



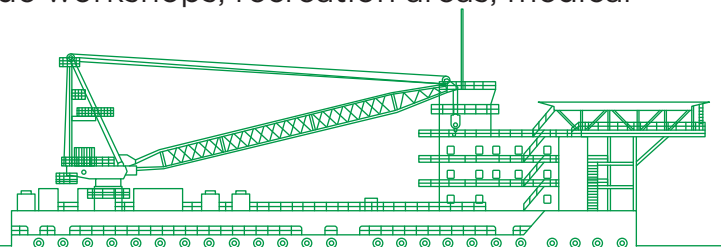
مبارك البحرية Mubarak Marine



Mubarak Supporter

Special service utility construction vessel

This 77m long and 30m breadth DP2 multipurpose work barge features an 8-point mooring system, 23m spuds, and accommodation for up to 182 people. It's equipped with a Liebherr SWL 100-ton main crane, a 15-ton auxiliary hook, and optional 5- and 12-ton service cranes. Onboard facilities include workshops, recreation areas, medical facilities, and a helideck.



Registration

Year of build	2014
Builder	Dubai Shipbuilding & Engineering
Port of registry	Dubai
Flag	UAE
Official number	0007428
Call sign	A6E2185
IMO number	8537229
Class	Bureau Veritas
Class number	28017F
Class notation	HULL, MACH, AUT_UMS, DYNAPOS AM/AT R HEL/ALM special service/utility-construction vessel, tropical zone
Coast guard number	DC 411
Operator	Mubarak Marine LLC

Dimensions

Length overall	77 m
Length (thruster appendages)	91.5 m
Breadth moulded	30 m
Depth moulded	5.5 m
Minimum draft	2.6 m (with 15 days consumables)
Maximum draft	4.1 m

Machinery/propulsion

Main generator	Guascor SF480 - 3x (1171 kw) Guascor SF360 - 2x (879 kw) = 5271 kw
Frequency	60 Hz
Emergency/harbour generator	1x 433 kw
Switch boards	Terasaki
Power management	Praxis
Electrical accessories	Terasaki
Oily water separator	1x 1 m ³ /h, 15 ppm
Fresh water maker	3x 30 t/day = 90 t/day production
Sewage treatment plant	1x ACO Manipur AM200, 1x ACO Manipur AM50, Germany membrane type with UV sterilization system in the effluent discharge
Propulsion	4x Verhaar Omega channel thrusters, thruster model 31140, 550 kw @ 1800 rpm each, 4x HRP deck mounted Azimuth thrusters diesel, engine driven, model HRP4111 each rated 525 kw each @ 1800 rpm
Dynamic positioning	DP2, model MT bridge mate with independent joystick
Reference system	DGPS 1-Veripos/LD900, DGPS 2-Veripos/LD900, laser-guidance navigation cyscan, acoustic-sonardyne, taut wire-forum energy technologies (MT), microwave-radius 700

Tonnage

GRT	5251 t
NRT	1575 t
Deadweight	5520 t
Displacement	9320 t

Navigation/communication equipment

Wind indicator	3x DEIF
Radar	3x (X-Band) Yonzoe, Koden, Kelvin Hughes
ECDIS	2x Intermarine Electronics/Kelvin Hughes
Echo sounder	2x Hondex, 1x JMC
GPS	2x Koden (KGP 920 & 922)
Gyrocompass	4x Sperry Marine
VHF (portable)	3x Jotron TR30 (GMDSS Radio)
Satellite phone	1x FBB, 1x VSAT
Satellite TV	1x Seatel
SSB radio	1x Sailor 6301
PABX phone	1x NEC exchange, covering all cabins

Deck equipment

Mooring winches	8x 40 t line pull, 100 t break holding power 1000 m of 42 mm diameter wire model NCW-SD-40-100H, Nor crane equipped with load monitoring system on bridge
Spud winches	2x 30 t pull, electric winches 100 m of 32 mm diameter wire, model NCW-MW-SD-30-70-E, Nor crane
Spud legs	1200 mm Ø x 22 m length
Main crane	Offshore pedestal crane - Liebherr BOS4200-100D Litronic
Main hook (4Fall)	SWL 100 t @ 9.1 m - 20 m
Auxiliary hook	SWL 15 t @ 10.7 m - 51.5 m
Auxiliary hook man riding	SWL 2 t
Auxiliary crane	1x electro hydraulic crane 12 t @ 8 m and 5 t @ 16 m
Anchors	8x delta flippers of 7 t each
Helideck	Designed for Bell 412 and 212 for helicopters with D" value up to 22.2 m

