

A night landscape featuring a dark, starry sky with a vibrant green aurora borealis. The foreground shows a calm body of water reflecting the light, with dark, rugged mountains in the background.

Jackup Rig Move

Kristoffer Hjellestad, Discipline Responsible Marine Operation



Agenda

1. Odfjell Technology
 - a. Marine operations in OTL
2. Linus
3. Jackup Rig Move
 - a. Preparing a Jack up move
 - b. Performing rigmove

Odfjell Technology At a Glance

Part ownership in and strategic partner to Odfjell Oceanwind AS

Platform drilling, maintenance, modifications & upgrades

Projects & Engineering hubs in Norway, UK, Dubai and Manila

Serving the onshore sector as well as offshore



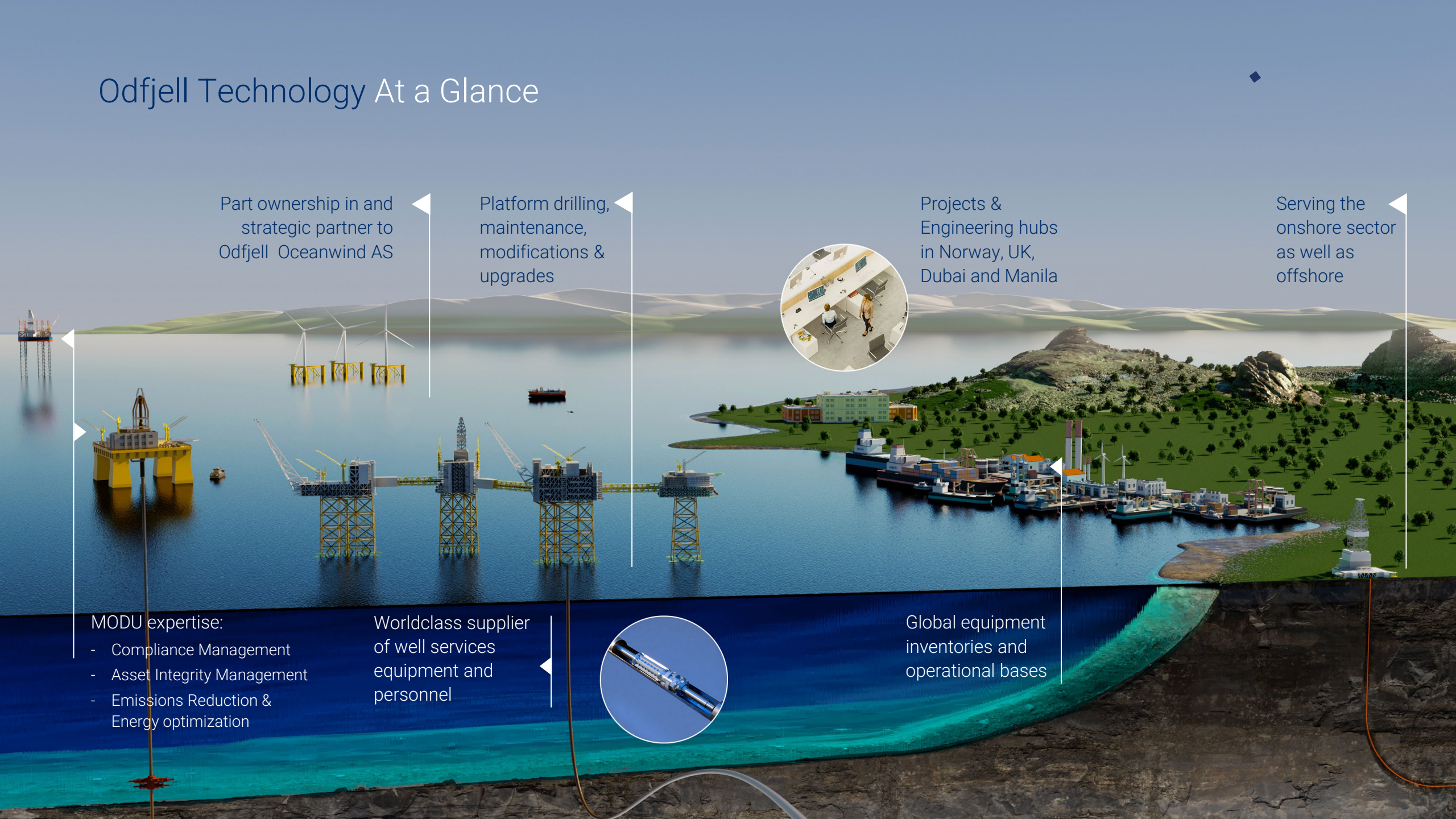
MODU expertise:

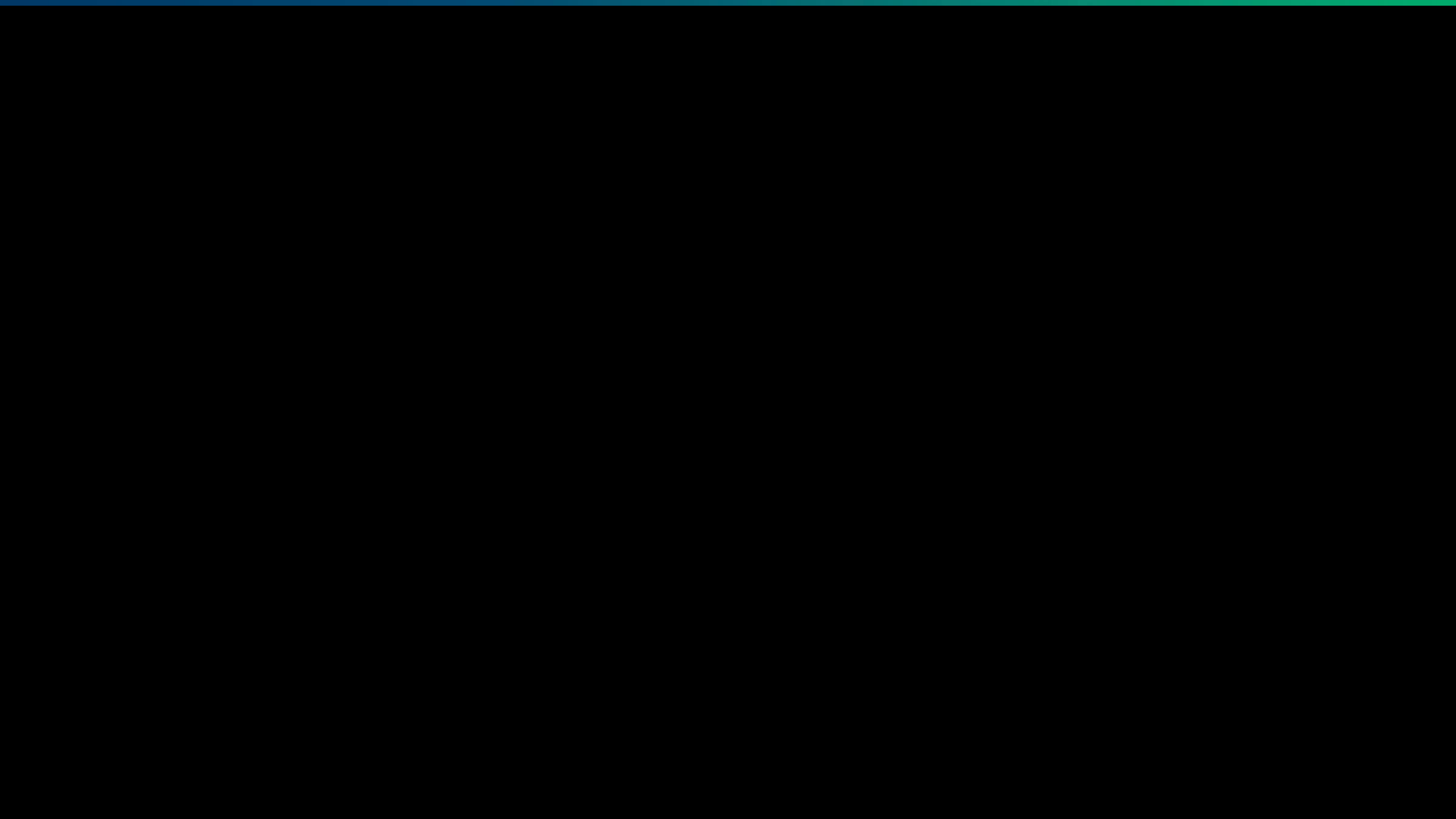
- Compliance Management
- Asset Integrity Management
- Emissions Reduction & Energy optimization

