

APPLICATION FOR VESSEL TEMPORARY ADMISSION TO THE COASTING TRADE OF CANADA

1.0 VESSEL DETAILS

1.1 Name / Registry

SSCV Thialf/Panama

1.2 Category and Type

Semi-Submersible Crane Vessel

1.3 Technical Specifications Summary

Gross Tonnage	136,709
Net Tonnage	41,012
Deadweight	125,508 mT
Length	201.6 m
Width	88.4 m
Draught	11.8-31.6 m

1.4 Vessel Special Characteristics

- 1 Port and 1 Starboard M-5000 revolving stern mounted Amhoist cranes, 7100 MT capacity each (14,200 Tandam at 31.2 m radius)
- Dynamic Positioning DP Class 3
- 6 X 5500 KW, retractable, fixed pitch, azimuth thrusters
- Helideck & Helicopter Refuel Station

2.0 SCOPE OF WORK

The original dates granted under Authorization 7688-2/CCV-19/57 were approved for March 01, 2020 until October 15, 2020. Due to the world-wide situation with Covid-19, the project start date was delayed, and operations are hindered during the ongoing Pandemic and additional time is being requested to complete this work that has already started.



2.1 Geographical Locations

The SSCV Thialf will be removing seven (7) offshore platforms which are part of the Sable Offshore Energy Project located offshore Nova Scotia (NS), and installing two platform cranes for the Hibernia Platform located offshore Newfoundland & Labrador (NL).

2.2 Operation Details

ExxonMobil Canada Properties has awarded Heerema Marine Contractors Nederland Se the contract for the Engineering, Preparation, Removal and Disposal (EPRD) of the Sable production facilities topsides and jackets.

The Sable Decommissioning Project is comprised of seven (7) offshore gas platforms located approximately 135 NM east of Halifax, Nova Scotia, Canada on the edge of the Scotia Shelf. Four (4) satellite platforms tie back to the central complex via subsea pipelines. The platforms were installed between 1999 and 2006 and consist of integrated topsides modules on jacket structures. The gas produced in the field was preliminary processed at the central complex and the gas/condensate mixture was sent ashore through a 26" export pipeline. The Sable offshore facilities are located in water depths ranging from 22m at Venture to 75m at North Triumph.

The removal of the facilities is scheduled for year 2020. The SSCV Thialf will remove topsides and jackets offshore and will perform back-loading of these components onto a cargo barge near shore. One barge will be back-loaded offshore near the location of the Thebaud facilities.

A second scope of work for a separate project from the SOEP will include the delivery and installation of two platform cranes to the Hibernia Platform for the Hibernia Project offshore Newfoundland and Labrador. Hibernia Management Development Company (COMPANY) has awarded Heerema Marine Contractors Nederland SE (CONTRACTOR) the engineering, preparation and removal of the existing Hibernia platform pedestal deck cranes contract as well as the engineering, preparation, transport and installation of new pedestal deck cranes.

2.2.1 The SOEP Platforms

The seven (7) offshore platforms are part of the SOEP which produced natural gas and natural gas liquids offshore Nova Scotia from 1999 until 2018.

The platforms are located in five (5) fields located approximately 200 km east of Halifax, Nova Scotia. Four (4) of the platforms are satellite platforms that connect by inter-field pipelines to the central Thebaud complex. The central Thebaud complex is made up of three (3) platforms:

- i) a wellhead platform;
- ii) a compression platform; and
- iii) a processing/ accommodations platform

The platforms were installed between 1999 and 2006 in water depths ranging from 22m to 75m and consist of integrated topsides modules supported by steel jacket structures. Each platform structure is unique with weights varying from 750mT to 7000mT with the combined weight of all seven platforms approaching approximately 48,000mT.

2.2.2 Removal of the Platforms

The SSCV Thialf will remove the topsides and jackets offshore and will then transit to a nearshore location to be offloaded onto cargo barges and prepared for transport across the Atlantic Ocean. The facilities will be exported to a specialized decommissioning yard in the United Kingdom for dismantlement, recycling and disposal.

2.2.3 Installation of the Hibernia Platform Cranes

The existing diesel electric driven cranes are being replaced with newly fabricated fully electric driven cranes from Germany, which should extend the lifetime extension of the Hibernia production facilities by 20 years.

The existing cranes will be removed in two pieces - boom and slewing column. The new cranes with a weight of approximately 160 mT each will be installed by the SSCV Thialf in one piece, inclusive of hoists and luffing wires.

The work is scheduled to be executed during the summer of 2020, as a step-out of the SOEP project. The new cranes will be loaded onto the SSCV Thialf deck at a near shore location in Nova Scotia prior to departing for NL. Upon the completion of the change out of the cranes in NL, the SSCV Thialf will return to NS waters to complete the SOEP EPRD project.

2.3 Special Characteristics or Requirements

The heaviest component to be lifted by the SSCV Thialf is the Alma Jacket structure which weighs approximately 4725 mT.

