



# JACK RYAN

## Tree handling incident

### Short presentation



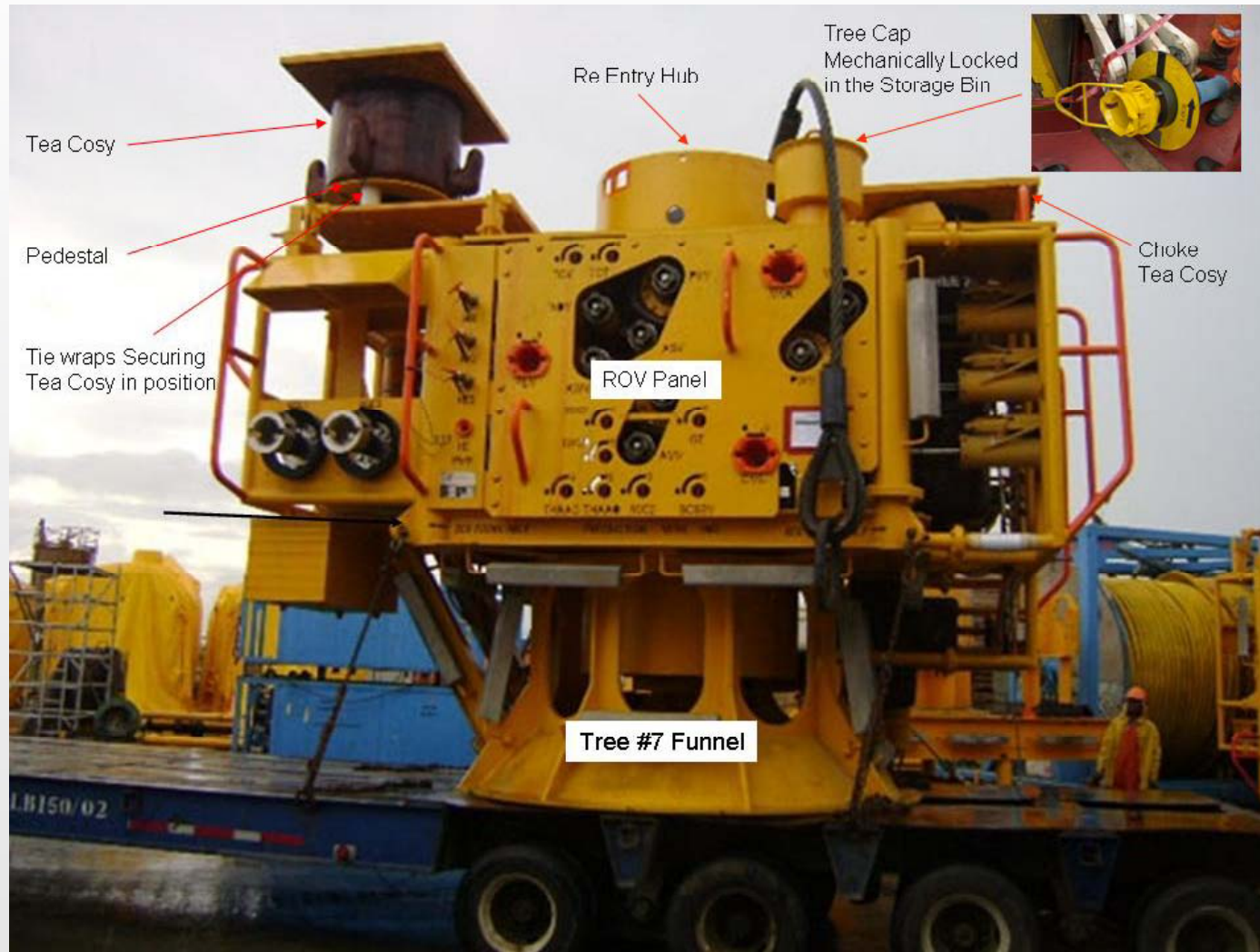
## Presentation Intent

- Share Immediate Findings from the Investigation.
- Share with Crew the Crane Condition Assessment Status.
- Outline some of the Jack Ryan Corrective and Improvement opportunities.