Worldclass supplier of well services equipment and personnel



Global equipment inventories and operational bases





Marine Operations in OTL

- Delivering resources to Odfjell Drilling
- Logistics and Projects towards the MODU rigs
- Delivers projects, mooring analyses, Riser analyses, marine support and Towmaster towards Linus
- In 2024 we delivered approx 100 mooring and riser analysis
- Delivers technical and marine support towards Odfjell Ocean wind

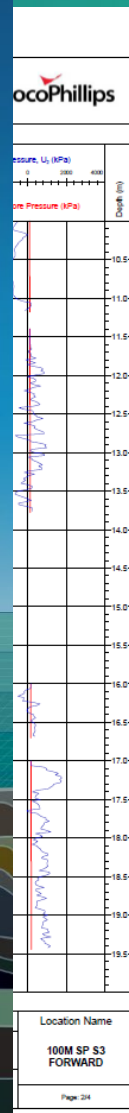
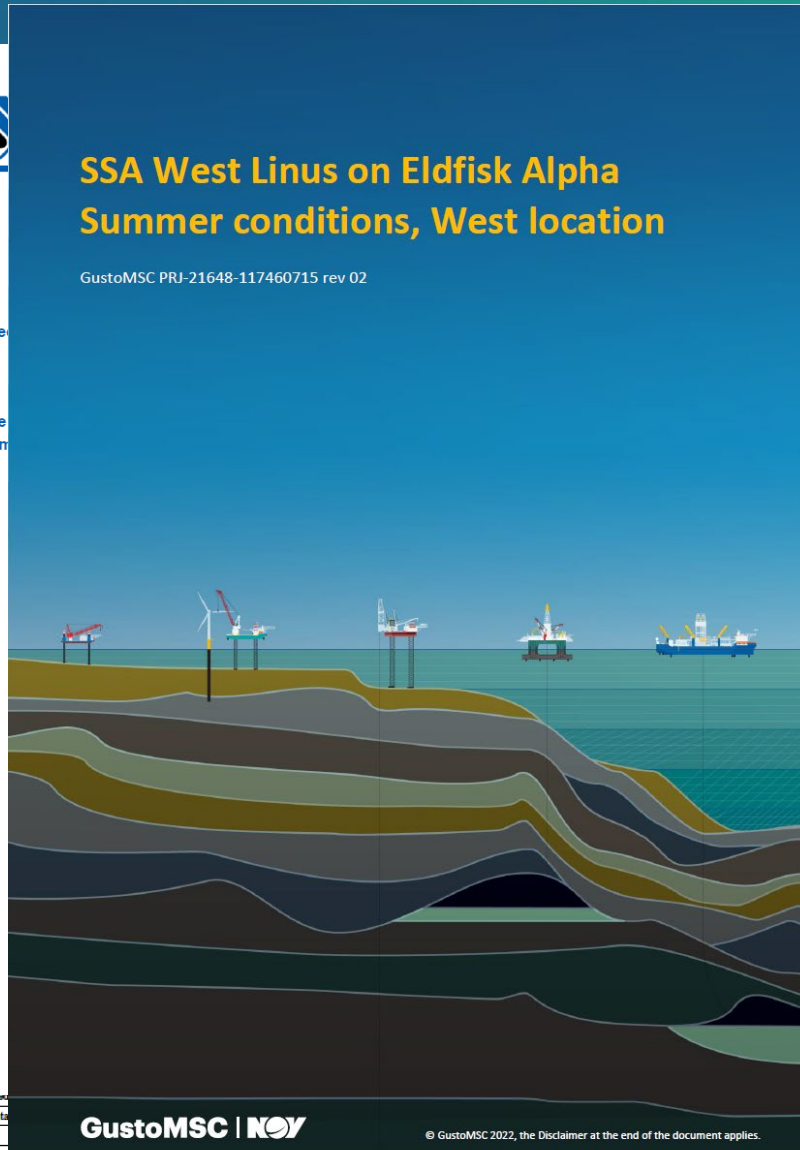
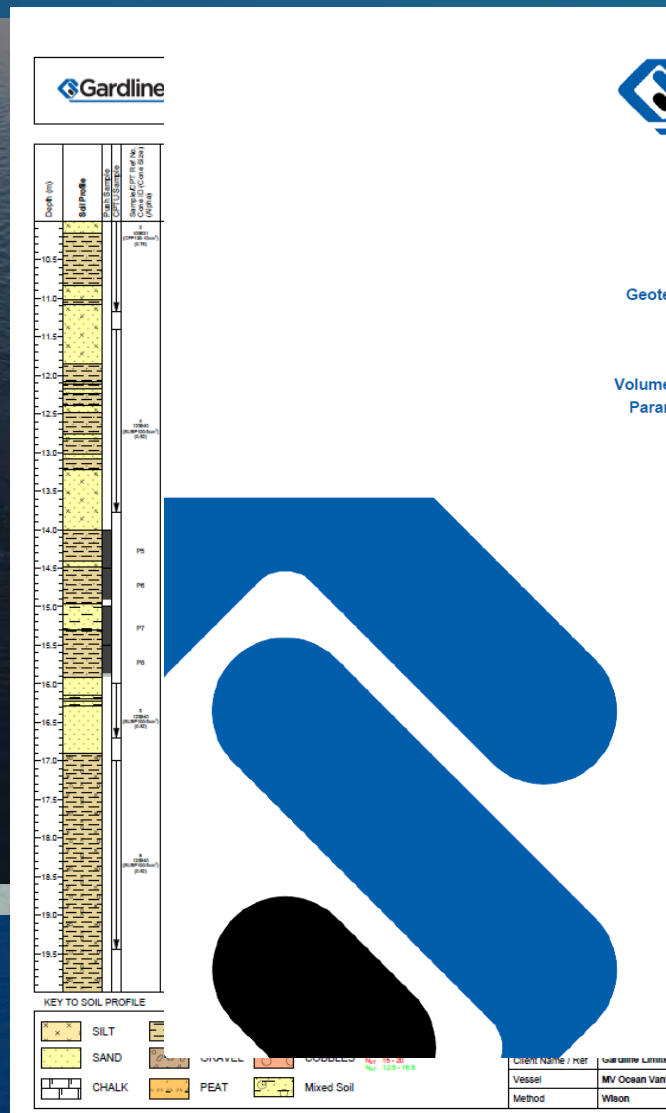
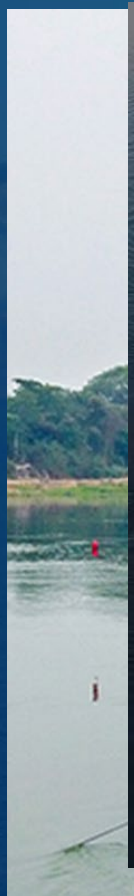


