

AJ46-360-C

Crossway Eagle & Crossway Dolphin



Accommodation Construction Support Jackup

- Rated for 350' water depth
- Accommodation for 354 POB and 900 person life boat capacity
- 55-foot cantilever with a mounted 200 t pedestal crane and two 50 t auxiliary cranes
- Harsh environment operable

This data sheet describes the three legged cantilever type jack-up accommodation unit GustoMSC AJ46-360-C. The AJ46-360-C is intended for use in water depths of up to 106.4 m (350 ft).

Platform particulars

PRINCIPAL DIMENSIONS

Length hull	65.25 m (214 ft)
Breadth hull	62.00 m (203 ft)
Leg centres	
• Transverse	46 m (151 ft)
• Longitudinal	40 m (131 ft)
Depth hull	8.0 m (26.2 ft)
Design draft	4.5 m (15 ft)

FIXATION SYSTEMS

Number	18
Make	GustoMSC
Type	5000
Drive	AC electric

JACKING SYSTEMS

Number	3 x 18 pinions
Make	GustoMSC
Effective jacking	215 t per pinion (475 kips)
Pre-load jacking	296 t per pinion (650 kips)
Jacking speed (hull lifting)	0.45 m/min
Jacking speed (leg lifting)	0.68 m/min
Drive	AC electric, variable speed

LEGS

Number	3
Type	triangular open truss X-braced
Size	10 m chord center to center
Overall length	147.4 m (483.5 ft)
Footing reaction	7,900 tf (17,350 kips)
Footing area	150 m ² (1,615 sqft)


STORAGE CAPACITIES

Storage capacities	
Fuel oil	570 m ³ (3,590 bbls)
Potable water	1,300 m ³ (8,175 bbls)
Preload	
Raw water	11,090 m ³ (69,750 bbls)
	150 m ³ (840 bbls)

DESIGN TEMPERATURES

For steel: design temperature	-10°C
For AC and ventilation systems:	
• Max ambient temperature	+48°C
• Min ambient temperature	-10°C

CLASSIFICATION, REGULATIONS

ABS  A1 Self-elevating Accommodation Unit
 MODU code 1989/ 1991
 SNAME T&R 5-5A



ACCOMMODATION

Permanent complement, fully air conditioned, for 354 persons:

- 166 double berth cabins with sanitary unit
- 22 single berth cabins with sanitary unit

Mess rooms (Junior and Senior)

Galley + cold, cool and dry storage

Recreation rooms (cinema, sauna, gym, quiet room, game room)

Coffee shop (smoking and non-smoking)

Numerous offices and meeting room facilities

Main lounge

Kiosk

Hospital facilities

LIFE-SAVING EQUIPMENT

- Life-saving equipment for total 375 persons
- 6 Totally Enclosed Motor Propelled Survival Crafts (TEMPSC) for 900 persons
- A diesel powered fast rescue craft (FRC) (man-overboard boat)
- 3 sets of chute escape systems each for 150 persons are installed on PS and SB main deck
- Lifebuoys, survival suits and fireman's outfit are provided



POWER PLANT

Main power	4 Caterpillar 3516C driving 1,530eKW generators
Emergency power	1 Caterpillar 3508B driving a 665eKW generator

DECK EQUIPMENT

Mooring winches	2 single drum winches 35 t pull; 65 t brake load 700 m of 38 mm wire 3.5 t HHP anchors
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CRANES