## Facts Relevant to the Incident

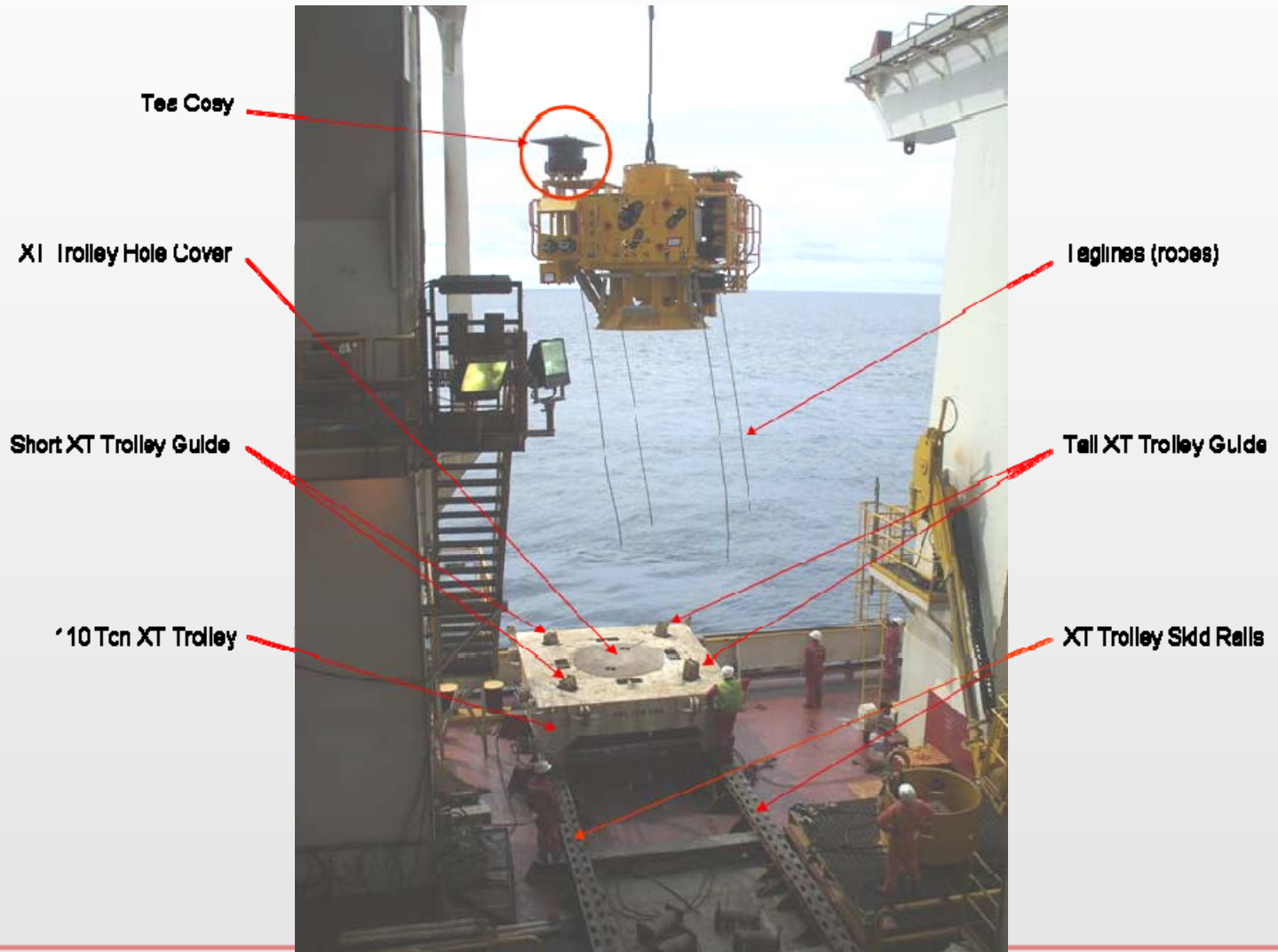
- Date / time : 5<sup>th</sup> October 2008 – 15:30 hours
- Rig : Jack Ryan
- Name : Mr. Darryl Scott Lambert
- Age / Marital status : 44 Years / married with 1 son (8 years old) and  
2 daughters (21 Years and 19 Years old)
- Position : Toolpusher
- Seniority : 18 Years
- Operator : TOTAL
- Place of Occurrence : Port forward deck
- Intended Operation : Moving Cameron tree #7 from set back area  
onto XT trolley (12<sup>th</sup> lift of this type)