Linus

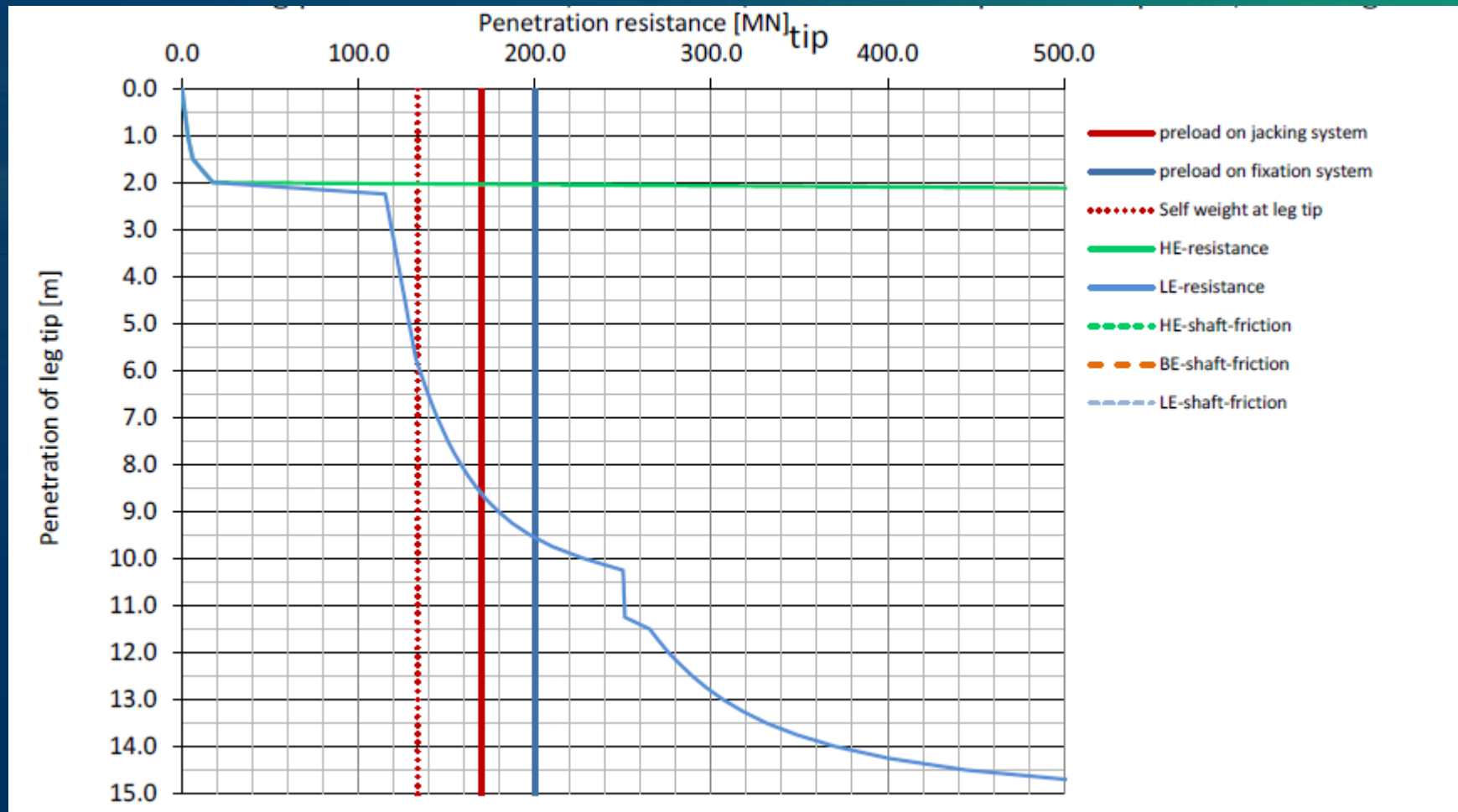
- Linus are a Jack up rig of Gusto MSW CJ70-X150A Design
- Have operated since 2015 for ConocoPhillips on the Greater Ekofisk field
- Managed by Odfjell Platform Drilling AS and is owned by SFL Linus Ltd (SFL Corporation LTD)



