |
| Chart Plotter | : 1 x Garmin GPS MAP 7412 |
| Satcom | : V – Sat (High Speed Internet) |
| Satellite TV | : OSN |

Vessel Equipped with Collapsible Mast

SPECIFICATIONS ARE NOT CONTRACTUAL AND SUBJECTED TO CHANGE WITHOUT NOTICE

A SUBSIDIARY OF ATLANTIC NAVIGATION HOLDING (S)

Revision 02.2022

45 m / 2600 BHP / Maintenance Utility Vessel with Telescopic Crane

FIRE FIGHTING & SAFETY EQUIPMENT

| | |
|----------------------------------|--|
| Bilge / Ballast / Fire / GS Pump | : 2 x 80 m ³ / hr @ 60 m Head |
| Emergency Fire Pump | : 1 x 35 m ³ / hr @ 50 m Head |
| Fixed CO2 System | : Engine Room, Paint Locker, Galley & Exhaust Casing |
| Rescue Boat & Davit | : 1 x 6 Pax (Open Type) & 20 kN Single Arm Davit |
| Life Rafts | : 6 x 20 Pax (Inflatable – Throw Type) |
| Life Buoys | : 8 Nos |
| Fire Hydrant | : DN40 x 12 Nos & DN50 x 2 Nos |
| Life Jackets | : 38 Nos |

GALLEY & LAUNDRY

| | |
|------------------------|--|
| Electric Cooking Range | : 1 x 4 Hot Plates |
| Chiller & Freezer | : 15.0 m ³ & 14.3 m ³ ; 1 Month for Full POB |
| Refrigerator | : 1 x 300 Liters |
| Electric Water Boiler | : 2 x 30 Liters |
| Washing Machine | : 3 x 10 Kg |
| Dryer | : 3 x 10 Kg |
| Iron | : 1 with Ironing Table |

ACCOMMODATION

| | |
|-------------|--|
| 1 Man Cabin | : 4 Nos |
| 2 Man Cabin | : 15 Nos |
| Total | : 34 Person |
| Hospital | : 1 No. with 1 Bed |
| Mess Room | : 1 No. with 34 Persons capacity in Single Seating |

All Cabins Fully Air Conditioned

DECK MACHINERY & EQUIPMENT

| | |
|-------------------------------|---|
| Deck Crane | : 1 x MacGregor; Electro Hydraulic; Telescopic Crane SWL - 20 MT @ 4 m & SWL - 4 MT @ 20 m Minimum Outreach – 4 m Maximum Outreach – 30 m Personnel Lifting – 0.3 T @ All Radius |
| Anchor Windlass/Mooring Winch | : 1 x MacGregor; Hydraulic Operated Winch Drum Capacity 180m x 44mm Dia. PP Rope Rated Pull – 4 T @ 15 m / min (1 st Layer) Brake Holding – 15 T (1 st Layer) Double Gypsies with Double Warping Ends Windlass – 5 T @ 9 m / min; Brake Holding – 33.8 T |
| Anchor chain | : Total of 660 m x 30 mm Diameter U3 Chain |
| Anchor | : 2 x 1193 kg; High Holding Type |
| Tugger Winch | : 2 x MacGregor; Hydraulic Driven; Rated Pull – 5 T Each @ 10 m / min (1 st Layer) Brake Holding – 7.5 T (1 st Layer) |
| Vertical Capstan | : 2 x 5 T @ 15 m / min; Warping Head – 400 mm |