The full deck capacity of the SSCV Thialf of approximately 9,290 m² will be utilized during this operation.

2.4 CBSA Office of Importation

Halifax, Nova Scotia

2.5 CBSA Office of Accounting

Halifax, Nova Scotia

3.0 PERIOD OF TIME FOR WHICH PERMISSION IS REQUIRED

Start Date	October 16 th , 2020
Completion Date	November 30 th , 2020
Permission Required By	August 15 th 2020

The original dates granted under Authorization 7688-2/CCV-19/57 were approved for March 1 until October 15, 2020. Due to the world-wide situation with Covid-19 the project start date was delayed, and operations are hindered during the ongoing Pandemic and additional time is being requested to complete this work that has already started.

4.0 ADDITIONAL APPLICATION INFORMATION

4.1 Changes to the Dates Proposed

The dates cannot change due to contractual obligations of our client (client) and weather working conditions.

4.2 Reasons Why the Applicant Determined No Alternative But to Import the Foreign Vessel

Our client is not aware of any vessels of this class being available for the scope of work detailed in the proceeding application in Canada, therefore, no Canadian vessel owners were contacted prior to filing this application.

5.0 LEGISLATIVE BACKGROUND INFORMATION

This application is made under provisions of the Coasting Trade Act, Oceans Act and the Customs and Excise Offshore Application Act.

6.0 APPLICANT / CLIENT DETAILS

Applicant (on behalf of client)	Mathers Logistics Ltd
Contact	Cory Tanner
Telephone	902-429-5680
Fax	902-429-3350
Name of Client	Heerema Marine Contractors

7.0 SIGNATURE OF APPLICANT'S AUTHORIZED REPRESENTATIVE



Signature

July 15, 2020

Date

1. GENERAL

Type of vessel	:	Heavy Lift Vessel Semi-Submersible column stabilised unit
Owner	:	Heerema Shipping 1 B.V.
Call sign	:	3EAA4
Port of registry	:	Panama
Registration no.	:	15637-86 CH
Year constructed	:	1985
Built by	:	Mitsui Engineering & Shipbuilding
Kind of service	:	----
Operating draft	:	11.9 - 31.6 m (39 - 104 ft)
GRT	:	136,709 mT
NRT	:	41,012 mT
Light weight	:	73,754 mT
Transit speed	:	12,000 mT deck load, 5 knots at 12.5 m (41 ft) draft.
IMO Number	:	8757740

2. DIMENSIONS

Length overall	:	201.6 m	(663 ft)
Breadth	:	88.4 m	(290 ft)
Depth to work deck	:	49.5 m	(162 ft).

3. CLASSIFICATION

- Lloyd's Register of Shipping
- OU 100 A1, Semi-Submersible Crane Unit , OIWS
- Cranes classified under Lloyd's Register of Shipping's Rules "Register of Cargo Gear".

4. CERTIFICATES

- Dynamic Positioning DP Class 3 Approval
- Document of Compliance (International Safety Management System)
- Safety Management Certificate
- Helicopter Landing Area certificate (HCA)
- International Ship Security Certificate (ISPS)

5. ACCOMMODATION

Accommodation and related facilities for 736 persons on 8 deck levels. All quarters have heating and air conditioning facilities. Other facilities are lounge, cinema, outside pool, sauna, sport room, laundry, 8 offices, two meeting rooms and hospital. Cold storage room 737 m³.

6. HELIDECK

The helideck is built in accordance with the ICAO Document, Annex 14 Volume II "Heliports" requirements of RLD and suitable to accommodate a helicopter with MTOW 21t. Systems are installed for firefighting and communication. Up to and including an overall length of 27 m.

7. HELICOPTER REFUEL STATION

Thialf is equipped with a “Helifuel™ AS, Helicopter Refueling System”, designed for the use of JET A-1 type fuel. Refuel station is equipped with a deluge system. The “Helifuel™ AS, Helicopter Refueling System” is of an ABS certified and approved type. The complete helicopter refuel station, including fuel storage, has been examined and approved by Lloyds.

8. LIFE SAVING EQUIPMENT

Life boats	:	12 fully enclosed 64 persons life boats with a total capacity of 768 persons.
Life rafts	:	30 life rafts with a total capacity of 750 persons.
Rescue boat	:	1 rescue boat with a capacity of 8 Persons
Other	:	1,153 life jackets Epirb: Make Jotron, Type TRON 1C 1 pc Each lifeboat a SART, 12 pcs. Each lifeboat a VHF ICOM IC-401 25 life buoys 1,032 survival suits.