Preparation for Jack Up Move



Preperation for Jack Up Move

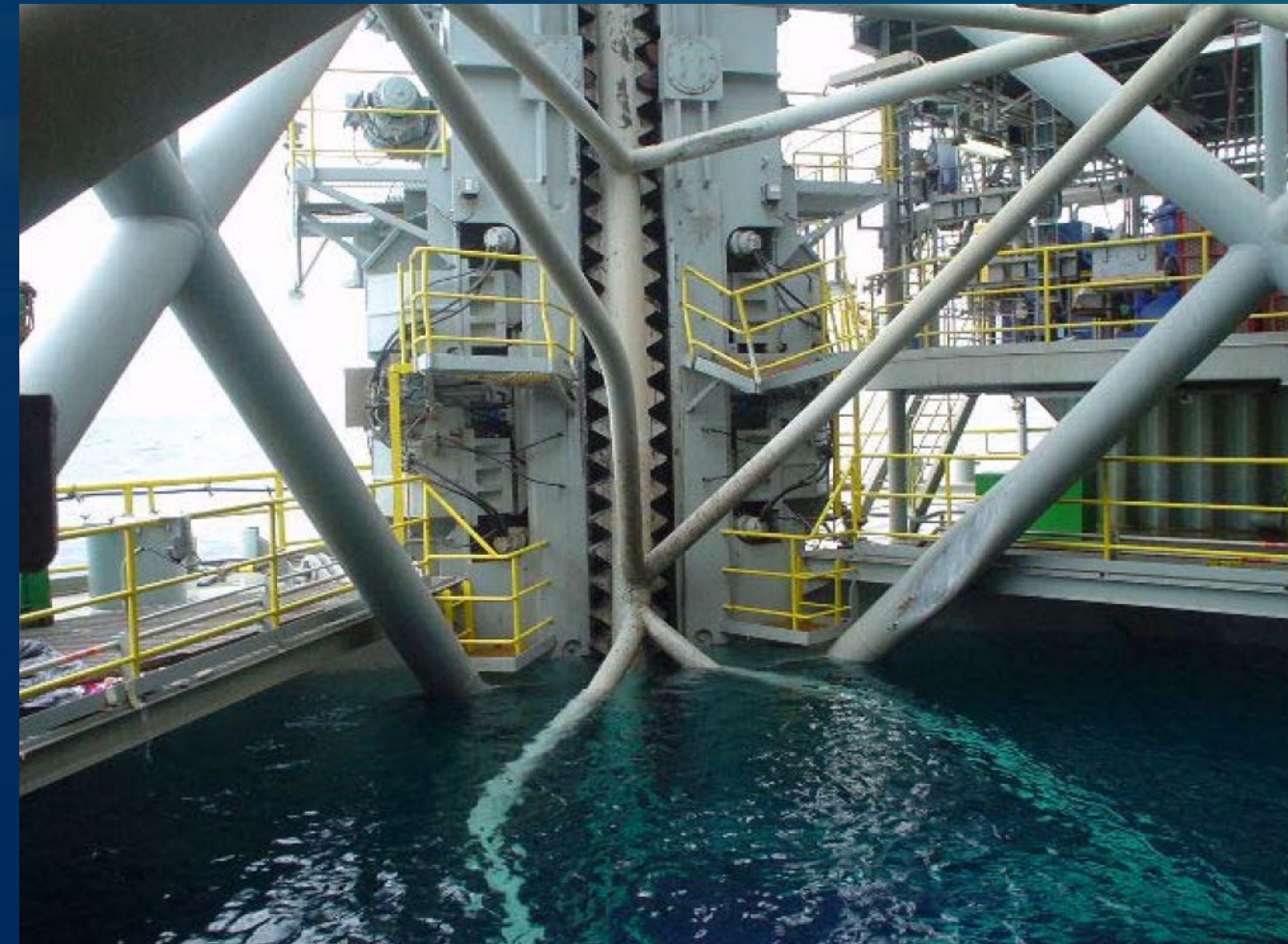


Why do we do all this, Punch through!! (Or fast rapid penetration)

- Noble David Tinsley experienced this «punch through» while preloading outside Qatar.



Why do we do all this? Punch through!! (Or fast rapid penetration)



Punch through!! (Or fast rapid penetration)

- Vantage Drilling, Sapphire Driller experiences a «Bow leg run» /Punch Through in 2009
- It appears a zero air gap preload was being conducted, with most likely minimized potential structure failure