ELECTRICAL SUPPLY & SOCKETS ON MAIN DECK

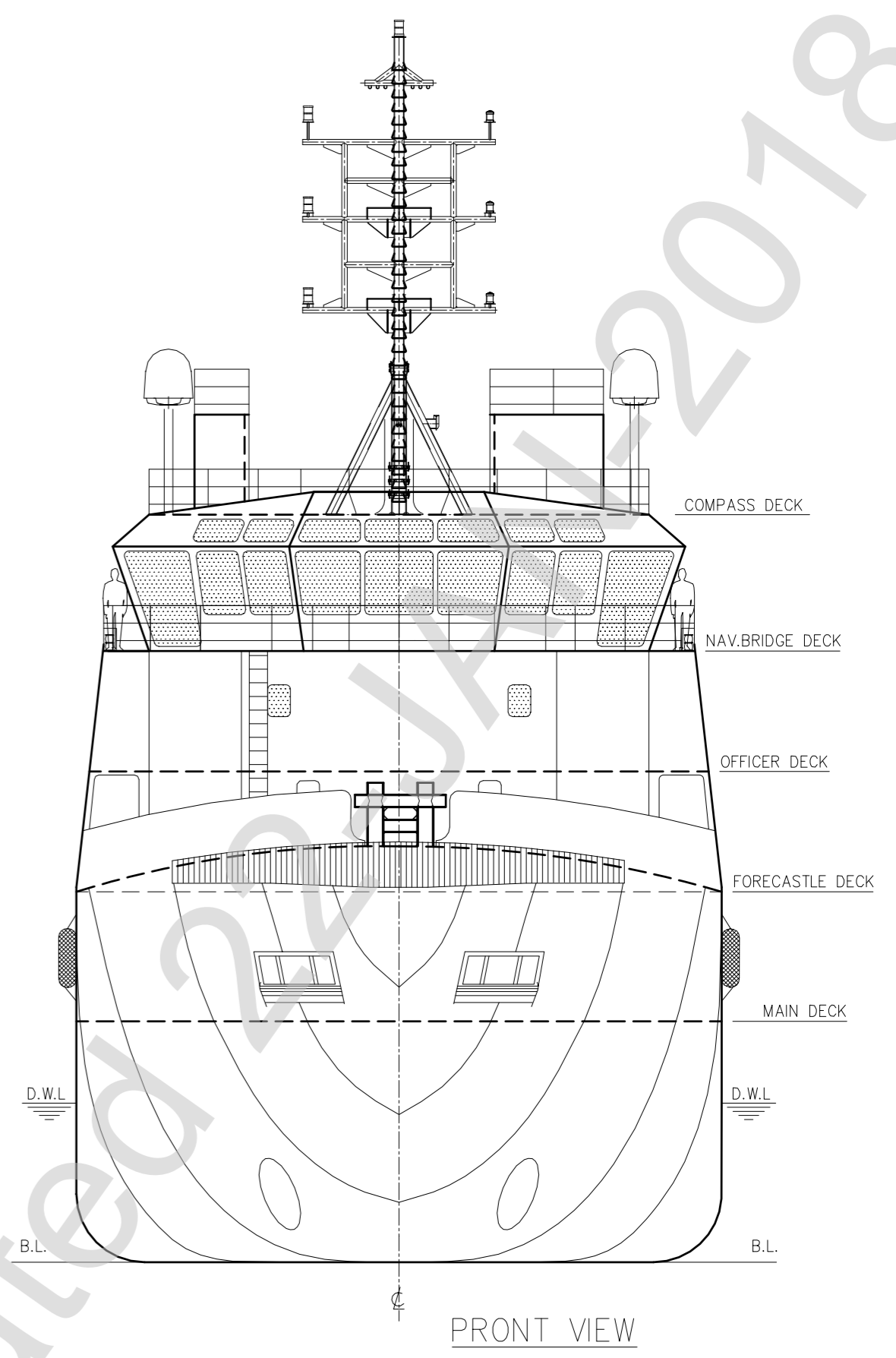
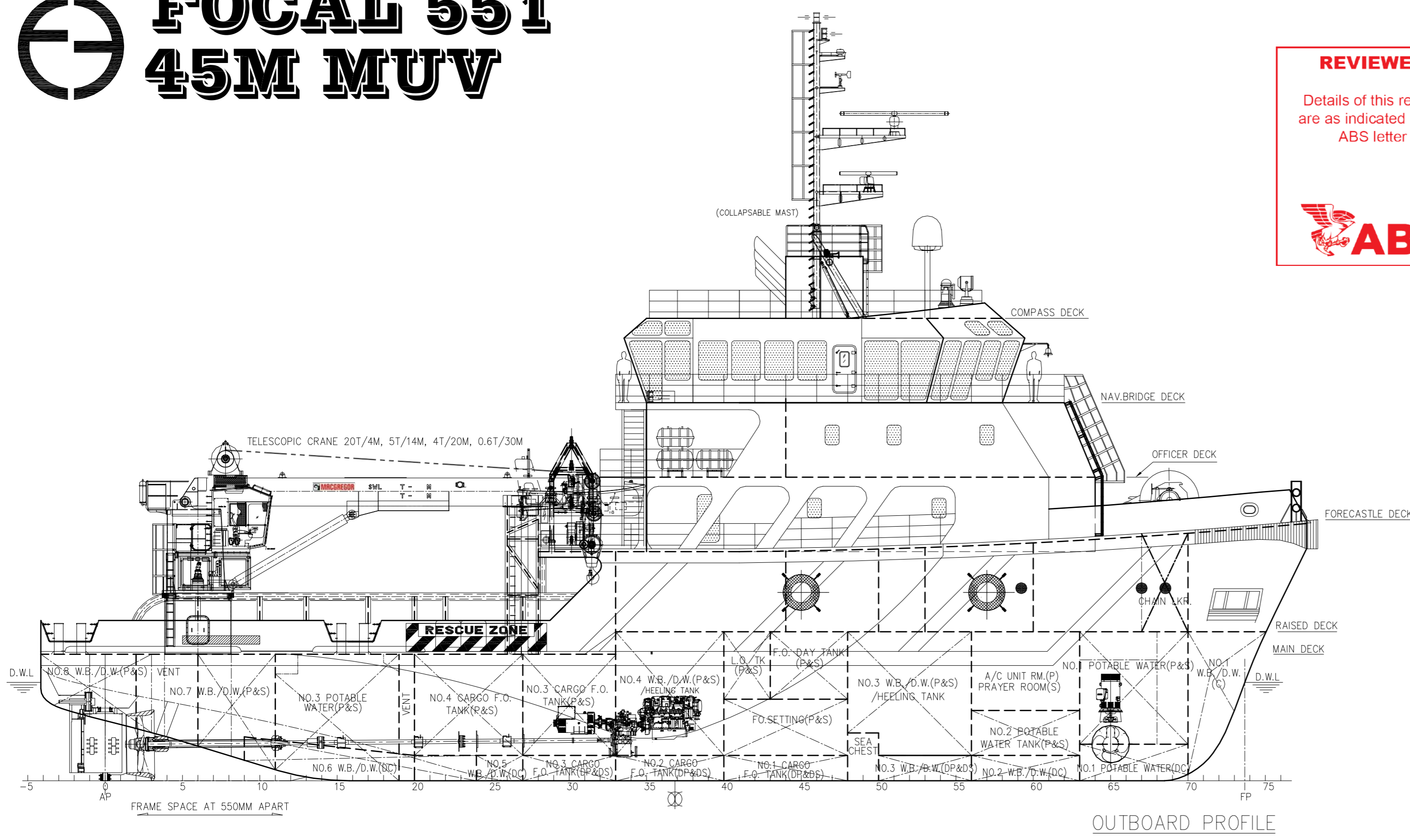
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|----------------------|--|
| Power Supply Sockets | : 7 x 440 V @ 80 Amps (Explosion Proof Sockets) : 6 x 220 V @ 60 Amps (Explosion Proof Sockets) : 4 x 220 V @ 25 Amps (Explosion Proof Sockets) : 6 x 110 V @ 30 Amps (Explosion Proof Sockets) |
| Reefer Sockets | : 2 x 440 V @ 50 Amps : 2 x 220 V @ 60 Amps |