9. FIRE FIGHTING EQUIPMENT

Fixed installation	:	FM200 in the following areas: engine room (port and starboard), aux. machinery rooms P&S, SCR rooms (port and starboard), emergency generator room, boiler room and fuel oil pump rooms (port and starboard), galley exhaust, paint store CO2: In Auxiliary Engine Room for Lubricating Oil Separators and Engine Room 3 for Generators. Ajax FOG: water-mist installation in Engine Room 3 and above purifiers Engine Room 3. Novec 1230: Incinerator room.
Main fire pump	:	4 x 50 m ³ / hr @ 12.5 bar
Portable extinguishers	:	407 total.
Other	:	12 firemen outfits.
Fire / smoke detection	:	ionisation, radiation, heat detector, optical smoke detector and manual call points
Helideck	:	3 CO ₂ fire extinguishers each 20 kg (Class B) 1 CO ₂ fire extinguisher 45 kg (Class B) 2 dry powder containers of 250 kg with hose on reel and nozzles 2 Dry powder fire extinguishers 9kg (Class D) 1 Dry powder fire extinguisher 50 kg (Class B + C) 1 Dry powder fire extinguisher 6kg (Class A/B + C) 2x 650 ltr A 3% AFFF foam firefighting system has been provided with three monitors. Foam pump: 260 m ³ / hr @ 12.5 bar. Dual purpose nozzles and hoses are provided of sufficient length.

Fire hose stations : 123 fire hose stations with branch pipes.

10. COMMUNICATION EQUIPMENT

Radioroom:

Inmarsat system : Fleet 77
Inmarsat mini-C : 2x Sailor TT3026
Inmarsat mini-M : NERA WORLDPHONE
Inmarsat F : NERA F77 & SAILOR F33
Fax : Canon Fax-B820
(via Fleet 77: send and receive, via C-Band: only receive)
Telex : Via Inmarsat C
Radio : VHF 2 x SAILOR RT5022 incl VHF DSC (encoder)
MF/HF/DSC 1 x SAILOR TU5250 transceiver/
TU5100 control unit
V-sat system : C-Band
KU-band (back up)

Bridge:

SSAS/LRIT : FURUNO FELCOM 16
Radio : VHF 4 x SAILOR RT 2048
VHF DSC (encoder and watch receiver) 1 x SAILOR RT5022
VHF 1x Sailor 6248
Alarmpanel 1x Sailor AP5065 (GMDSS equipment)
VHF Remote control unit 2x Sailor Remote CU5000
Navtex : FURUNO NX-700A

11. NAVIGATION / POSITIONING EQUIPMENT

Radar : Furuno FAR 1827 ,
: Furuno FAR 2837S ,
GPS : 1x Simrad MX510
1x MX Marine MK12 Professional Navigator
AIS : FURUNO FA-100
SART : 14 x JOTRON TRON 40S (12 lifeboat and 2 bridge)
Gyro : 3x IXSEA OCTANS Gyro
Echo sounder : Skipper DGS102
DP system : Kongsberg Simrad SDPM532 (triple), STC & SDP312
Reference system : Convert team LTW system
Sonardyne Ranger2, USBL, Multi-AHRS, USBL
Sonardyne Ranger2, USBL, Multi-AHRS, USBL (Back-Up)
Artemis explosion proof Mk V
3x Multifix Fugro DGPS
2x Fanbeam 4.2 Laser Radar System

12. THRUSTERS

Thrusters : 6 x 5500 KW, retractable, fixed pitch, azimuth thrusters,
LIPS FS3500-671/MNR.

13. PROPULSION

14. POWER

Electric total : Total 56400 kW , 4160V , 60Hz
Diesel engines : 6 x UBE-MAK 8 M552 , 4900 kW each
2 x Sulzer 8ZAL40S , 6000 kW each
4 x Sulzer 6ZAL40S , 4500 kW each
Generators : 6 x Nisishiba NTAKL-VC , 4600 kW each
2 x Leroy Somer Type LSA60 , 5800 kW each
4 x Leroy Somer Type LSA58 , 4300 kW each
Emergency : 1 x Yanmar Diesel Engine Co. 8T280-L-ST ,
1500 kW , 440 V , 60 Hz

15. CRANES

15.1 Port / Starboard Side

Type : M-5000 revolving stern mounted Amhoist cranes
Certification : Lloyd's Register of Shipping "Register of Cargo Gear"
Boom length : 123.83 m (408 ft)
Main hoist tackle : Distance heelpoint – main fall = 85.345 m
Main hoist revolving : 7,100 mT, radius = 31.2 m (102 – 107 ft)
(Stern offset = 17 – 18.2 m to centerline hook)
(Stern offset = 28.5 m to centerline hook)
Main fall speed with full load = 2.78 m/min
Main fall speed with no load = 5.77 m/min
(All acc. load curve main fall)
Lifting height range : 15 m below waterline up to 118 m above waterline
(Minimum radius / 31.2 m operating draft / standard reeving)
Auxiliary hoist tackle : Distance heelpoint – auxiliary fall = 109.74 m
Aux. hoist revolving : 907 mT, radius 36.2 m – 79.2 m (120ft – 260ft)
(Stern offset = 22 m – 65 m to centreline hook)
Auxiliary fall speed with full load = 11.75 m/min
Auxiliary fall speed with no load = 12.43 m/min
(All acc. Load curve auxiliary fall)
Lifting height range : 85 m below waterline and 146 m above waterline
(Minimum radius / 36.2 m operating draft / standard reeving)
Whip hoist tackle : Distance heelpoint – whip fall = 121.94 m
Whip hoist revolving : 200 mT, 41 m – 130.5 m (134ft – 430ft)
(Stern offset = 26.8 m -116.3 m to centreline hook)

Whip fall speed with full load = 32.12 m/min
Whip fall speed with no load = 33.20 m/min
(All acc. Load curve whip fall)
Lifting height range : 531 m below waterline and 157.9 above waterline at
(Minimum radius / 40.9 m operating draft / standard reeving).
Both cranes' whip hoist blocks are man riding certified.