Punch through

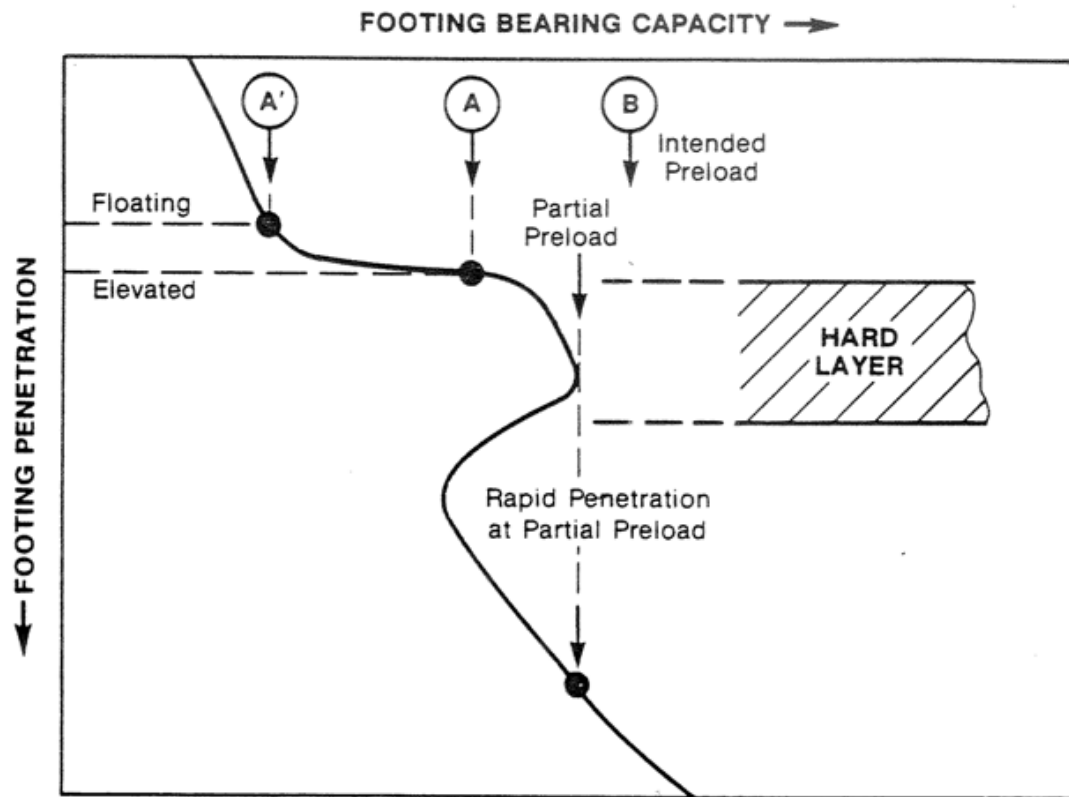


FIGURE 10. PUNCH-THROUGH FAILURE DURING PRELOAD

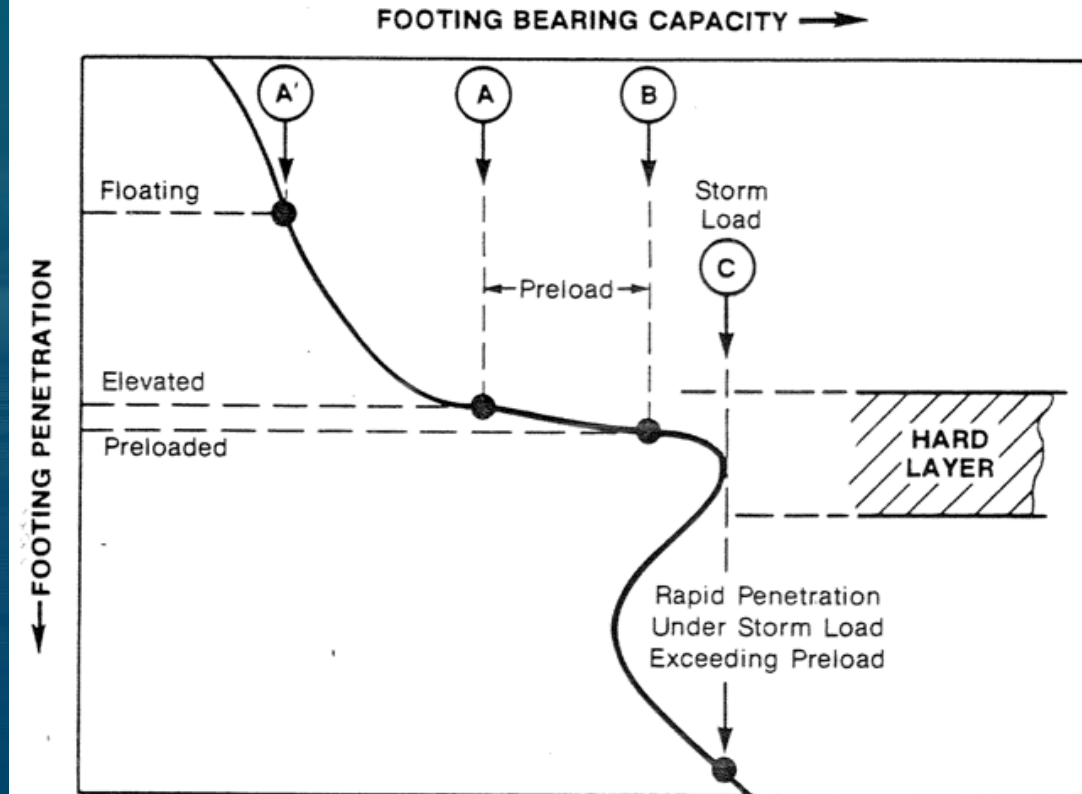
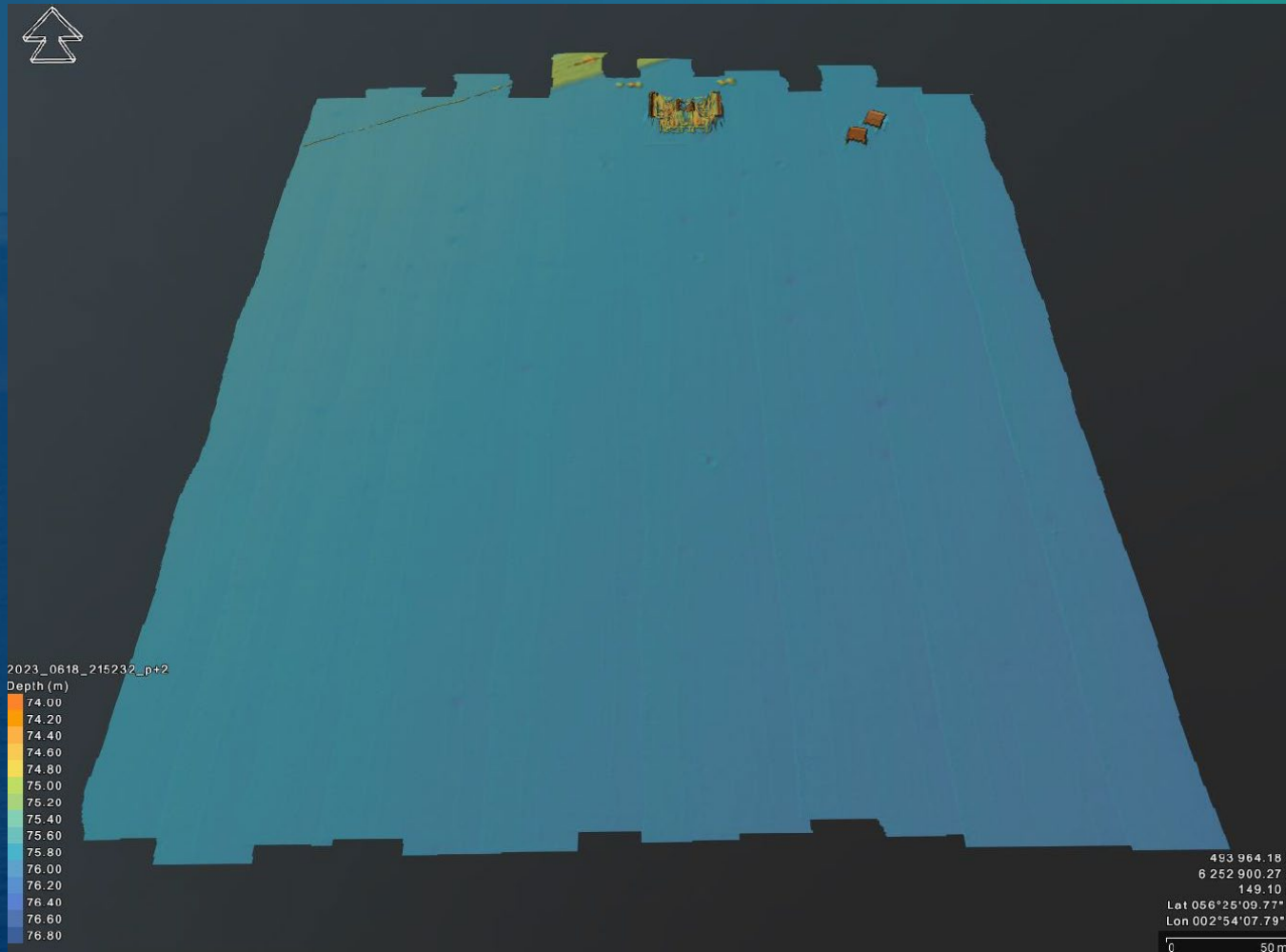


FIGURE 11. PUNCH-THROUGH FAILURE DUE TO STORM OVERLOAD

Seabed debris survey



Seabed debris survey



Debree on seabed, spud cans



Debris on seabed, Removal

Solution:

- 20T Excavator & 5.4T Grab mobilized through Scanmudring
- Olympic Triton (vessel) mobilized through Reach Subsea

Method:

- The excavator crushes and collects the cement in piles
- The grab moves the cement to a dedicated storage area
- Machines are powered through umbilical from vessel
- Transponders & digital grid system to determine subsea location
- Dedicated ROV supporting with cameras

Timeline:

- Sept: Debris survey (MBES)
- Oct: Debris survey (data gathering)
- Nov: Verify hardness of cement (tool testing)
- Dec: PO in place with Reach Subsea
Mob vessel 27th of Dec
- Jan: WOW for 5-6 days
Deploy Excavator 6th of Jan
Deploy Grab 10th of Jan
Final survey & Demob



Fig 2 - Scanmudring 3D Software

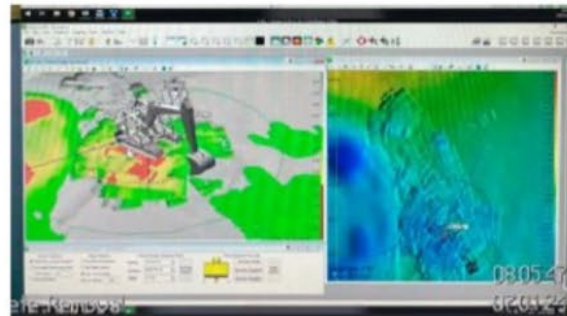


Fig 2 - Scanmudring 3D Software



Fig 3 - Olympic Triton



Fig 4 - Deploying Excavator

Fig 5 - Deploying Grab

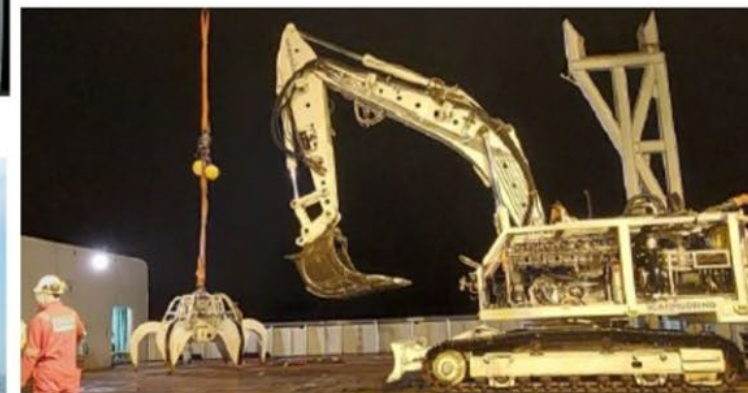


Fig 6 - Grab & Excavator on Olympic Triton

Departure – Freeing legs

- Legs and spud cans are stuck in the soil due to a combination of vacuum underneath spud can and soil on top of spud can
- Jetting below Spud cans will break down the vacuum and start filling up the gap generated by legs creeping upwards.
- Hull buoyancy is mostly used in our waters, but in some areas jetting is needed.
- Freeing legs are one of the so called flat areas for the vessels, it looks that nothing is happening, the rig is just standing there, and sometimes the vessels are eager to «get on with it» but the action level in the control room are high.