FOCAL 551 45M MUV

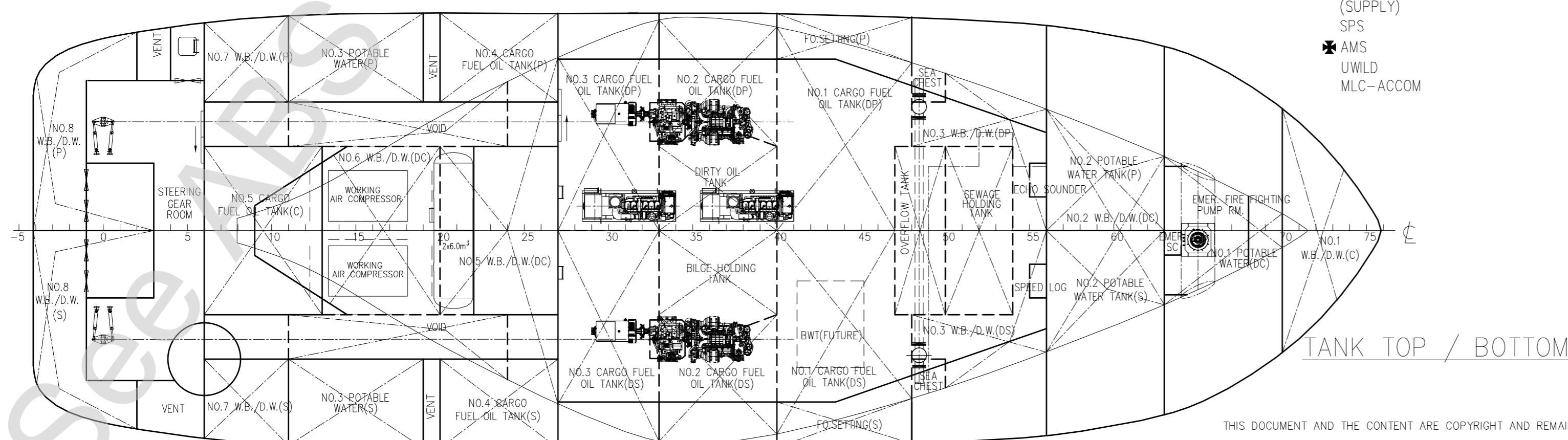
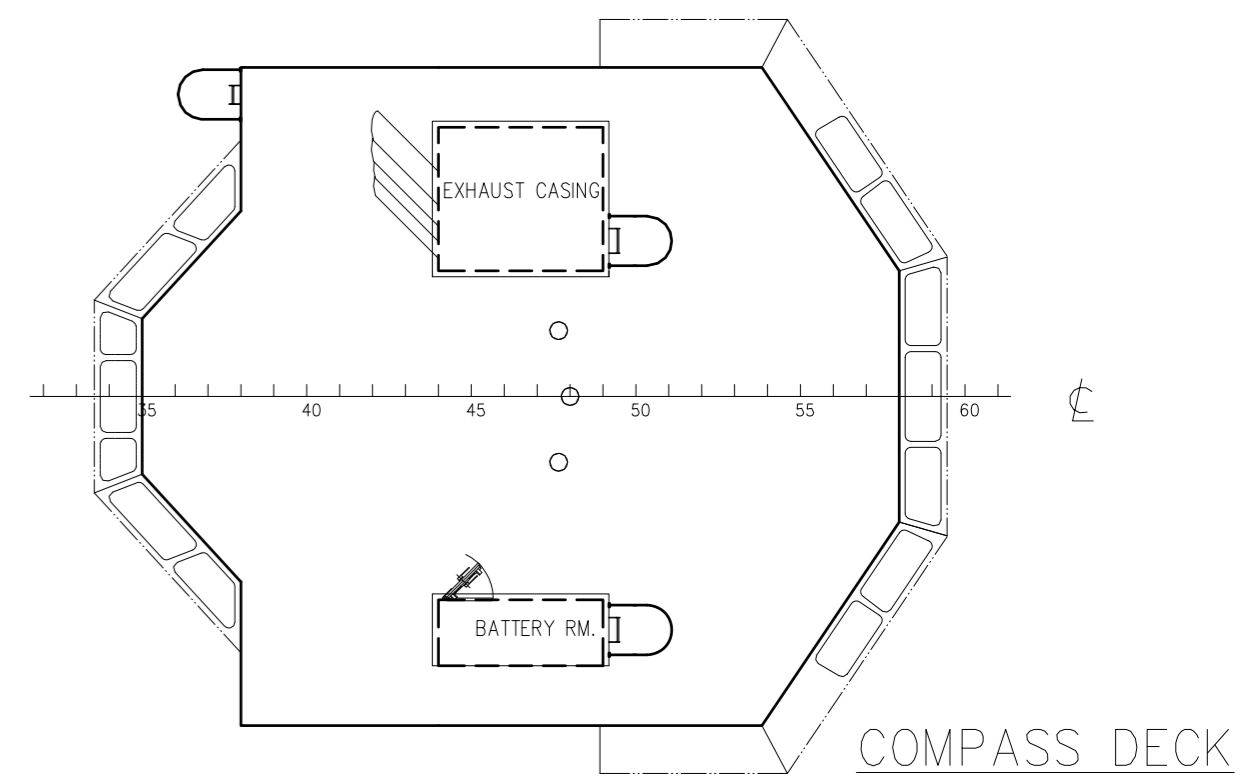
