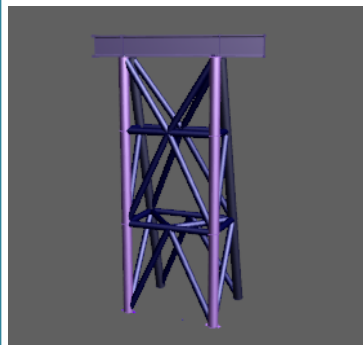




**Rig Name:** Paul B Loyd Jr  
**Rig Type:** Semi-submersible  
**Owner name:** Transocean Ltd.  
**Classification Society:** DNV  
**Pertinent code:** API 2C  
**Code design:** ASD 9<sup>th</sup> edition.  
**Crane Model:** Liebherr BOS  
 2600-75D LITRONIC

[Click below to see model 3D!](#)

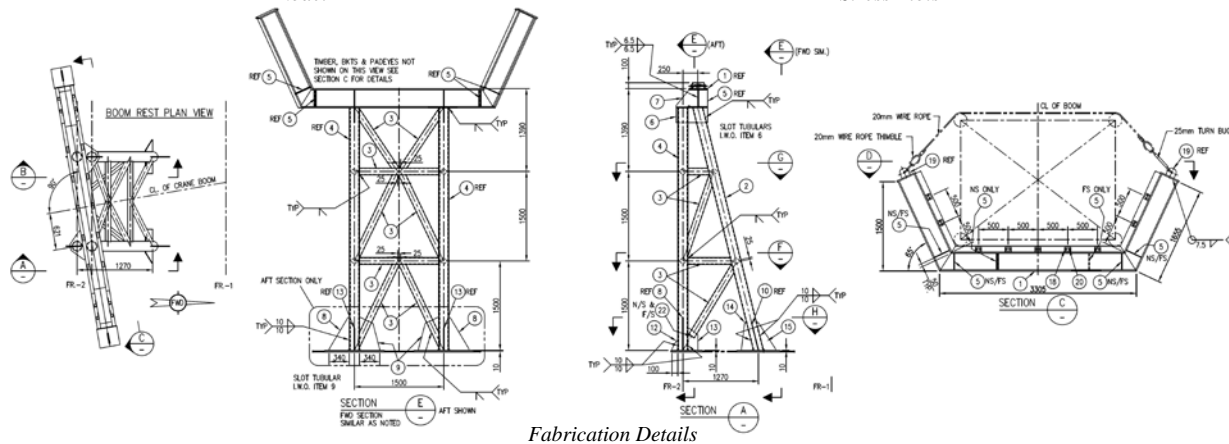
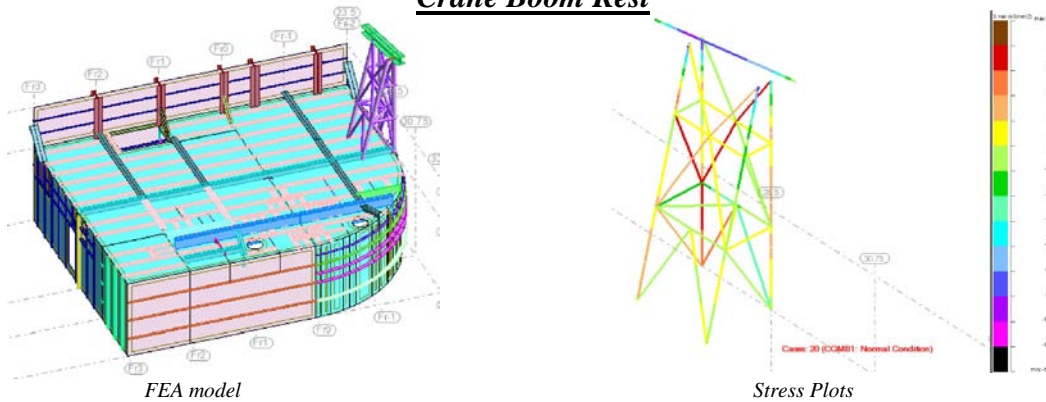


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To view 3D documents



**Project description:** Rig Engineering (R.E.) was recently tasked by Transocean to provide engineering services / support in replacing existing Port pedestal crane with a new Liebherr crane. This supports include engineering calculation, (static strength and fatigue calculation), simulation and the fabrication packages to allow for the destruct and installation of new pedestal. For detailed information, refer to our Case Study 2518 A Paul B Loyd Junior Port Crane Replacement. As a follow on from that Case Study, R.E. has been tasked with designing a brand new auxiliary crane boom rest to supplement the main boom rest when the crane is in normal stowed condition. Since the stowed condition of use, pose the risk of breaching the 210 sector for landing and takeoff, this auxiliary boom rest was provided for use during helicopter landing and taking off. Liebherr's design criteria and Lloyd's Register requirements Code for Lifting Appliances in a Marine Environment as well as Det Norske Veritas's requirements on the strength verification, were met in full. Short Form Agreement (SFA) was raised with Det Norske Veritas and the Class Submittal was duly done on behalf of TOI.

## Crane Boom Rest



## R.E. scope of work

- Conduct site survey to confirm that the as built drawings are still valid and any added structures or changes in structures in way of the existing Port crane, are captured and used in this campaign.
- Design of new Crane Boom Rest.
- Prepare a detailed finite element (FE) model of the deck area under Crane Boom Rest.
- Assist with class submittal and provide all the required technical assessment and verification to Det Norske Veritas (DNV).
- Provide fabrication and strengthening drawings deemed necessary to accommodate this crane boom rest.

## Engagement Condition

Upload your problem to us and give us relevant input to allow us to resolve your problem, we will need:

1. As built of structure to create 3D FEA model.
2. Static and environmental loads of rig.
3. Detailed information about new crane.
4. Code and standards required for Boom Rest Conformance check