15.2 Deep Water Mode

Mainhoist : 880 mT, radius 36.2 m – 79.2 m (120ft – 260ft)
(Stern offset = 22 m -65 m to centreline auxiliary hook)
805 m below waterline and 128 m above waterline
(Minimum radius / 26.6 m operating draft)
Special main hoist block : 1043 mT at 805 m below waterline
(Minimum radius / 26.6 m operating draft)
Long mode
(Aux / whip combination): 910 mT at lift-off till 311 m below waterline and at 146.2 m above
waterline at minimum radius / 26.6 m operating draft / standard long mode
reeving.

15.3 Tandem Lift

Main hoist : 14,200 mT at 31.2 m (102,4 ft) radius.

15.4 Crawler Crane

Make : Manitowoc 2250
Certification : ABS statement of fact witness dynamics load and soundlevel
determination, CE
Boom length : 64mt (210 ft) optional jib 25 m (80 ft)
Fixed jib : 3 ft
Main block : 41 / 175T
Whip block : 13,5 mT.
Man riding block : 2.5mT (NEN13852-2 Lloyds statement of fact witness)

Make : MAEDA LC785-6
Certification : N.A.
Boom length : 14.52 m (46.5 ft)
Main block : 4.9T @ 2.1 m

16. FORKLIFTS

Diesel powered (2x)
Make : Linde H45D
Lift capacity : 4.5T
Max. height : 4.5 m

Electric powered (1x)
Make : Linde E25L

Lift capacity : 2.5T
 Max. height : 4.7 m

17. MOORING SYSTEM

Anchors : 12 (Delta Flipper) anchors of 22.5 mT each
 Wire : 2,440 m / 3 1/8" wire, min breaking strength 470 mT:
 Winch : max. pulling force 238 mT, stall 1st Layer
 Spooling 100 m/min. maximum
 Static brake cap: 225 mT 8e layer
 Capstans : 6 x Bodewes 25T, 10 m/min
 Pendant winches : 4 x unit with 3 drums each.
 max. pulling force: 6 mT - 0-8.6 m/min
 Brake capacity: min. 15 mT

18. BALLAST SYSTEM

Tank capacity : 135,781 m³
 Transfer capacity : 20,800 m³ / hr
 Pumps : 8 Naniwa, 2,600 m³ / hr each.

19. DECK, FUEL AND WATER CAPACITY

Deck area : 9,290 m²
 Deck load capacity : 15 mT / m²
 Total deck load : 12,000 mT
 Fuel storage : 8,512 m³
 transfer : 32 m³ / hr
 Diesel storage : 658.8 m³
 Water storage : 9,309 m³
 transfer : 140 m³ / hr
 production : 240 m³ / day.

20. STEAM SYSTEM

21. AIR SYSTEM

Barge air compressors : Total 85 m³/min 8 bar.
 1 x Tamrotor L250 EW
 1 x Atlas Copco G 180-315 Marine Air System
 Painter compressors : 2 x Ingersoll Rand M160AC 25 m³/min @ 10 bar

22. WORKSHOP EQUIPMENT

- 2 x lathe
- Milling machine
- 2 x fixed column drilling machine

- 3 x Sawing machines
- Hydraulic bender
- Cutting equipment
- Welding equipment
- Grinding machines

23. WELDING EQUIPMENT

Electronic welding equipment.

