



SPARROWS

CASE STUDY

CRANE BOOM CHANGEOUT ON SINGLE CRANE ASSET

The manual handling solution was the most effective way to complete the boom changeout and return the crane to full capacity

BENEFITS

Return of the crane to full capacity

Utilising the existing proposal with verification, saving time on implementation

Design and engineering expertise available throughout the project to resolve issues

LOCATION

North Sea



CHALLENGE

- The client engaged us as the new crane management contract incumbent to complete a full boom changeout on an accommodation platform.
- The initial plan and materials were designed and manufactured by the previous incumbent, including the scaffolding, which had to be checked, and the methodology verified.
- The plan involved having the booms sitting side by side. During initial checks of the scaffolding, it was found that the structure would not safely accommodate both booms, and the project had to be stopped.
- The workscope needed to be carried out with minimal downtime, as the crane was the only one servicing the accommodation block for all the platform personnel, including the galley.

SOLUTION

- A system was designed and manufactured (by the previous contract incumbent) to allow the old and new booms to be set side by side. The old boom was then detached and skidded away from the boom foot connection. The crane was then to be re-energised, slewed in line with the new boom, and then the new boom was to be skidded into connection place.
- During initial checks, it was found that the scaffolding structure was not safe to sit both booms side by side. Our design team discussed this with the scaffolder and came up with a new design which would enable the work to be carried out safely.
- Once the new scaffolding solution was designed, the rest of the system and methodology were checked and proven to be a valid solution.
- A full build of the skidding system was completed onshore, prior to implementation.
- The new boom was lifted into place, the old boom was then lowered onto the skid frame, slid out of position, and the new boom was then brought into position.
- Following the removal of the old boom, it was identified that the boom foot chassis bores were out of tolerance. A repair method and materials were provided to restore this area to its original specification.
- It was also noted during the return to service phase that the A Frame sheaves were damaged which were found to be the A Frame sheave bearings. These had been shipped offshore in the original container as a contingency and were changed onsite during the boom foot pin repair workscope.

SUMMARY

Integrated solutions

- Mechanical handling
- Fault finding and repair

Capabilities / services

- Multi-discipline engineering / design
- Rigging / lifting
- Site surveys

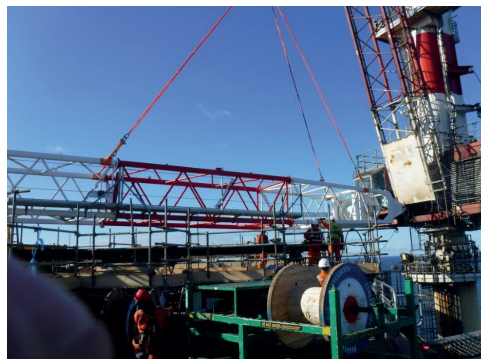
Equipment sale and rental

- Rigging / lifting equipment
- Mechanical handling equipment.

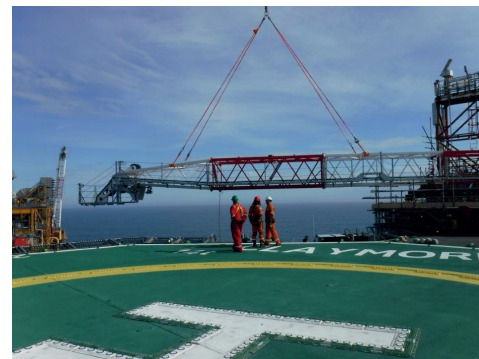
1.



2.



3.



1.

Installation of skid frame for accepting new boom.

2.

Lifting on new boom first two sections.

3.

Connection of final sections of new boom.

DELIVERY ASSURED

For more information please visit www.altradsparrows.com



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