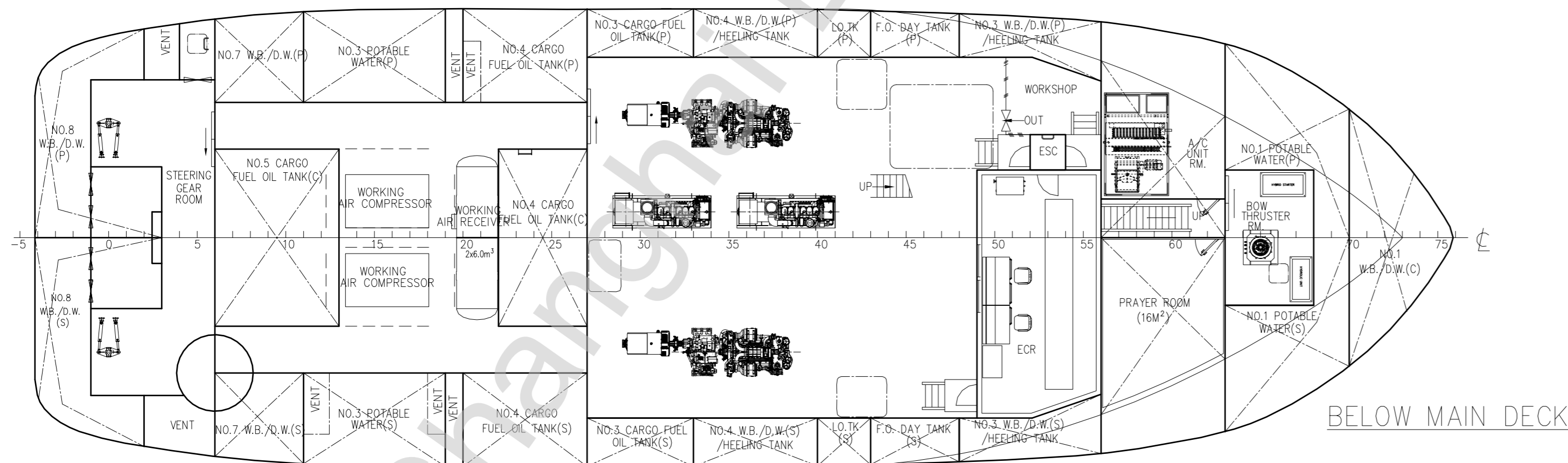
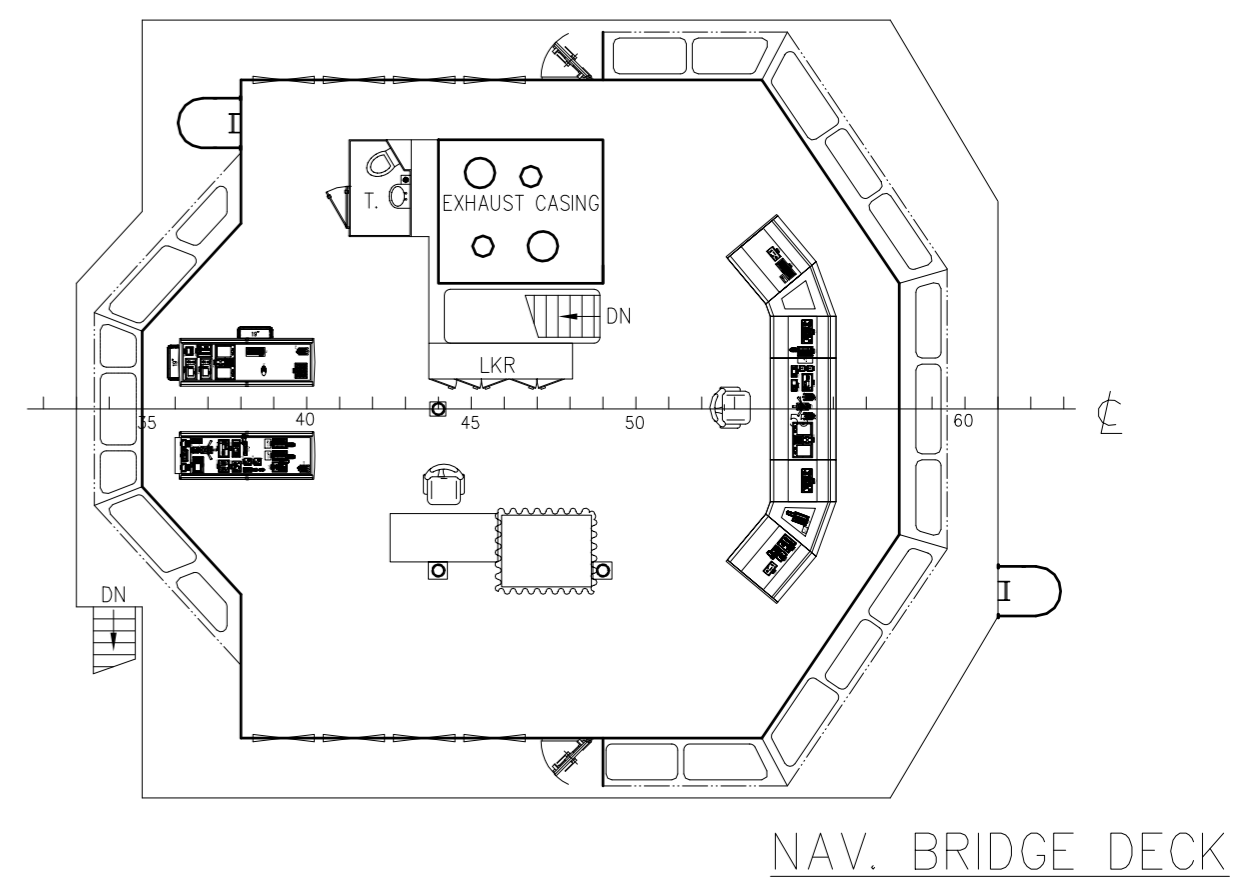
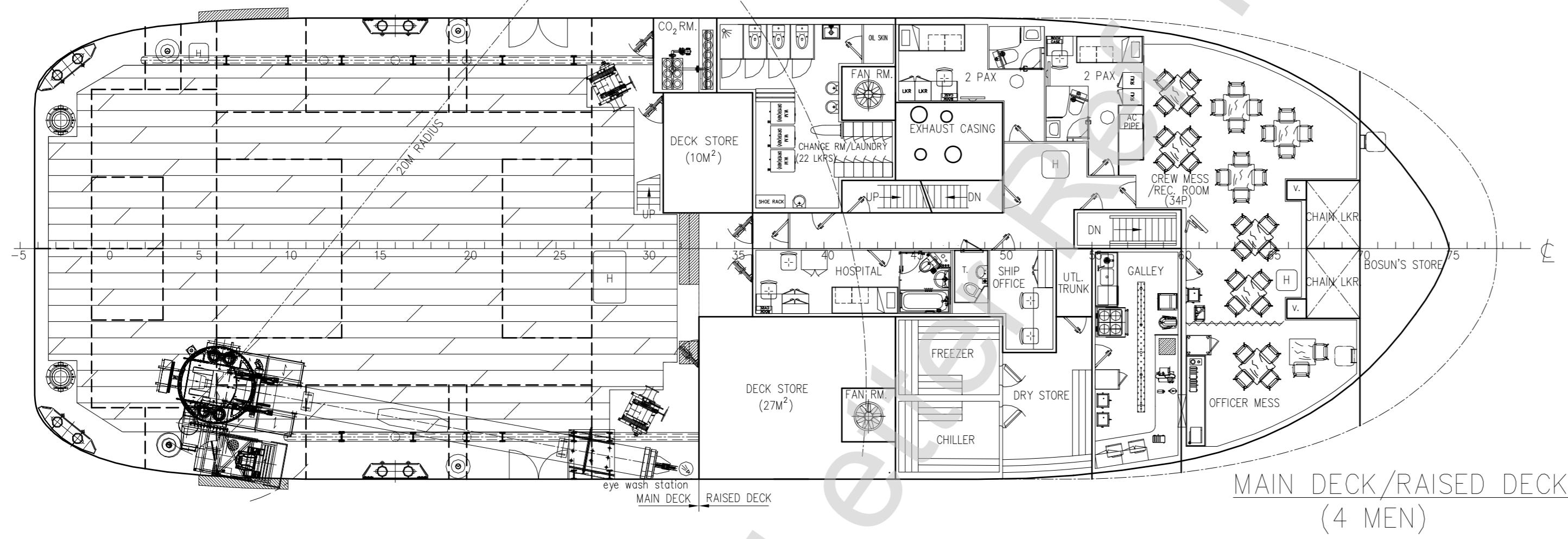