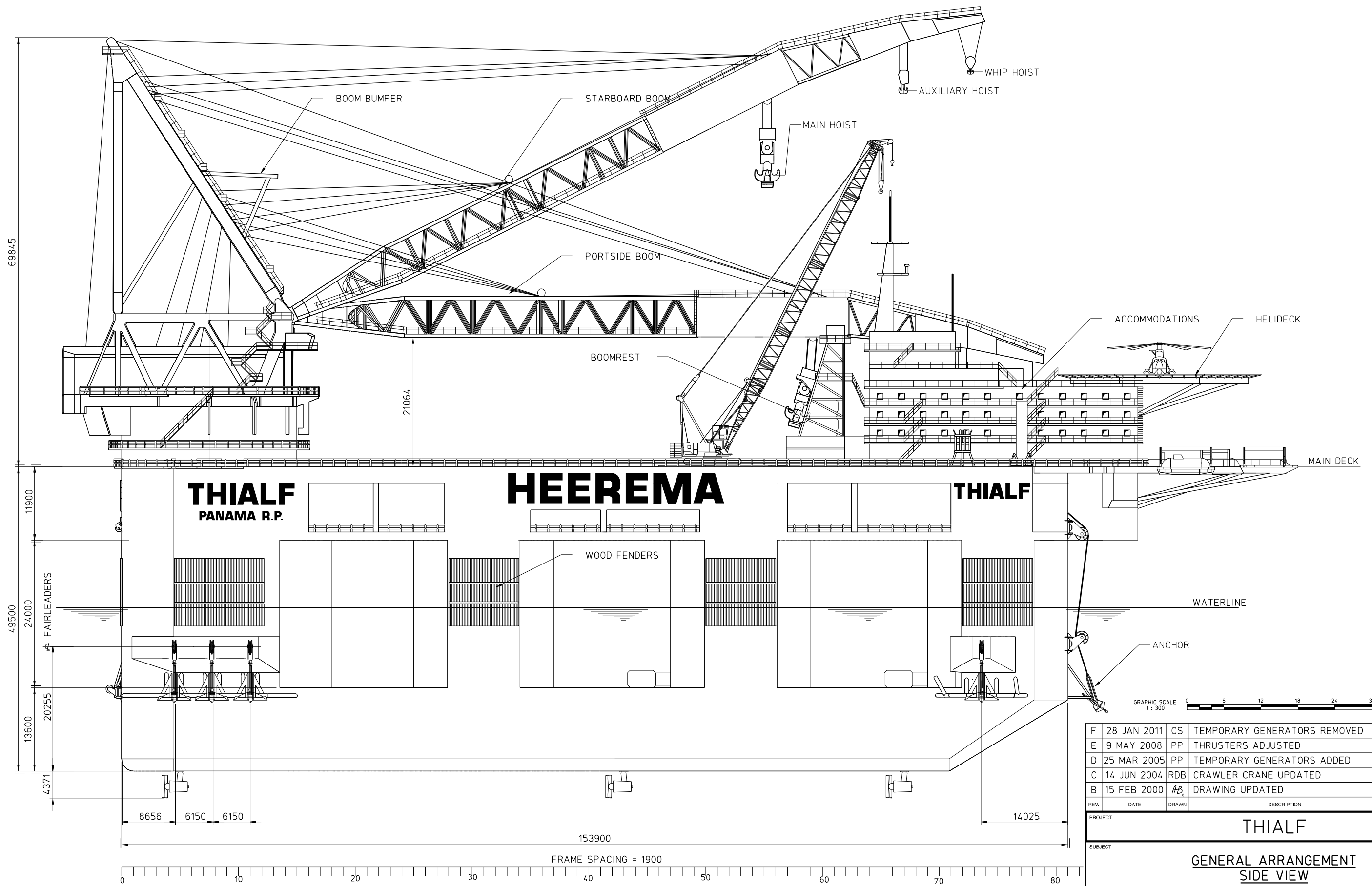
24. INCINERATOR

Type	:	ATLAS 1200 SL XL WS P INCINERATOR
Burn capacity.	:	1.000.000 kcal/h (1163 kW)
Oil sludge	:	135 l/hr. (200 l/hr. max)
Solid waste	:	230 kg/h (however max. approx. 920 kg/24 hour)

25. ATTACHMENTS


Attachment 1	-	Side Elevation
Attachment 2	-	Aft Elevation
		Top View
Attachment 3	-	Load & Clearance Curves Metric Tonnes
Attachment 4	-	Load & Clearance Curves Short Tonnes