Capacities

Fuel oil	577 m ³
Fuel oil transfer P/P	2x 30 m ³ cap @ 56 m WC
Fresh water	2229 m ³
Fresh water transfer P/P	1x 45 m ³ /hr cap @ 49 m WC
Ballast fresh water	2010 m ³
Freezer room	52.3 m ³
Chiller room	71.3 m ³
AC unit	2x 133 t = 266 t cooling capacity with chilled water system and independent room temperature control

Clear deck area

Work deck area	1150 m ²
Deck strength	10 t/m ²

Workshop facility

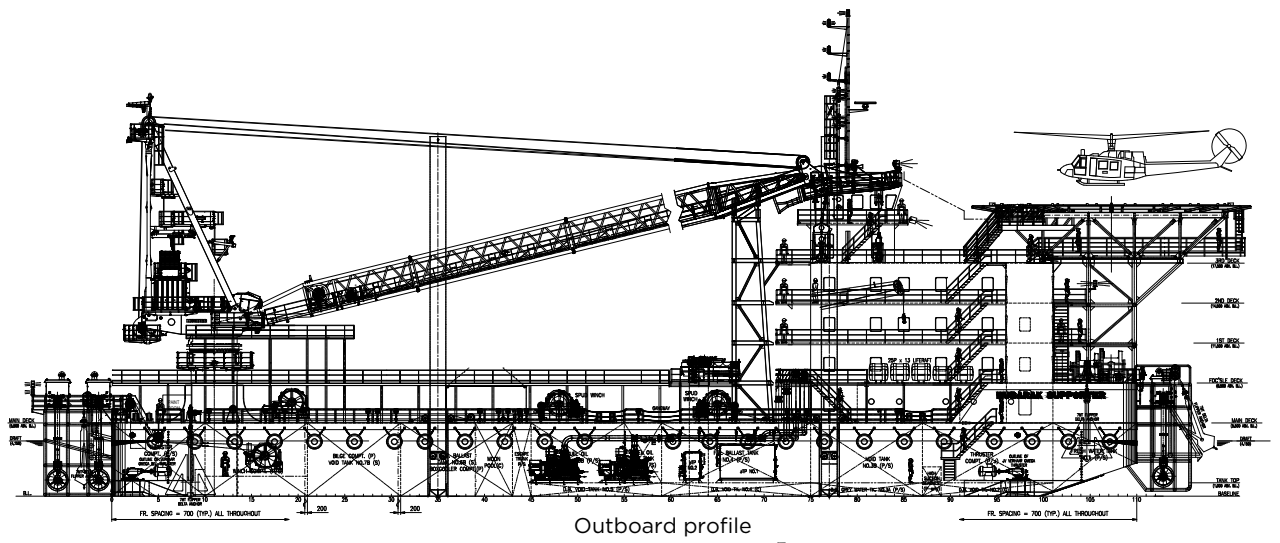
Equipped with lathe drilling and grinding machines