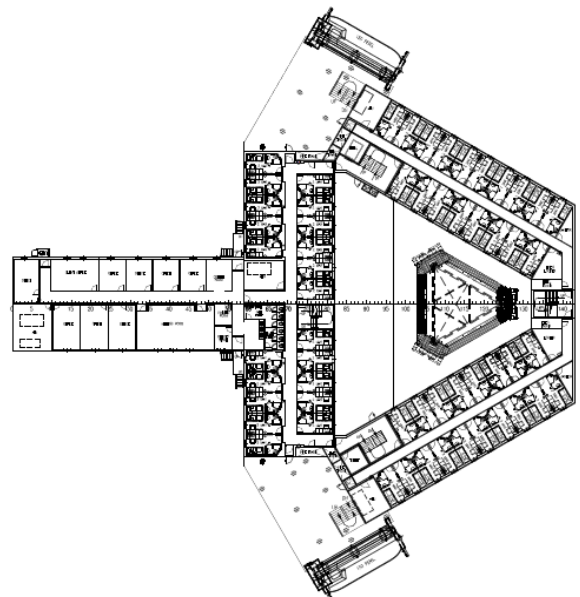
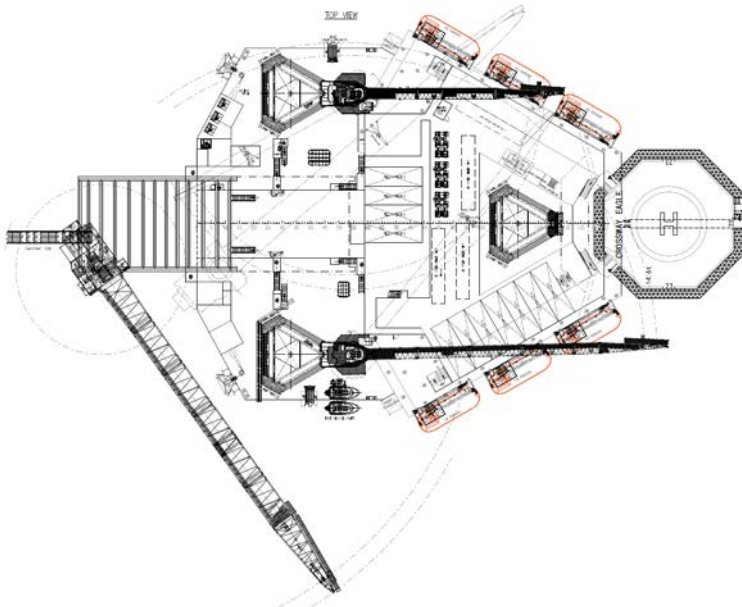
Main crane	Liebherr Bos 7500-200 Litronic located at extreme end of cantilever
Main hook capacity SWL	200t @ 15m; 50t @ 50m
Boom length	66 m
Auxiliary hook capacity	50t @ 15m
PS FAVCO crane boom length	32 m
Main hook capacity SWL	50t @ 16m; 21t @ 32m
SB FAVCO crane boom length	50.4 m
Main hook capacity	50t @ 18m; 15t @ 48m

HELIDECK

Helicopter	EH101
Dimensions	22.8 x 22.8 m

CANTILEVER

Cantilever	27.8 * 16 * 10 m (91 * 52 * 33 ft)
Longitudinal reach	16.76 m (55 ft)
Max. load (crane in operation)	200 t
Max. load (crane stowed)	650 t
One 30m gangway and personnel system available at extreme end of cantilever	



Design conditions AJ46-360-C

Elevated conditions

The unit is designed to withstand the external loadings in the elevated position according to the following typical combinations of conditions.

Survival conditions

	300 ft, 100 kn wind	350 ft, 100 kn wind
leg length	147.4 m (483.5 ft)	147.4 m (483.5 ft)
waterdepth	91.4 m (300 ft)	106.7 m (350 ft)
air gap	15.24 m (50 ft)	15.24 m (50 ft)
wave height	18.30 m (60 ft)	15.24 m (50 ft)
wave period	15.6 s	15.0 s
surface current	0.51 m/s (1 knots)	0.51 m/s (1 knots)
wind velocity (1 min sust.)	51.4 m/s (100 knots)	51.4 m/s (100 knots)
leg penetration	5.79 m (19 ft)	5.79 m (19 ft)
Maximum elevated weight	11,000 t (24,250 kips)	11,000 t (24,250 kips)

Operational conditions

	300 ft	350 ft
leg length	147.4 m (483.5 ft)	147.4 m (483.5 ft)
waterdepth	91.4 m (300 ft)	106.7 m (350 ft)
air gap	15.24 m (50 ft)	15.24 m (50 ft)
wave height	13.0 m (43 ft)	10.0 m (33 ft)
wave period	12.0 s	11.0 s
surface current	0.51 m/sec (1 knots)	0.51 m/sec (1 knot)
wind velocity (1 min sust.)	35.6 m/sec (70 knots)	35.6 m/sec (70 knots)
leg penetration	5.79 m (19 ft)	5.79 m (19 ft)
Maximum elevated weight	12,000 t (26,455 kips)	12,000 t (26,455 kips)

Transit conditions

The unit is designed to withstand the external loadings in the transit conditions according to the following main criteria:

	location move
variable load	2,500 t (5,495 kips)
displacement	13,600 t (29,890 kips)
draft hull approx	4.5 m
max roll or pitch motion each side	10 deg/ 10 s