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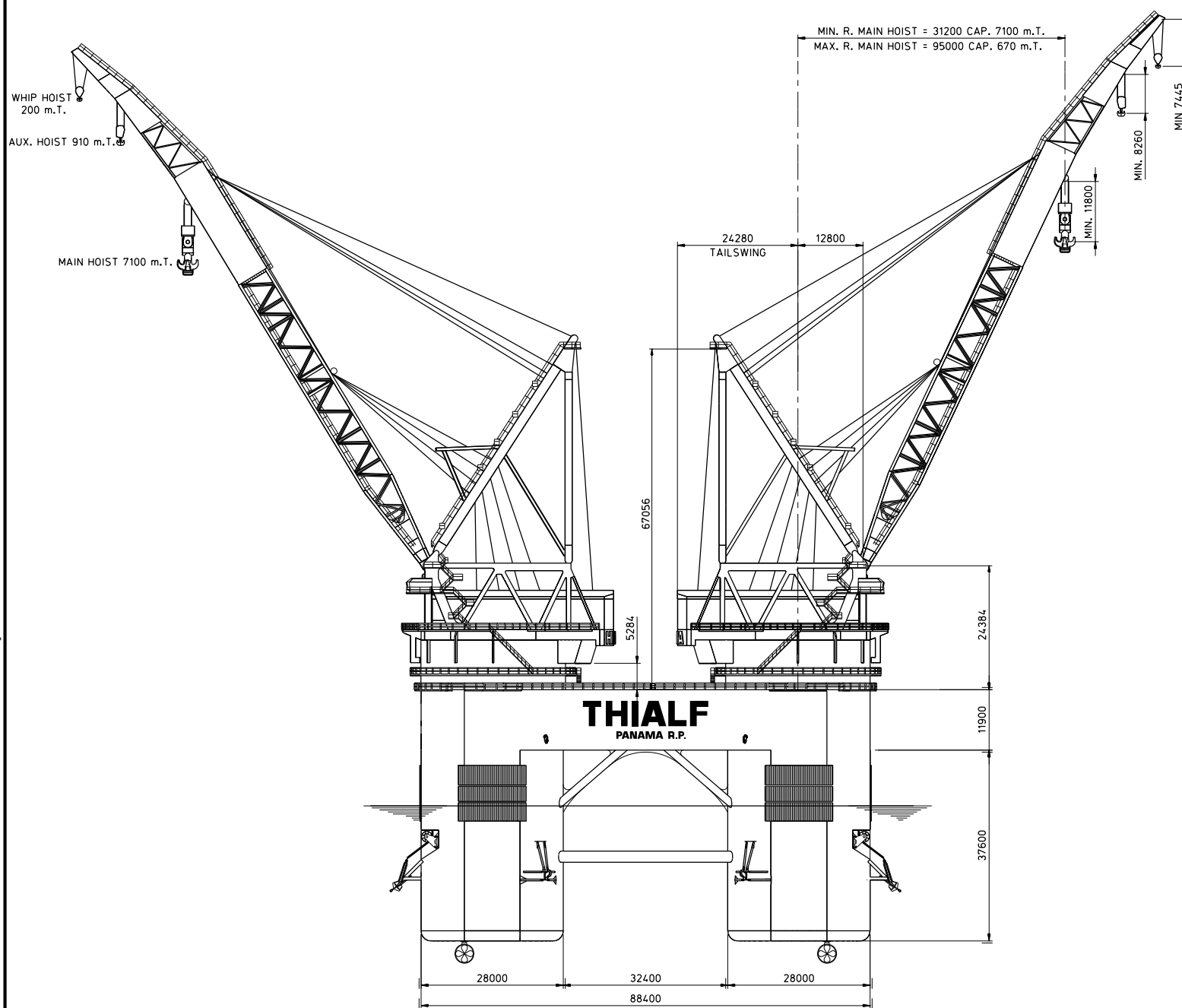


F	28 JAN 2011	CS	TEMPORARY GENERATORS REMOVED	SC	DA
E	9 MAY 2008	PP	THRUSTERS ADJUSTED	AB	DA
D	25 MAR 2005	PP	TEMPORARY GENERATORS ADDED	SC	DA
C	14 JUN 2004	RDB	CRAWLER CRANE UPDATED	SC	DA
B	15 FEB 2000	AB	DRAWING UPDATED	SC	DA
REV.	DATE	DRAWN	DESCRIPTION	APPROVED ENGINEERING	APP'D OPS.

PROJECT	THIALF
SUBJECT	GENERAL ARRANGEMENT SIDE VIEW

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PRINCIPAL CHARACTERISTICS

LENGTH OVERALL	201.6 m	(661 ft)
LENGTH OF VESSEL	165.3 m	(542 ft)
BREADTH	88.4 m	(290 ft)
DEPTH TO WORKDECK	49.5 m	(162 ft)

DRAUGHTS

NORMAL OPERATING DRAUGHT	26.6 m	(87 ft)
MAXIMUM OPERATING DRAUGHT	31.6 m	(104 ft)
SURVIVAL DRAUGHT	16.6 m	(54 ft)
TRANSIT DRAUGHT	11.9 m	(39 ft)

CRANES

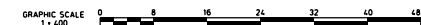
MAIN HOIST REVOLVING	7100 mT AT 31.2 m (102 ft)
MAIN HOIST REVOLVING	6500 mT AT 40.0 m (131.2 ft)
MAIN HOIST REVOLVING	6000 mT AT 44.2 m (145.0 ft)
AUXILIARY HOIST	910 mT AT 36 - 79.2 m (120-260 ft)
WHIP HOIST	200 mT AT 41 - 129.5 m (120-260 ft)

ACCOMMODATION/HELIDECK

ACCOMMODATION FOR 736 MEN
THE HELICOPTER DECK IS SUITABLE FOR A BOEING CHINOOK 234

ANCHORWINCHES (WIRES)

12 DELTA FLIPPER ANCHORS OF 22.5 m EACH, ON 3rd WIRE ROPES 2400 m (8000 ft) LONG, MIN. BREAKING STRENGTH 480 mT.
KONGSBERG ALBATROSS ADP 503 AND ADP 311 AUTOMATIC AND DYNAMIC POSITIONING AND MOORING ASSISTANCE



D	13 APR 2012	RdV	CRANE CABINS UPDATED				
C	28 JAN 2011	CS	UPDATED				
B	31 MAY 2000	#B	CRANES UPGRADED TO 7100 m.T.				
A	20 APR 1998	RJ	FOR INFORMATION				
REV.	DATE	DRAWN	DESCRIPTION	APPROVED ENGINEERING	APPD. OPS.		