Firefighting/safety equipment

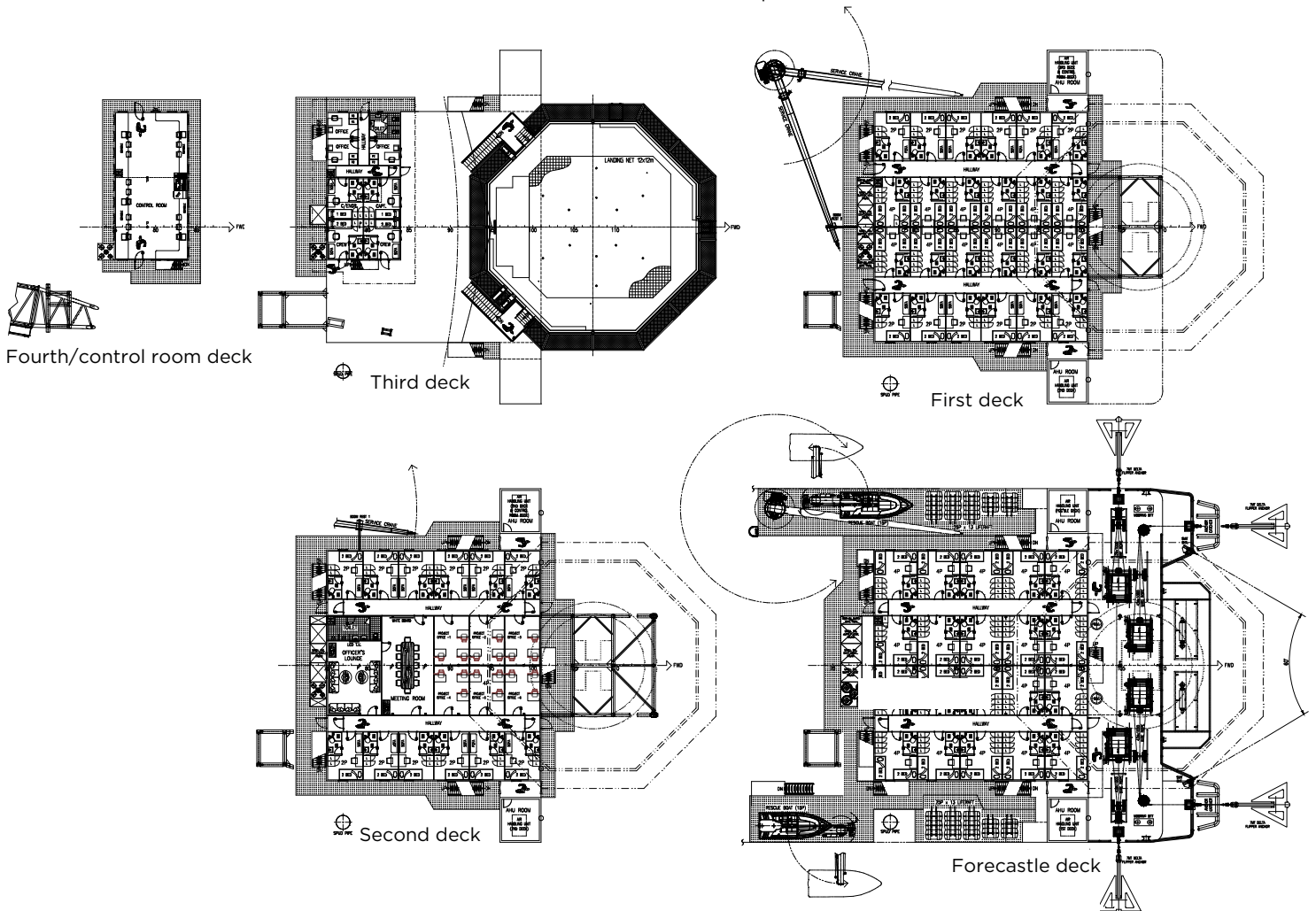
Life rafts	26x 25 persons = 650 persons
Life buoys	12x with smoke signals, 20x fitted with 30 m lifelines = 32 nos
Life jackets	260 nos
Rescue boat	2x 18 persons with jet propulsion diesel driven, launchable with a slewing davit
Fixed breathing air	195 nos
System (for 60 mins)	Cascade system
Fire pump	2 nos and 1 no (emergency)
Fire detection	Smoke and heat detection system
Sprinkler system	Covering all areas of accommodation
Gas detection	H2S and LEL detection
Mist system	Covering all machinery spaces
Fixed CO ₂ system	For engine room
Barge is built in conformity to SOLAS existing regulations	