Departure – Freeing legs

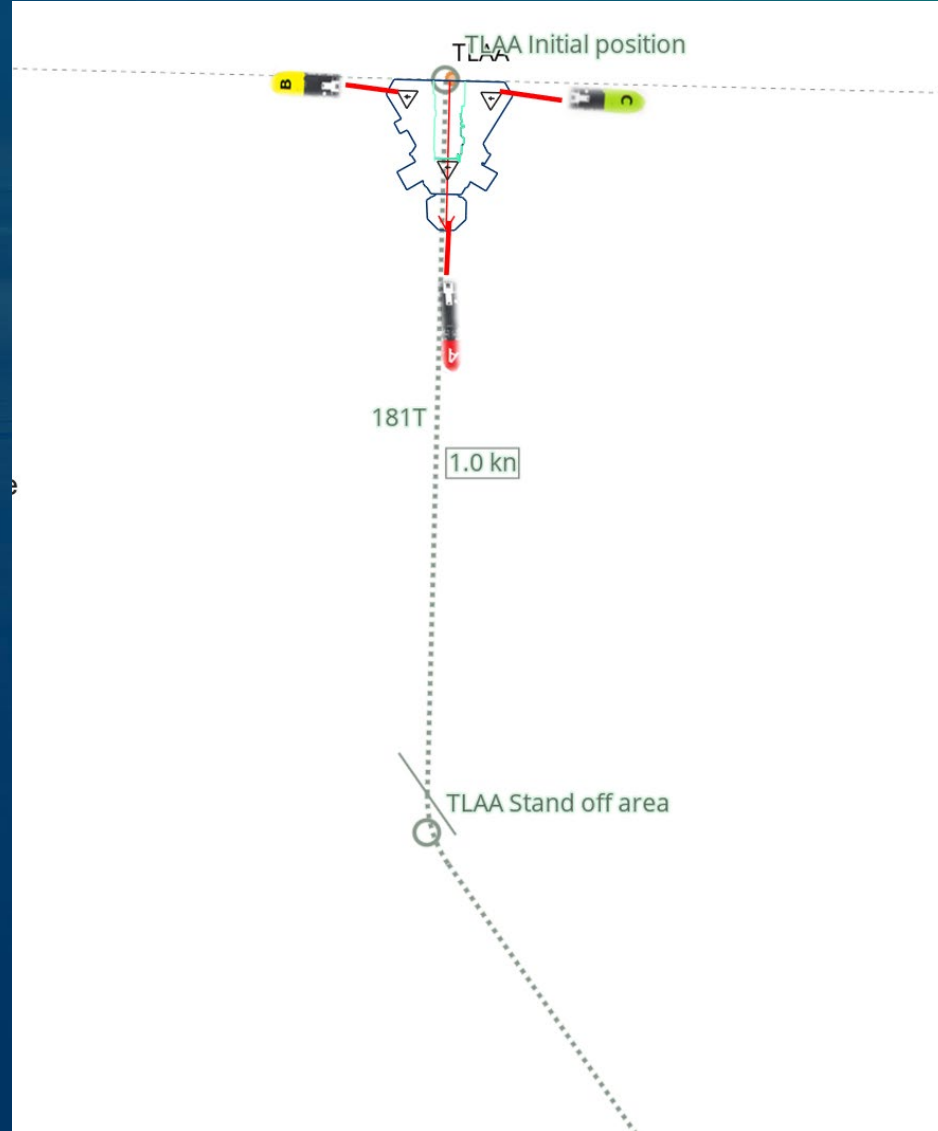


Departure – Freeing legs



Preforming Rigmoves

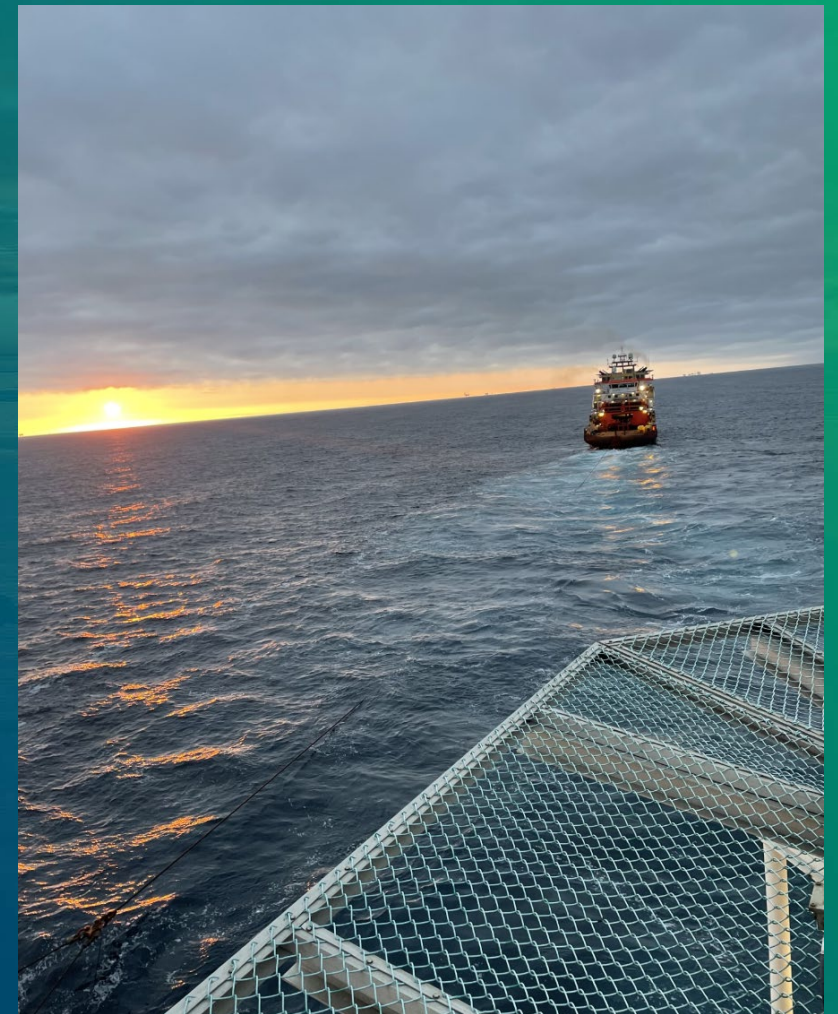
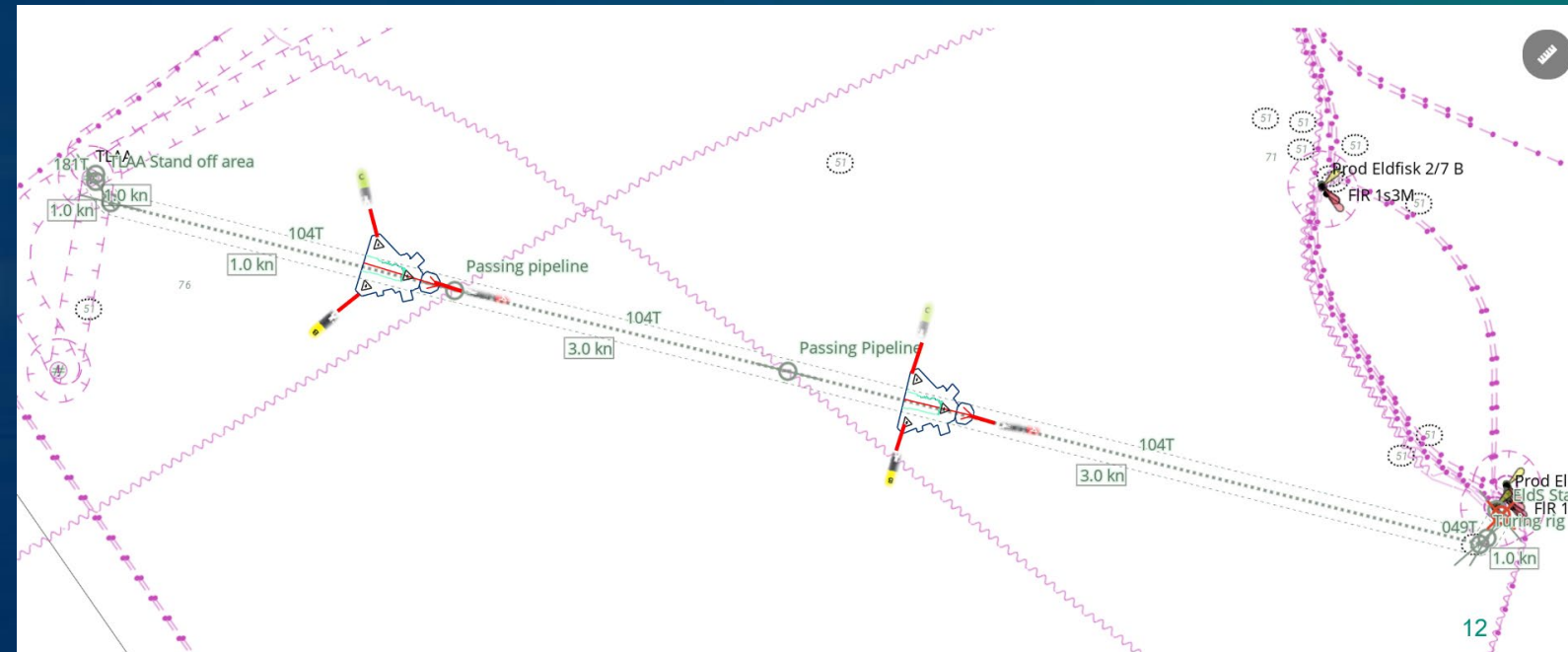
- Normal setup for rigmoves is 3 vessels. One AHV and two tugs.



