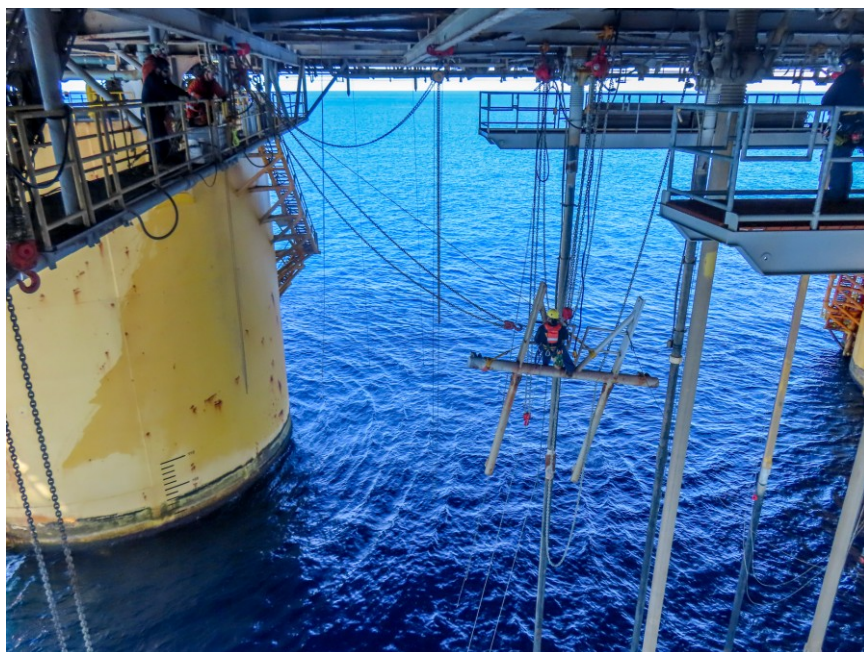




MARS GUIDELINE REPLACEMENT

The Mars platform is a Tension Leg Platform (TLP), floating above the seabed and secured by tensioned tendons. Over time, the existing guidelines installed beneath the platform had deteriorated due to corrosion and required replacement. Three of the five existing guidelines needed to be replaced.

Due to their location beneath the platform, conventional access was not available. A site visit was therefore carried out by Conbit rope access technicians to inspect the existing guidelines and after which a suitable replacement methodology was developed.