PROJECT
THIALF

SUBJECT
GENERAL ARRANGEMENT - AFT VIEW

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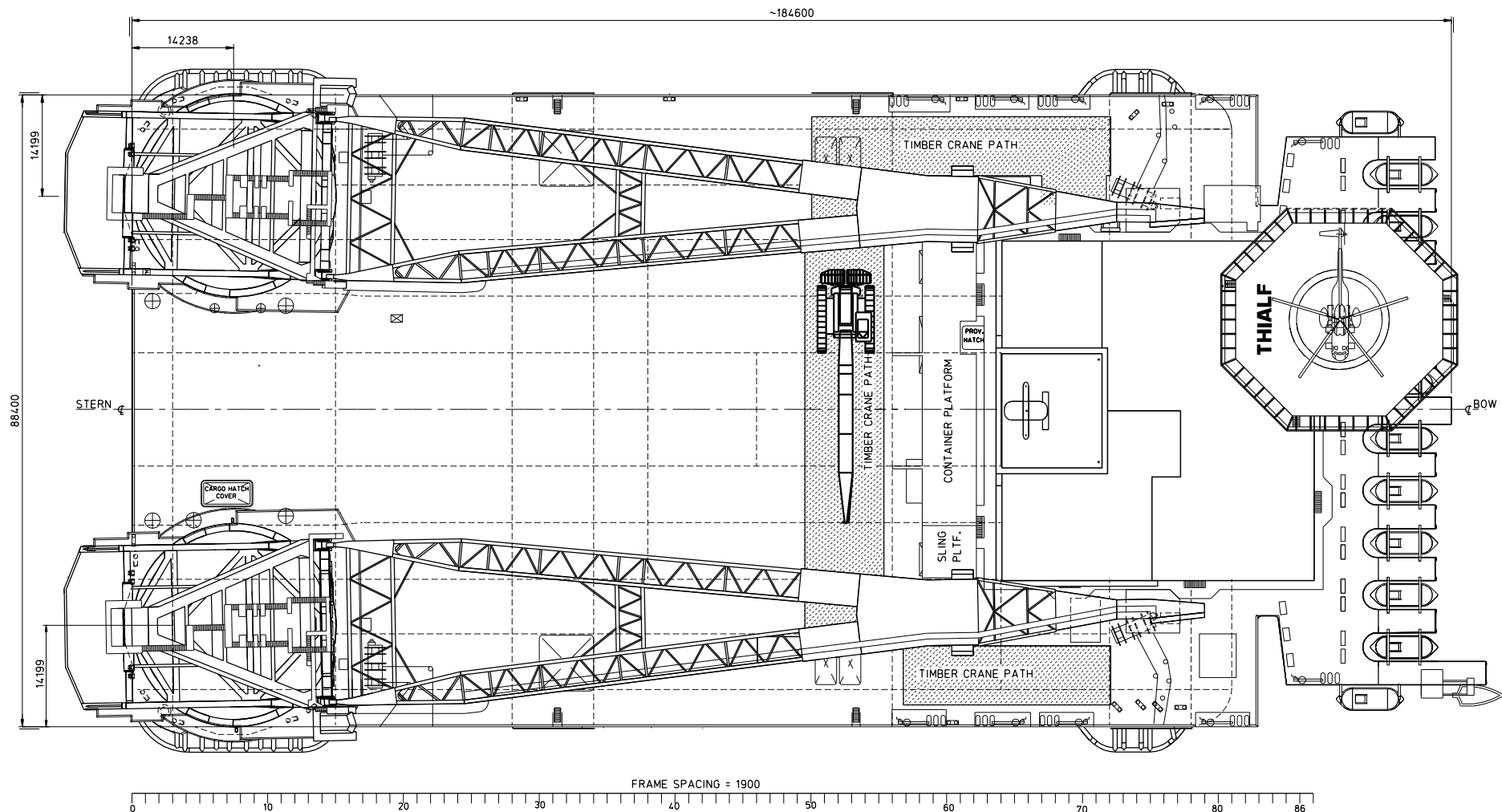
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GRAPHIC SCALE
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F	13 APR 2012	RdV	CRANE CABINS UPDATED	✓	✓	PA
E	28 JAN 2011	CS	GENERAL UPDATE	✓	✓	PA
D	14 JAN 2005	PP	TEMPORARY GENERATORS ADDED	✓	✓	PA
C	14 JUN 2004	RDB	CRAWLER CRANE UPDATED	✓	✓	PA
B	15 FEB 2000	#B	DRAWING UPDATED	✓	✓	PA
REV.	DATE	DRAWN	DESCRIPTION	APPROVED ENGINEERING	APPROVED OPS.	