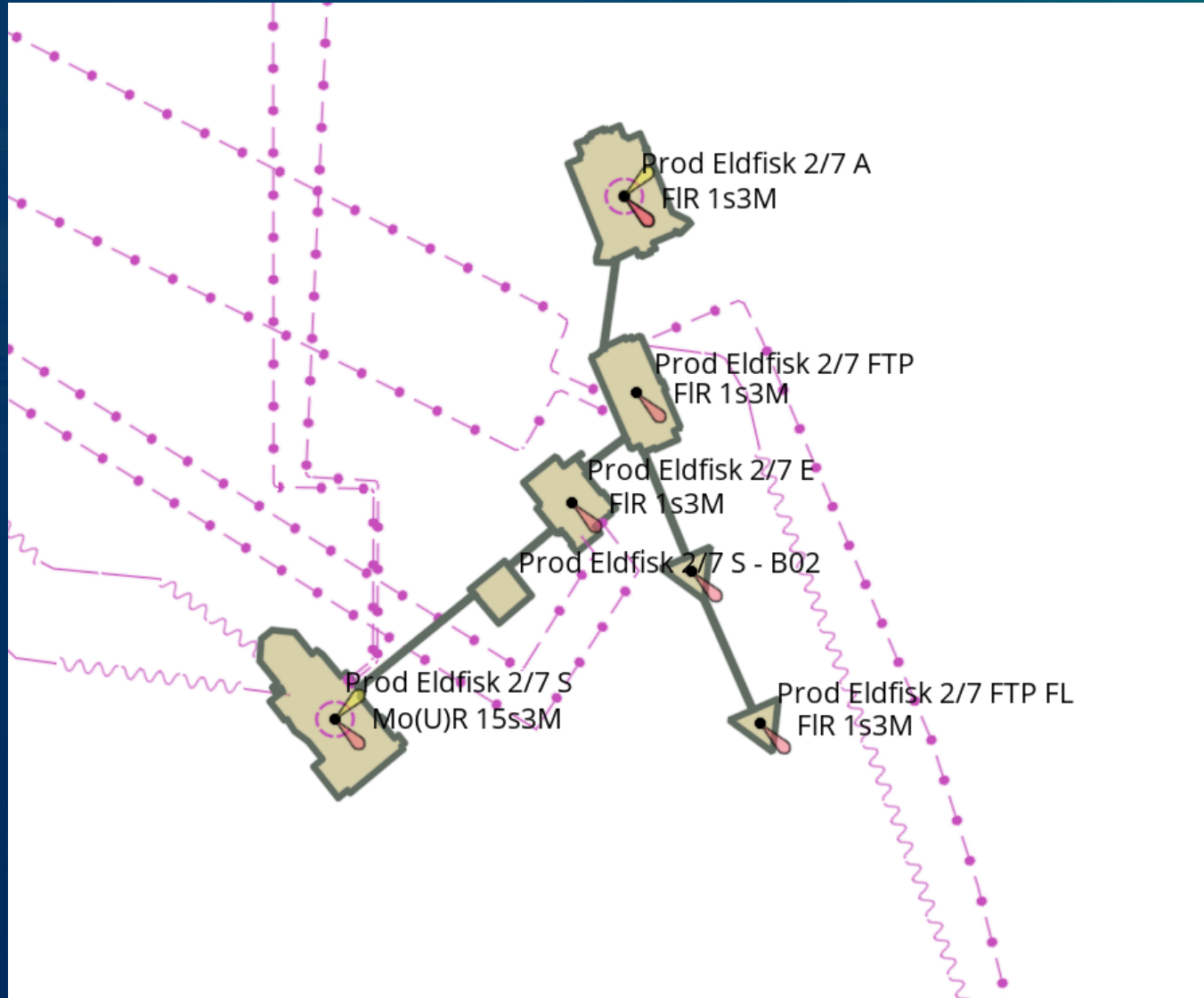
Performing Rigmoves, The fun stuff!