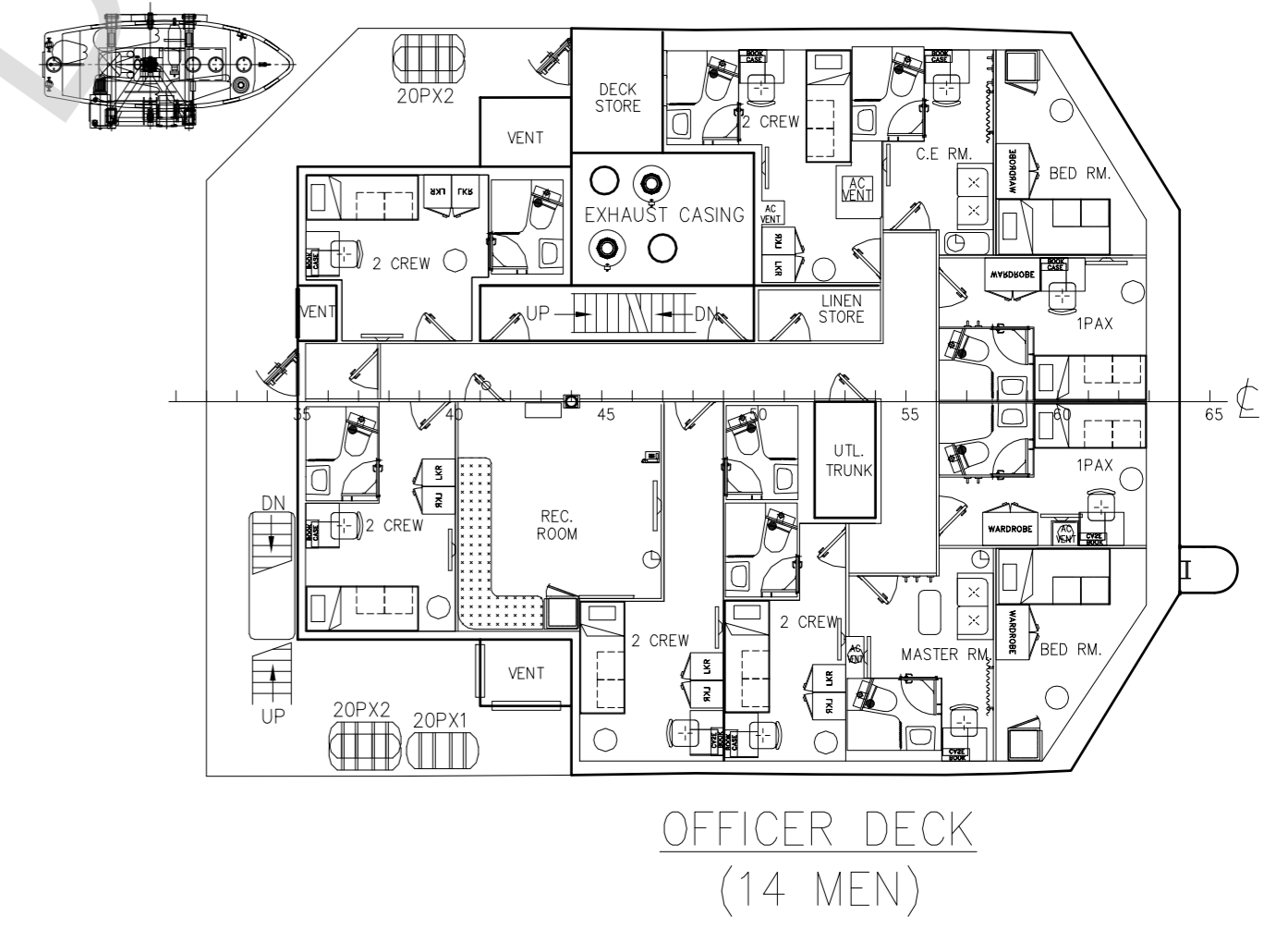
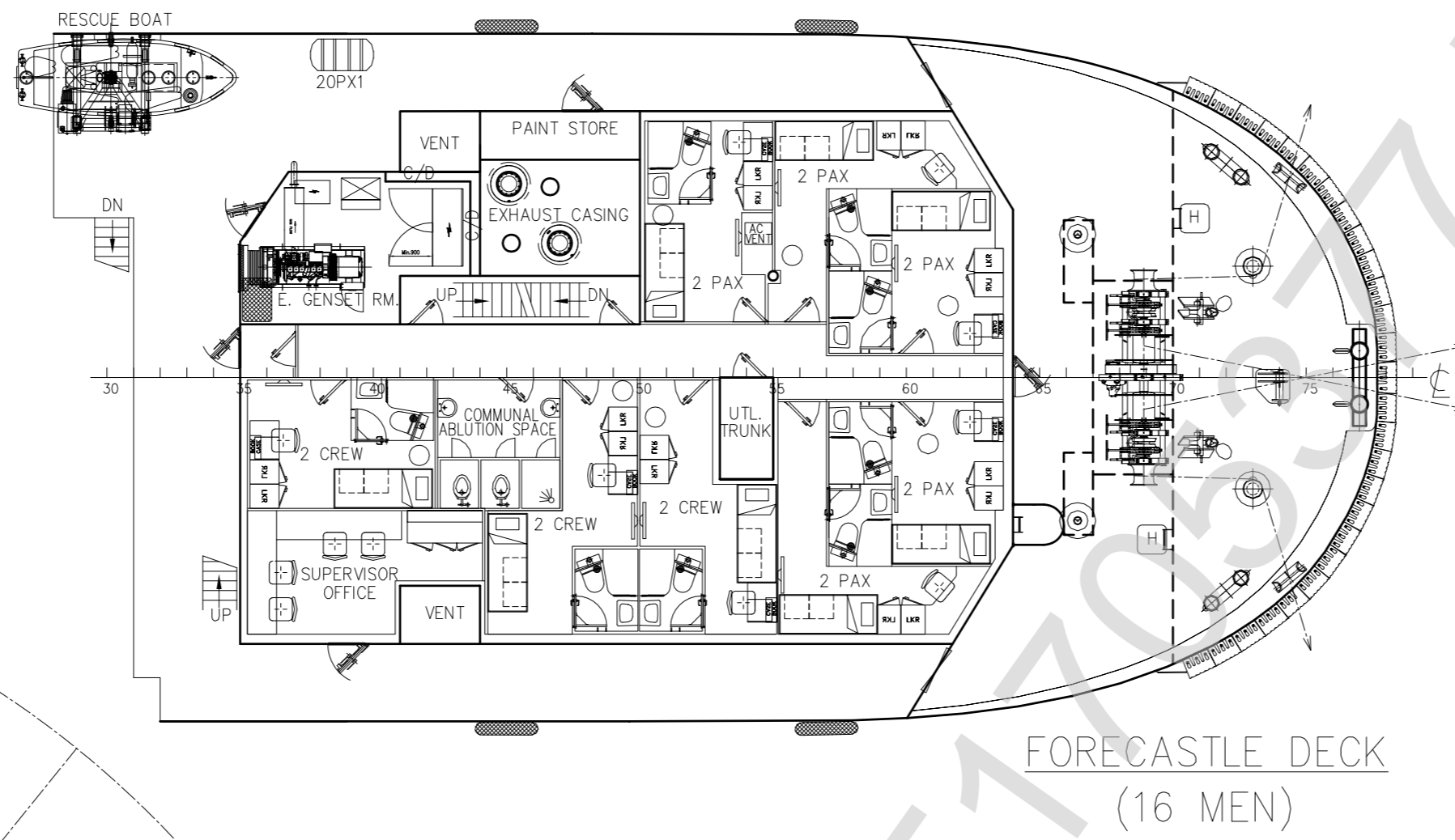
REVIEWED