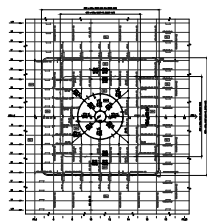
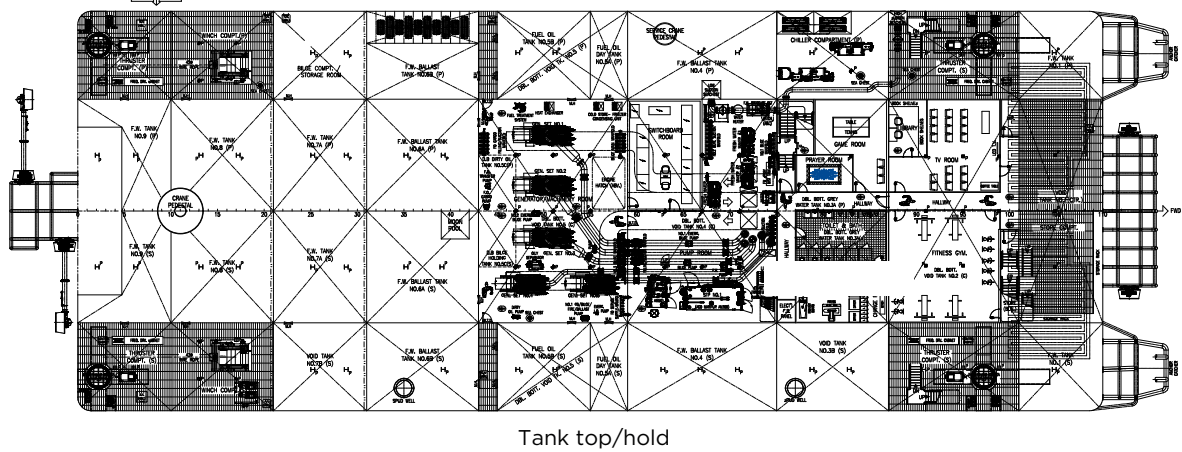
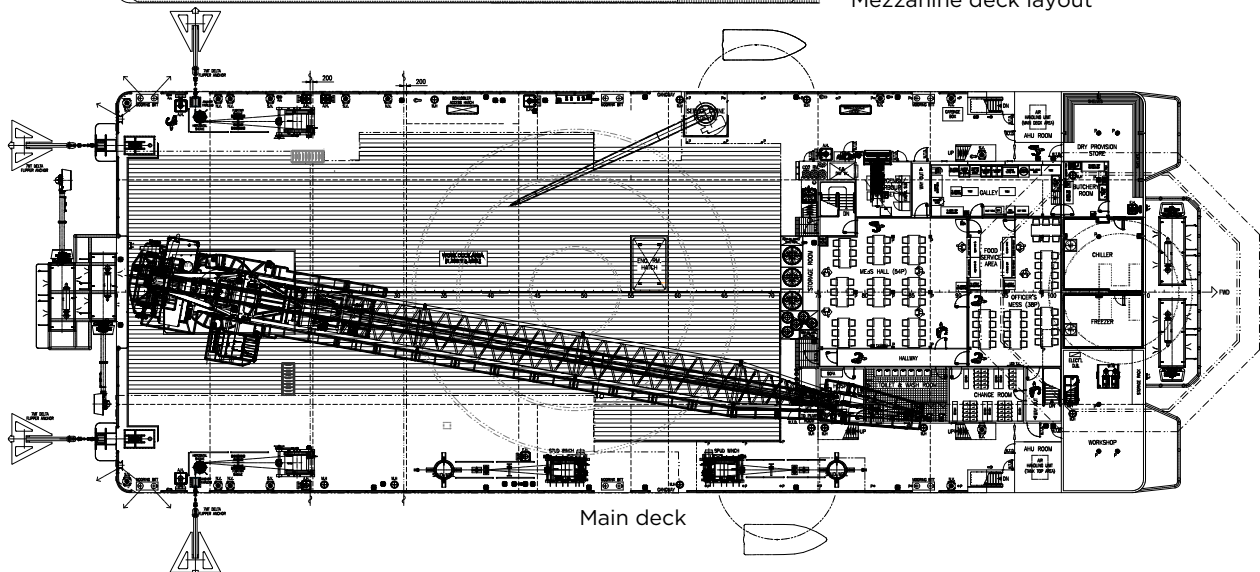
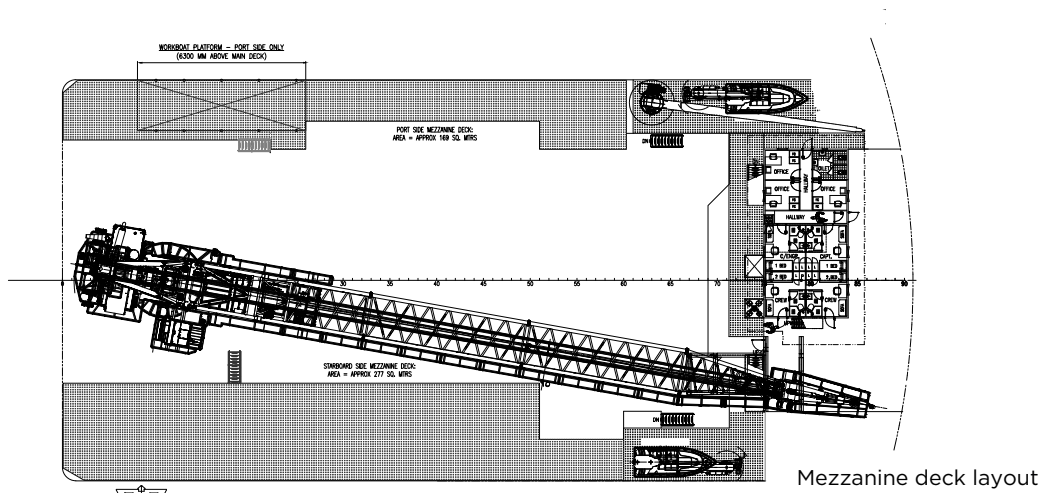
Accommodation