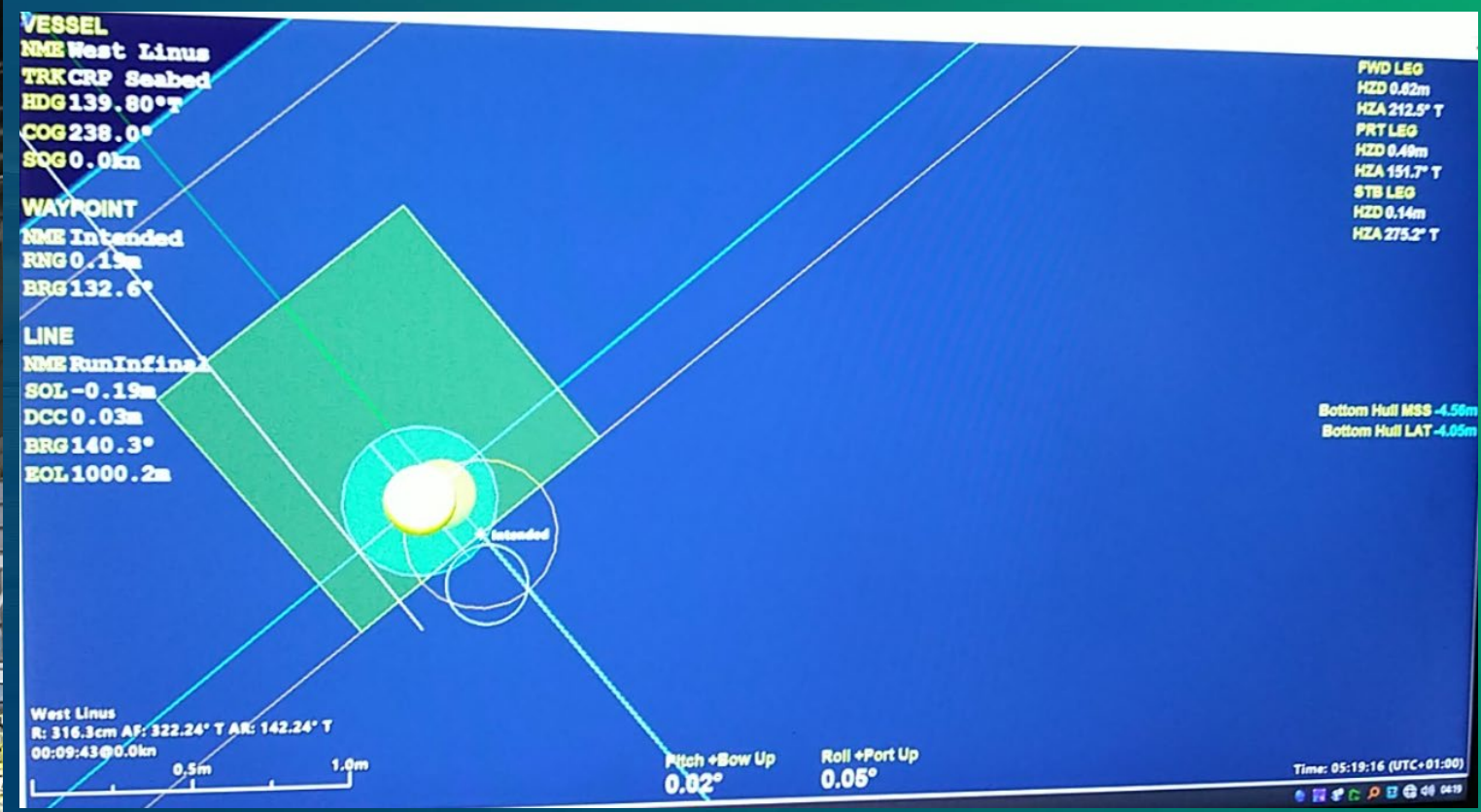
Preforming Rigmoves, Transit



Preforming Rigmove, Final positioning

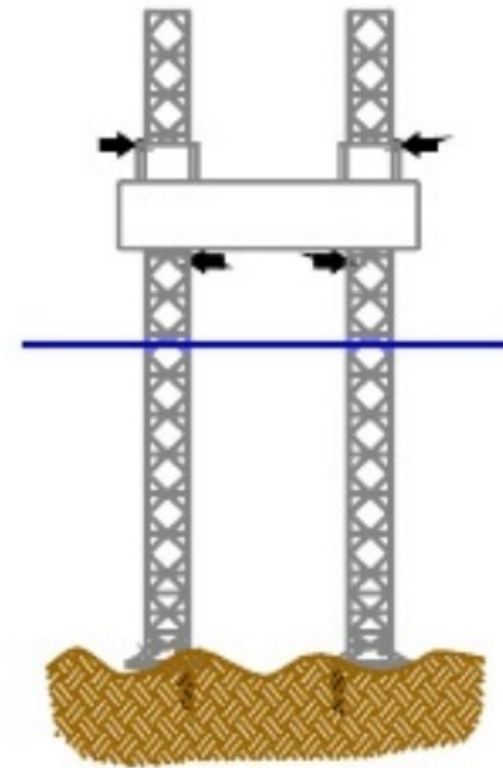
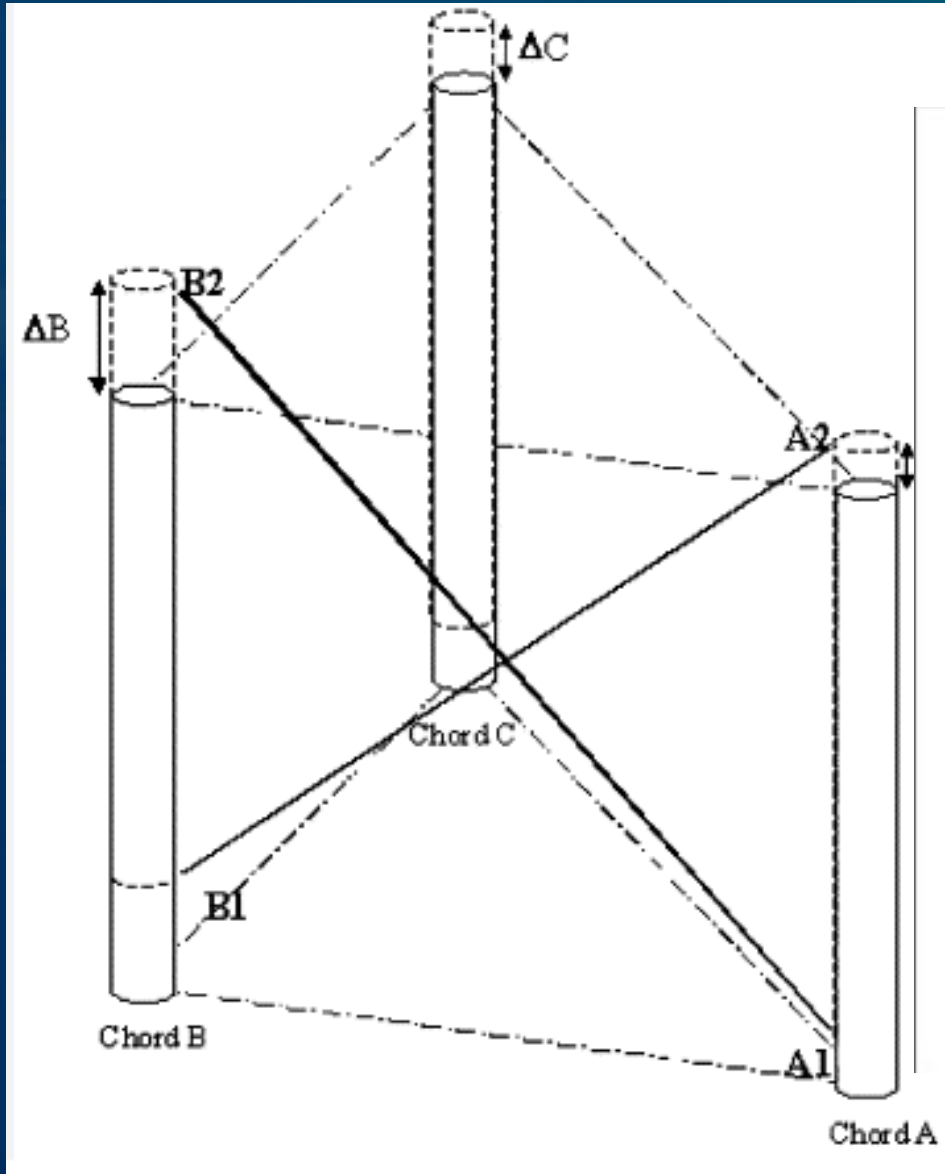


Preforming Rigmove, Final positioning



RPD = Rack Phase Difference

- Might result in a Bow legged appearance



A night landscape featuring a body of water in the foreground, dark mountains in the middle ground, and a starry sky with a vibrant green aurora borealis. The text "Thank you for the attention!" is centered in the sky.

Thank you for the attention!