Details of this review
are as indicated in the
ABS letter



PRINCIPAL PARTICULARS & CAPACITIES

| | |
|-----------------|--------------------|
| LENGTH OA | 45.00M |
| LENGTH BP | 40.52M |
| BEAM MLD. | 14.20M |
| DEPTH MLD. | 4.50M |
| DRAFT SCANTLING | 3.50M |
| DRAFT DESIGNED | 3.20M |
| COMPLEMENT | 34 MEN |
| MAIN ENGINE | 2 x 1,300 BHP |
| DECK LOADING | 5T/M ² |
| TRIAL SPEED | 10.5 KTS |
| CARGO DECK AREA | 200 M ² |
| FUEL OIL | 350 M ³ |
| W.B./D.W. | 250 M ³ |
| POTABLE WATER | 160 M ³ |

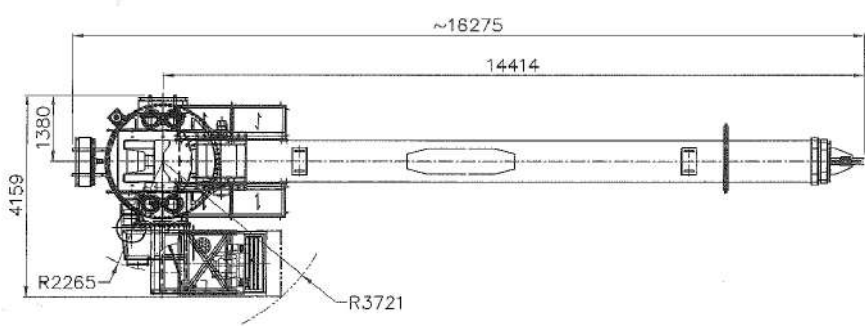


CLASS: ABS **A1** OFFSHORE SUPPORT VESSEL (SUPPLY)
SPS
AMS
UWILD
MLC-ACCUM

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| | | | |
|---|---|---------------------|-------------|
| 9 | AMENDED AS BUILT ON SITE | ZF | DEC-28-2017 |
| 8 | AMENDED AS DESIGN PROGRESS | YP | SEP-30-2016 |
| REV NO. | REVISION DESCRIPTION | BY | DATE |
| OWNER | ATLANTIC MARITIME GROUP FZE | | |
| BUILDER | WUCHANG SHIPBUILDING INDUSTRY CO., LTD HULL NO.: BG0012A09M/BG0013A09M/BG0014A09M/BG0015A09M | | |
| PROJECT | 45M MAINTENANCE / UTILITY VESSEL "FOCAL 551" | | |
| APPROVE | DWG TITLE: | JOB NO.: P-1919 | |
| VERIFY | GENERAL ARRANGEMENT | DWG NO.: P-1919-001 | |
| CHECKER | | SCALE: 1:125 (A1) | |
| DRAWER | YP | CLASS: ABS | |
| | | | |
| FOCAL MARINE & OFFSHORE EMAIL: info@focalmarine.com SHANGHAI TEL: 86-21-58705786 SINGAPORE TEL: 65-68481387 FAX: 86-21-50313265 FAX: 65-68481291 | | | |

