



MARS FLARE TIP REPLACEMENT

In the Gulf of Mexico, Shell Offshore Mars Platform had an inclined boom with two flare tips that needed to be replaced: one HP (3mT) and one LP (500kg). A unique solution was required since these flare tips were located in hard-to-reach places on the platform.

Conbit offered a gantry method in which the flare tips were raised over the platform's edge. A 6mT fast-lifting winch was used to raise the load, which was then dropped onto the supply vessel.



Picture: Gantry lift structure on top of the flare boom

PROJECT

✓ ENGINEERING

✗ PROCUREMENT

✓ INSTALLATION

Client
Shell

Project Number
31348

Project Name
Mars Flare Tip Replacement

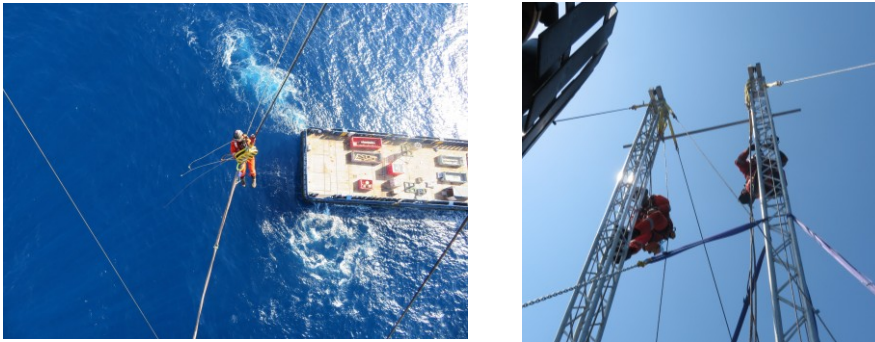


MARS FLARE TIP REPLACEMENT

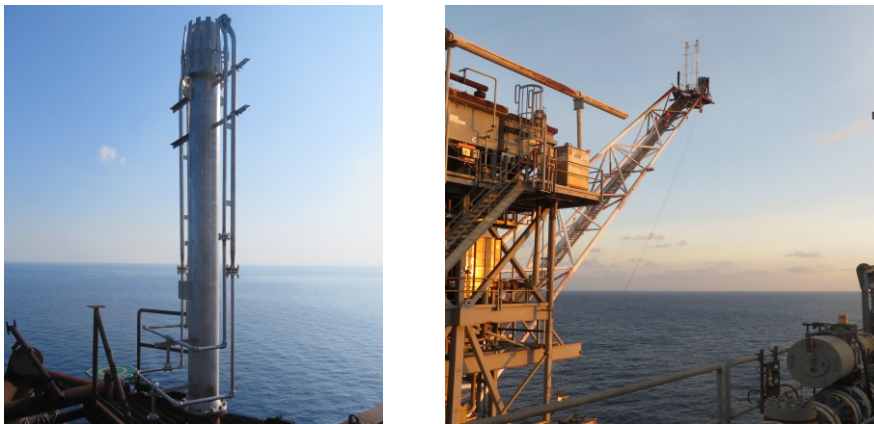
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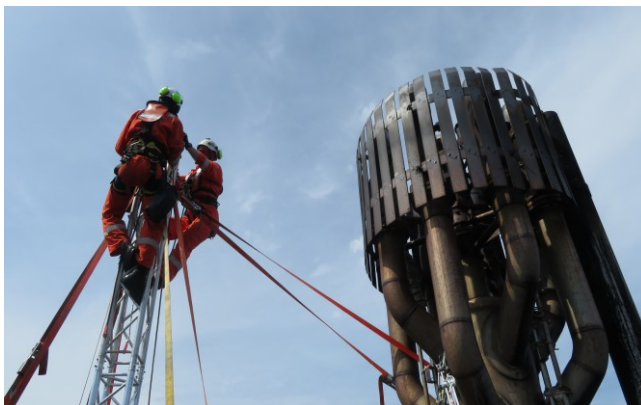
Pictures: Handling of LP flare tip (left) and the old HP flare tip(right)



Pictures: Rope access crew and supply vessel (left) Conbit crew working on the truss structure (right).



Pictures: Newly installed LP flare tip (left), and an overview picture with a portion of the Conbit gantry on the flare access platform (right).



Picture: Rope access one of the lifting structures.

EQUIPMENT AND OPERATION

The main pieces of equipment used for this project were:

- An aluminium gantry with manual rigging tools;
- An offshore lifting winch and service winch;
- LRE lift boom systems.

All the gantry equipment needed to be raised from the supply vessel to the flare tip access platform, and it was done so using the offshore service winch that was situated on the platform deck.

The aluminium gantry and its steel base structure were then lifted and installed using the LRE lift boom equipment on top of the flare tip access platform. The flare tip was handled by the gantry, which was able to hoist it over the edge of the flare tip access platform using manual rigging equipment before moving it to the offshore lift line.

The offshore lift line was used to lift the flare tips directly to and from the supply vessel.

Despite the challenges before and during the project, our Conbit crew managed to perform the lifts within the estimated time frame, resulting in great teamwork with the offshore crew from the client and other parties.

**"THE INTERACTION
BETWEEN CONBIT,
PLATFORM PERSONNEL
AND TAR TEAM WAS
EXCELLENT"**