1-person berth cabin	2x with attached toilet and bath
2-person berth cabin	26x with attached toilet and bath
4-person berth cabin	32x with attached toilet and bath
Office's	2x on 3rd Deck, 6x on 2nd Deck
Officer's meeting room	1x on 2nd Deck
Officer 's lounge	1x on 2nd Deck
Prayer room	1x on tank top
Mess room	1x on main deck, 100 nos seating
Galley	1x on main deck, fully equipped with dry storage and refrigerator storage
Clinic	1x double berth with attached toilet and bath on main deck
Recreation/TV room	1x fully equipped
Library	1x fully equipped
Gymnasium	1x fully equipped
Game room	Table tennis
Laundry room	Fully equipped with washers and dryers
Change Room	1x on main deck and 1x on top tank deck
Combined toilet	1x on main deck, 1x on top tank 1x on 2nd deck and 1x on 3rd deck
Total	182 persons



Outboard profile



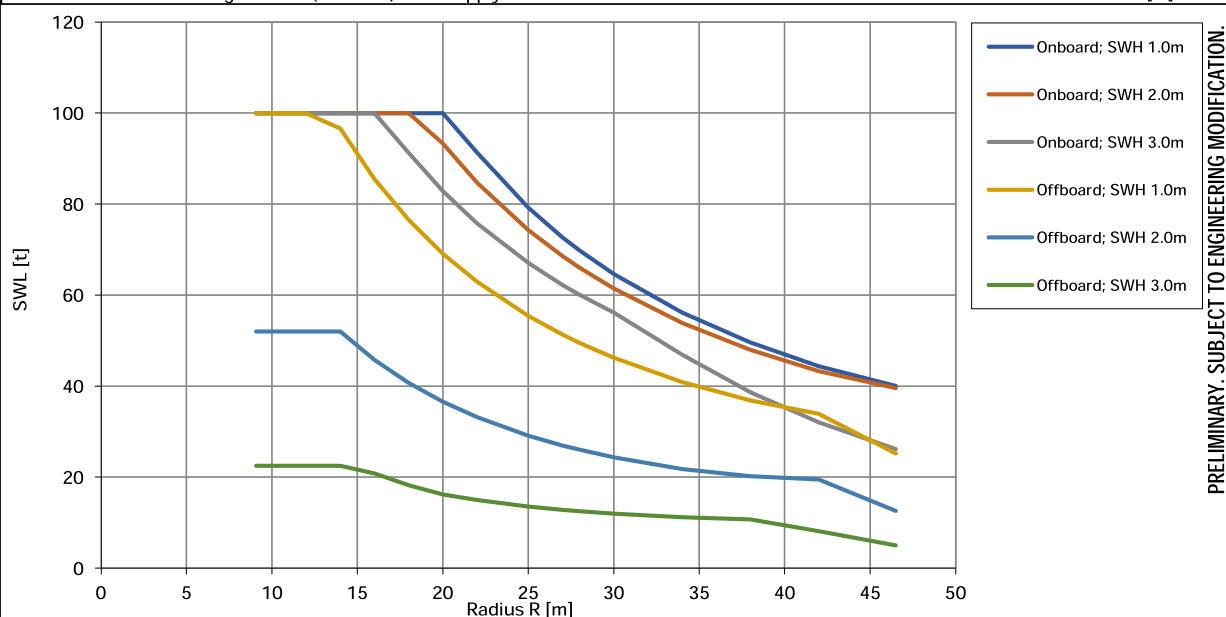


LOAD CHARTS: Main Hoist - 4-fall

Design code: API 2C, 7th Edition, "Specification for Offshore Pedestal Mounted Cranes", 2012

Calculation method: GM - General Method

Conditions: Crane location: Crane Barge HUP: min: 3.4 [m]
Lifting to/from (offboard): Supply vessel max: 15.4 [m]



Lift mode	Onboard	Onboard	Onboard	Offboard	Offboard	Offboard						
SWH [m]	1.0	2.0	3.0	1.0	2.0	3.0						
Static trim [°]	1 / (2.5)	1 / (2.5)	1 / (2.5)	1 / (2.5)	1 / (2.5)	1 / (2.5)						
Static heel [°]	2.5 / (1)	2.5 / (1)	2.5 / (1)	2.5 / (1)	2.5 / (1)	2.5 / (1)						