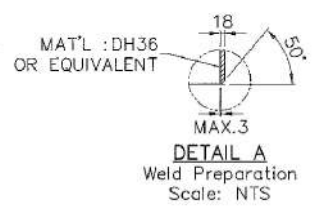
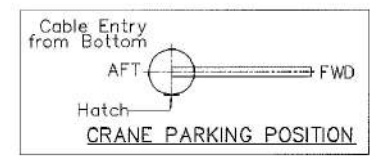
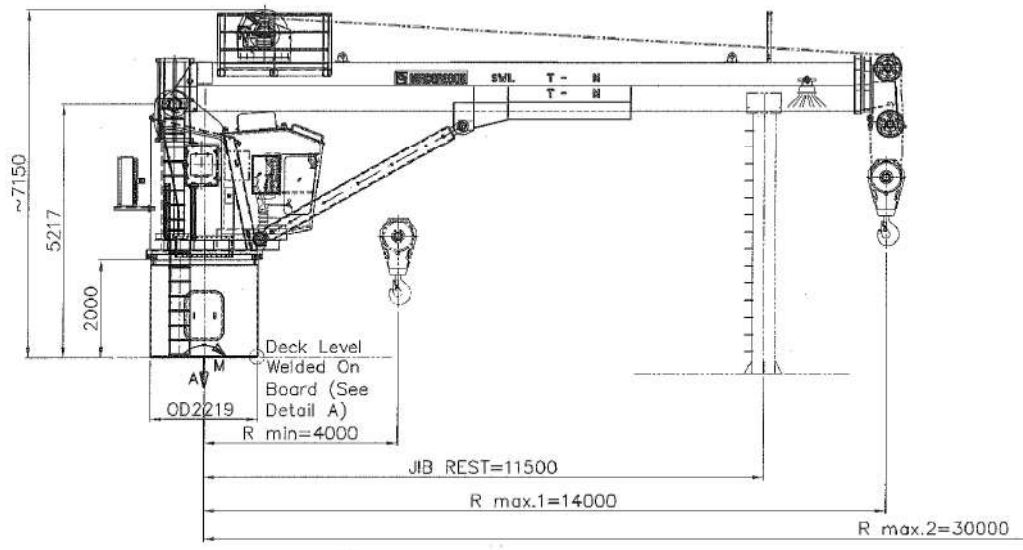
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SPECIFICATION

| | TELE. JIB FULLY RETRACTED | TELE. JIB EXTENDED |
|---------------------|------------------------------|--------------------|
| SWL | : 20 T / 5 T | : 4 T / 0.6 T |
| MAX. OUTREACH | : 4 M / 14 M | : 20 M / 30 M |
| MIN. OUTREACH | : 4 M | |
| PERSONNEL LIFTING | : 0.3 T @ ALL RADIUS | |
| HOOK SPEED | : 0-20 M/MIN | |
| HOOK TRAVEL | : 50 M | |
| SLEWING SPEED | : 0-0.5 RPM | |
| SLEWING SECTOR | : TBA (<360DEG) | |
| | (SLEW LIMIT SWITCH PROVIDED) | |
| LUFFING TIME | : 120 SEC | |
| TELESCOPIC TIME | : 180 SEC | |
| POWER PACK | : BUILT-IN | |
| AREA CLASSIFICATION | : SAFE ZONE (SEE NOTE 3) | |
| COLOR | : RAL 9010 WHITE | |

| | |
|---|----------------------------|
| MAX. MOMENTS GIVEN ARE INCL. DYN. FACTOR & PEDESTAL FACTOR OF 1.5 | |
| TRIM/LIST = 2°/5° | |
| WIND SPEED = 18 m/s | |
| WAVE HEIGHT = 0.6 m | |
| TELE. JIB FULLY RETRACTED | EXTENDED |
| M (Overturning) = 628.7 Tm | M (Overturning) = 731.0 Tm |
| A (Axial Load) = 89.4 T | A (Axial Load) = 51.7 T |



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. THIS CRANE IS DESIGNED IN ACCORDANCE WITH API 2C, 7th EDITION.
3. ALL ELECTRICAL COMPONENTS ON THE CRANE BOOM AND BLOCK SHALL BE RATED FOR OPERATION IN ZONE 1.

| REV | DATE | DESCRIPTION | DRAWN | CHK'D | APPR'D |
|-----|----------|--|-------|-------|--------|
| C2 | 11.01.17 | RE-ISSUED FOR CONSTRUCTION(D004/2K17) | CZJ | | |
| C1 | 21.12.16 | RE-ISSUED FOR CONSTRUCTION(D0235/2K16) | CWC | CZJ | XF |
| C | 15.11.16 | ISSUED FOR CONSTRUCTION | CWC | CZJ | XF |
| B2 | 07.10.16 | RE-ISSUED FOR APPROVAL | CWC | CZJ | XF |
| B1 | 29.08.16 | RE-ISSUED FOR APPROVAL | CWC | CZJ | XF |
| B | 03.08.16 | ISSUED FOR APPROVAL | CWC | CZJ | XF |
| A | - | - | - | - | - |

| | | | |
|--|--|---|--|
| TITLE : | | HYDRAULIC OFFSHORE TELESCOPIC CRANE GENERAL ARRANGEMENT | |
| SCALE 1 : 110 | | EST. WT.: ~42 TON | |
| MODEL NO: MG-OTC2201-2004-0420-0230E(WR01) | | DWG NO: F0309-12-OTC2201-2004-0420-0230E(WR01) SHT. 1/2 | |