PROJECT

- ✓ ENGINEERING
- ✗ PROCUREMENT
- ✓ CONSTRUCTION

Client
Shell

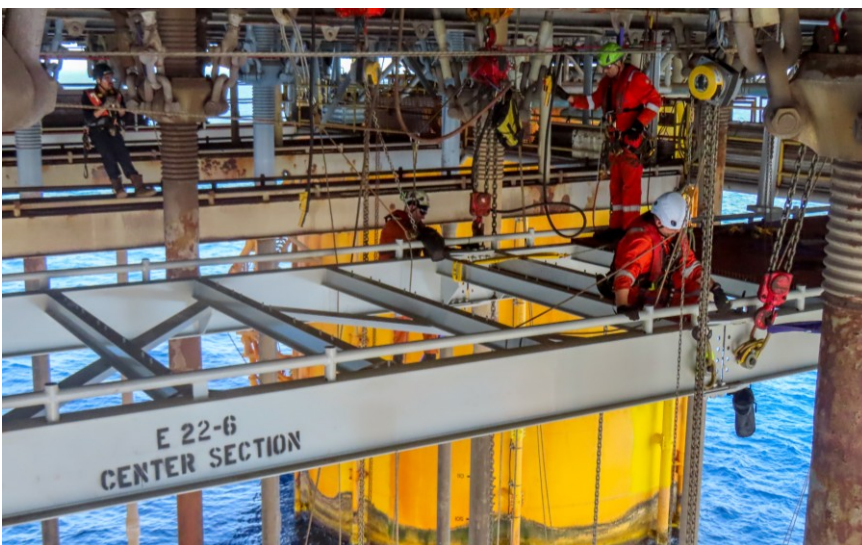
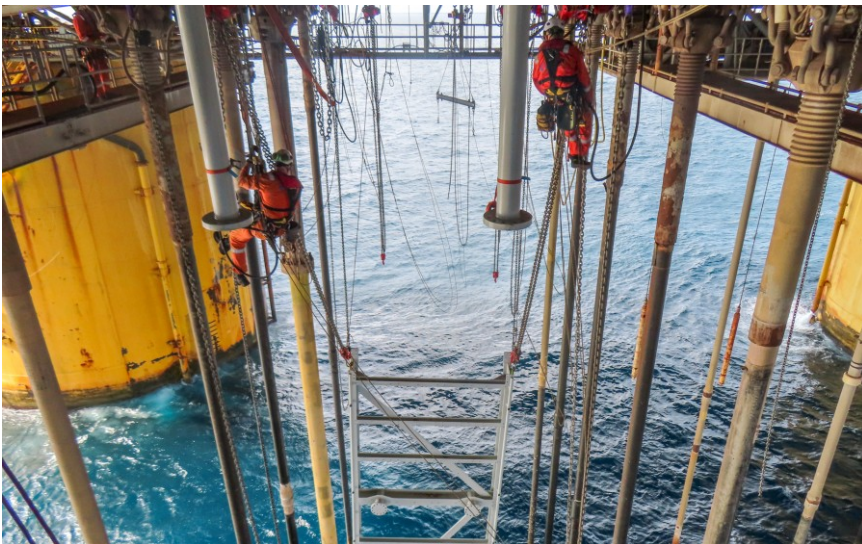
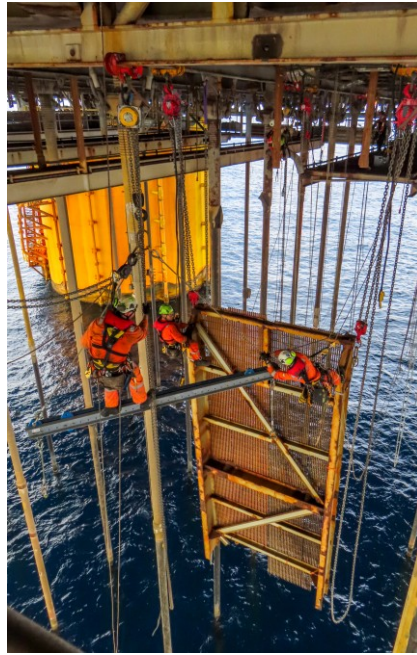
Project Number
31795

Project Name
Mars Guideline Replacement



MARS GUIDELINE REPLACEMENT

01SD175-A



SOLUTION

Conbit combined rope access techniques with engineered lifting solutions to safely remove and replace the guidelines. Temporary lift points were created beneath the platform, after which each existing guideline was cut into three sections. Using beam clamps, beam trolleys, chain hoists and air hoists, the sections were manually maneuvered into the reach of the platform crane. The new guidelines were supplied and installed in three separate sections per guideline, following the same controlled lifting and handling methodology.

CHALLENGE

The operation had to be completed with a compact team of four, supported by GIS personnel. Working from ropes and cutting the existing guidelines in this position required careful planning and proved to be a time-consuming part of the operation.

After completing the first guideline, Conbit evaluated the process and identified a more efficient route for the remaining work. The platform's moon pool, an opening extending through the entire platform, was used to move the guideline sections directly from beneath the platform to the platform level and into the laydown area.

This change significantly reduced the amount of manual handling and shortened the route to crane reach, improving both efficiency and execution time.

RESULT

By combining rope access, temporary lifting points and compact lifting equipment, Conbit successfully replaced three guidelines beneath the Mars TLP in an area with extremely limited access. The methodology was further optimized during execution, demonstrating the value of adapting the lifting approach to improve efficiency while maintaining a controlled and safe operation.