PROJECT
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SUBJECT
**GENERAL ARRANGEMENT
TOP VIEW**

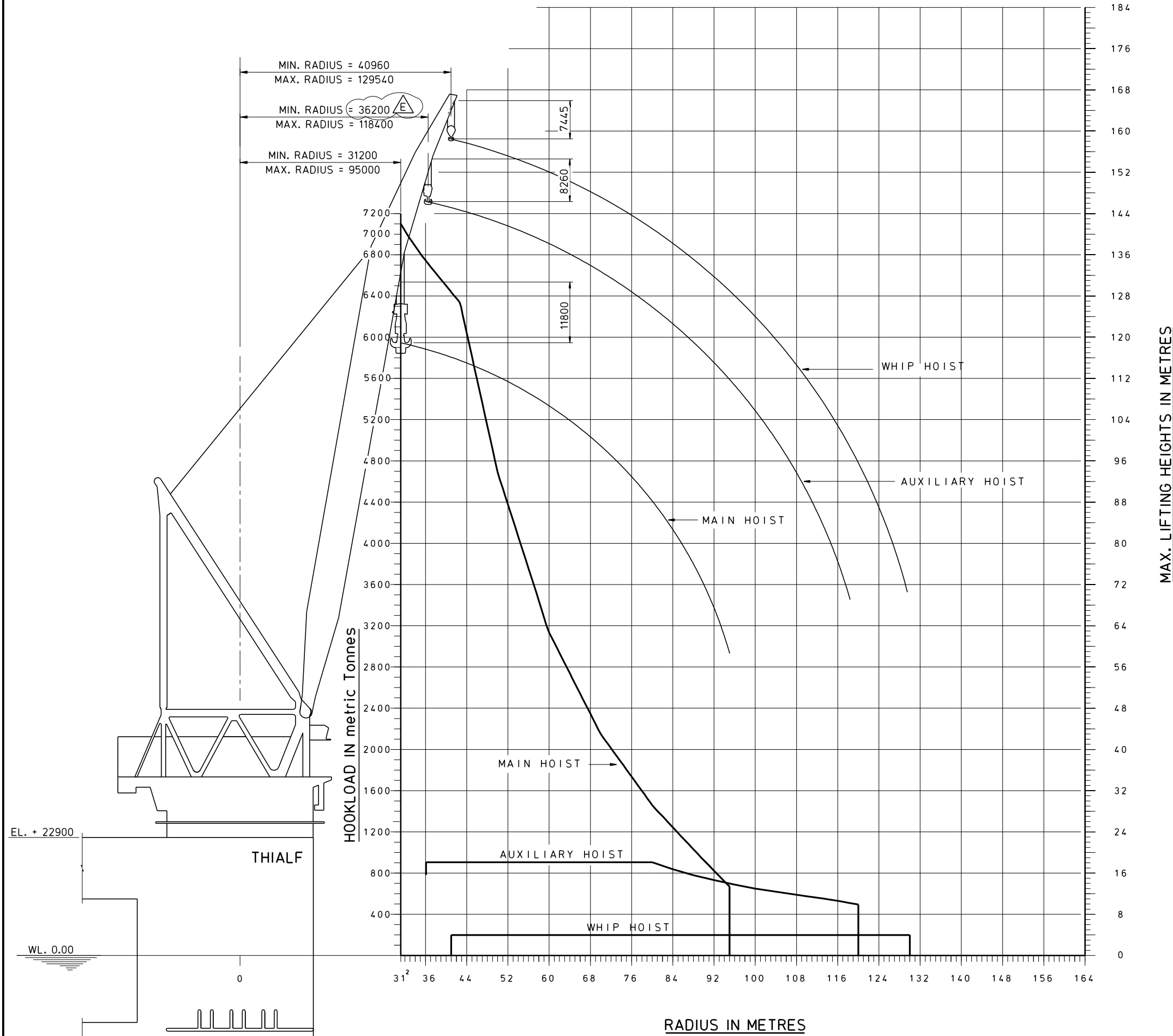
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CONTRACTORS

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GENERAL NOTES

— LOAD CURVES CRANE

— CLEARANCE CURVES

- CRANE CURVES REFER TO MAXIMUM ALLOWABLE STATIC HOOKLOAD, A DYNAMIC AMPLIFICATION FACTOR OF 10% IS THEN ACCOUNTED FOR.



E	21 DEC 2004	PP	REVISED AS INDICATED				
D	21 JAN 2004	PP	ADD MAXIMUM RADIUS				
C	16 MAR 2001	HOF	REVISED MAIN HOIST CURVE				
B	12 APR 2000	HB	REVISED MAIN HOIST CURVE				
A	9 SEP 1998	RvB	FOR INFORMATION				
REV.	DATE	DRAWN	DESCRIPTION	APPROVED ENGINEERING	APPROVED OPS.		

PROJECT THIA LF

SUBJECT LOAD AND CLEARANCE CURVES
METRIC TONNES



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PREPARED USING HEEREMA'S CAD/CAM SYSTEM