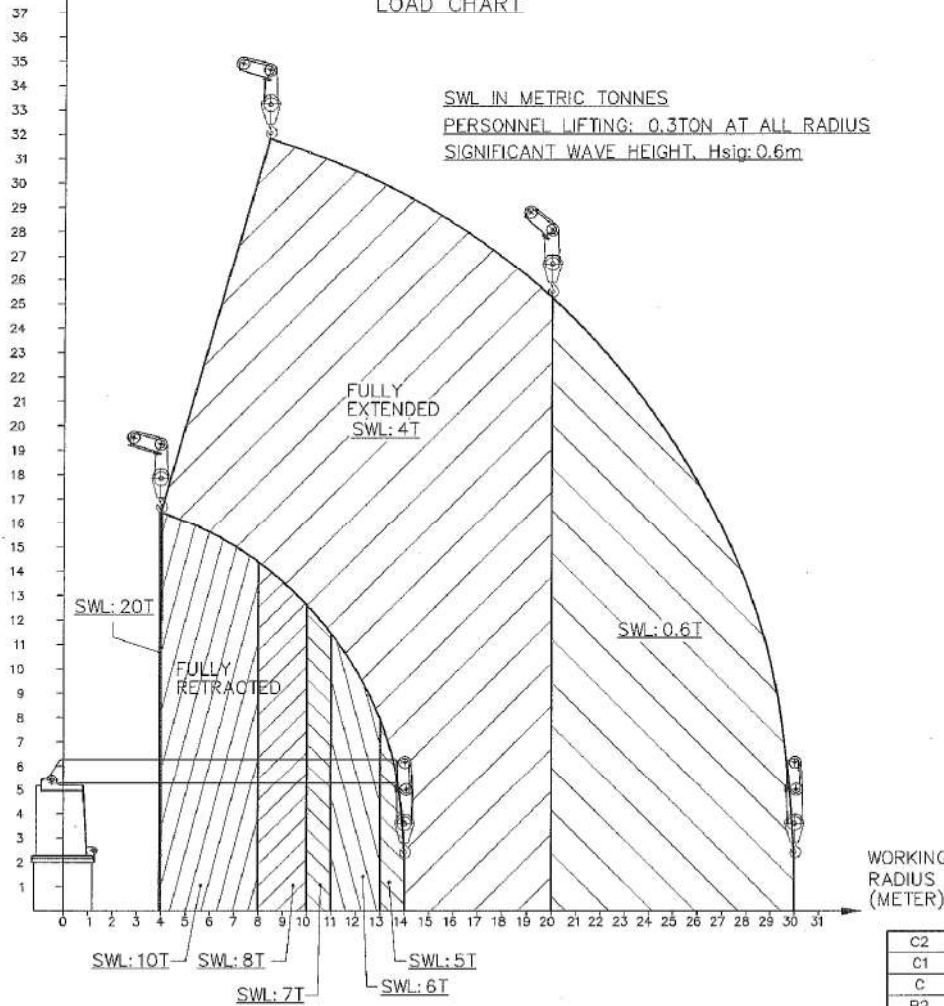
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|---|----------------|---|-------------|--------------|-----------|-------------|--------------|---------------|----------------|
| <p>MACGREGOR PTE. LTD. OFFSHORE DECK MACHINERY (REGISTRATION NUMBER 2073116330)</p> <p>ADDRESS : No.15 TUKANG INNOVATION DRIVE SINGAPORE 618299 TEL: (65) 65973888 FAX: (65) 65973513</p> <p>ALL INFORMATION CONTAINED ON THIS DRAWING IS CONFIDENTIAL AND CANNOT BE USED OR DIVULGED TO A THIRD PARTY WITHOUT PERMISSION.</p> | | GENERAL TOLERANCES: ACCORDING TO ISO 2768 | | | | | | | |
| | | LINEAR (mm) | RANGE 0.5-3 | OVER 3-6 | OVER 6-30 | OVER 30-120 | OVER 120-400 | OVER 400-1000 | OVER 1000-2000 |
| M/C | ±0.1 | ±0.1 | ±0.2 | ±0.3 | ±0.5 | ±0.8 | ±1.2 | ±2 | |
| UN M/C | ±0.2 | ±0.3 | ±0.5 | ±0.8 | ±1.2 | ±2 | ±3 | ±4 | |
| ANGULAR (Deg) | RANGE UP TO 10 | OVER 10-50 | OVER 50-120 | OVER 120-400 | OVER 400 | | | | |
| M/C | ±1° | ±0°30' | ±0°20' | ±0°10' | ±0°5' | | | | |
| UN M/C | ±1°30' | ±1° | ±0°30' | ±0°15' | ±0°10' | | | | |



LIFTING HEIGHT
(METER)

LOAD CHART

SWL IN METRIC TONNES
PERSONNEL LIFTING: 0.3TON AT ALL RADIUS
SIGNIFICANT WAVE HEIGHT, Hsig:0.6m



WORKING
RADIUS
(METER)

| REV | DATE | DESCRIPTION | DRAWN | CHK'D | APPR'D |
|-----|----------|--|-------|-----------|-----------|
| C2 | 11.01.17 | RE-ISSUED FOR CONSTRUCTION(D004/2K17) | CZJ | <i>Am</i> | <i>AB</i> |
| C1 | 21.12.16 | RE-ISSUED FOR CONSTRUCTION(D0235/2K16) | CWC | CZJ | XF |
| C | 15.11.16 | ISSUED FOR CONSTRUCTION | CWC | CZJ | XF |
| B2 | 07.10.16 | RE-ISSUED FOR APPROVAL | CWC | CZJ | XF |
| B1 | 29.08.16 | RE-ISSUED FOR APPROVAL | CWC | CZJ | XF |
| B | 03.08.16 | ISSUED FOR APPROVAL | CWC | CZJ | XF |
| A | - | - | - | - | - |

TITLE :

HYDRAULIC OFFSHORE TELESCOPIC CRANE
GENERAL ARRANGEMENT

| | | | |
|---|---|--|-----------------|
| | ALL DIMENSIONS IN MM UNLESS OTHERWISE STATED | SCALE 1 : 110 | EST. WT.: — TON |
| MODEL NO: MG-DTC2201-2004-0420-0230JE(MR01) | | DWG NO: F0309-12-DTC2201-2004-0420-0230JE(MR01)-0 SHT. 2/2 | |

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OFFSHORE DECK MACHINERY
(REGISTRATION NUMBER 2013116330)

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GENERAL TOLERANCES: ACCORDING TO ISO 2768

| RANGE | 0.5-3 | OVER 3-8 | OVER 8-30 | OVER 30-120 | OVER 120-400 | OVER 400-1000 | OVER 1000-2000 | OVER 2000-4000 |
|--------|-------|----------|-----------|-------------|--------------|---------------|----------------|----------------|
| M/C | ±0.1 | ±0.1 | ±0.2 | ±0.3 | ±0.5 | ±0.8 | ±1.2 | ±2 |
| UN M/C | ±0.2 | ±0.3 | ±0.5 | ±0.8 | ±1.2 | ±2 | ±3 | ±4 |

| RANGE | UP TO 10 | OVER 10-50 | OVER 50-120 | OVER 120-400 | OVER 400 |
|--------|----------|------------|-------------|--------------|----------|
| M/C | ±1' | ±0'30" | ±0'20" | ±0'10" | ±0'5" |
| UN M/C | ±1'30" | ±1' | ±0'30" | ±0'15" | ±0'10" |