a_z [m/s ²]	0.69	0.69	1.14	0.69	0.69	1.14						
a_{xy} [m/s ²]	0.36	0.78	1.21	0.36	0.78	1.21						
v_{wind} [m/s]	10.3	10.3	11.6	10.3	10.3	11.6						
v_c [m/s]	0.16	0.66	1.48	0.16	0.66	1.48						
v_d [m/s]	n.a.	n.a.	n.a.	0.60	1.20	1.80						
$v_{h,min}$ [m/s]	0.01	0.01	0.01	0.11	0.20	0.27						
Angle [°]	Radius [m]	SWL [t]	SWL [t]	SWL [t]	SWL [t]	SWL [t]	SWL [t]					
82.7	9.1	100.0	100.0	100.0	100.0	52.0	22.5					
78.9	12.0	100.0	100.0	100.0	100.0	52.0	22.5					
76.3	14.0	100.0	100.0	100.0	96.6	52.0	22.5					
73.6	16.0	100.0	100.0	100.0	85.5	45.8	20.8					
70.9	18.0	100.0	100.0	91.2	76.5	40.7	18.2					
68.2	20.0	100.0	93.3	82.8	69.1	36.5	16.2					
65.4	22.0	91.3	84.7	75.8	62.9	33.2	15.0					
61.1	25.0	79.2	74.3	67.1	55.4	29.1	13.6					
58.1	27.0	72.7	68.6	62.2	51.3	26.9	12.8					
56.5	28.0	69.8	66.0	60.1	49.5	26.0	12.5					
53.4	30.0	64.6	61.4	56.1	46.2	24.3	11.9					
46.6	34.0	56.1	53.9	46.9	40.9	21.7	11.2					
38.9	38.0	49.6	47.9	38.6	36.8	20.2	10.7					
29.5	42.0	44.4	43.3	32.0	33.9	19.5	8.1					
12.2	46.5	40.1	39.6	26.2	25.2	12.6	5.0					

Remark: - the given preliminary load charts are subject to engineering modification.
- operational limitations: 1. due to low vertical hook velocity: none
2. due to low radial hook velocity: none
3. due to low lateral hook velocity: none
4. due to wave induced motions of the load: offboard lifts with SWH $\geq$ 1.5m
5. for the lifting of personnel: no personnel lift operation available