# Terminology and position of equipment





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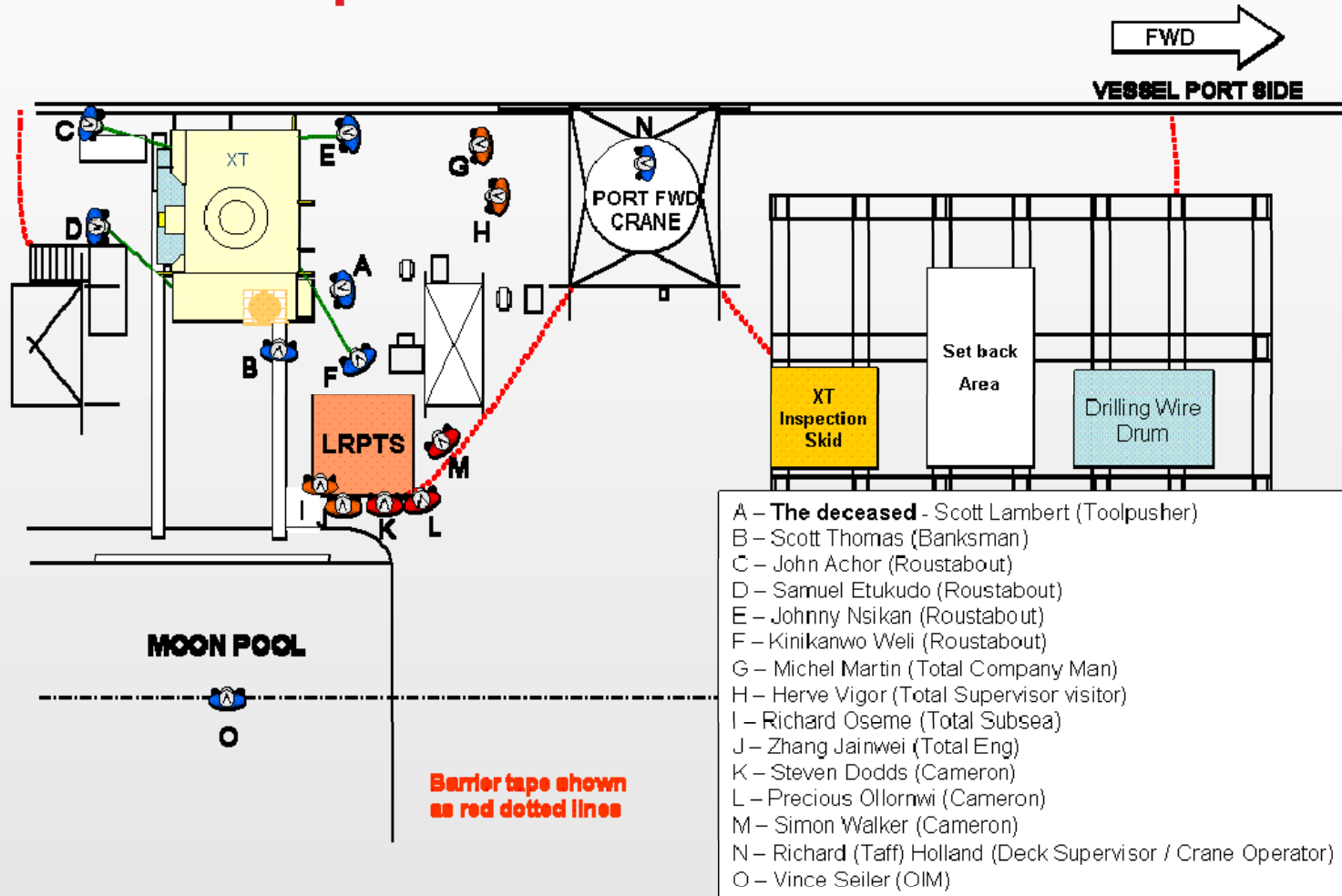
## Terminology and position of equipment



## Incident summary

- The tree was picked up approximately 2 ft above the XT trolley to clear the guides, and was held stationary while minor boom and slew adjustments were made by the Crane Operator.
- As the Crane Operator engaged the control to lower the load, the tree was observed to free-fall and landed misaligned on the XT trolley.
- The tea cosy was observed to “pop up” from its pedestal, deflect off the tree and tumble to the deck, striking Scott Lambert and knocking him to the deck.

## Position of People at time of the incident





## Timeline

- **05 Oct 08, At 14:00 hrs:** Permit issued for heavy lift; moving tree #7 onto XT trolley. Permit To Work was raised by Person In Charge of Work. Permit signed by Responsible Person and approved by OIM and Company Man.
- **05 Oct 08, At approximately 14:30 hrs:** A THINK Plan that referenced the JRA was conducted prior to the heavy lift taking place.
- **05 Oct 08, At approximately 15:25 hrs:** Tree #7 was picked up and repositioned after misaligned first landing. The Banksman requested the Crane Operator to lower the tree. As the Crane Operator engaged the control, the tree was observed to free-fall and land heavily on the XT trolley.



- The **Job Risk Assessment (JRA)** has no input from TUPNI nor Cameron. **DO I ALWAYS ASK EQUIPMENT OWNER FOR THEIR INPUT/ ASSISTANCE?**
- **Barrier management** was ineffective: Six of the personnel inside the barriered area during the task were not involved in the THINK plan. **HOW EFFECTIVE IS BARRIER MANAGEMENT ON MY RIG?**
- An interchangeable **motor** undersized for the application, had been fitted to the main hoist winch on 29 Sept 08. The motor mounting plates and drive shafts on both models are the same, therefore allowing an interchangeable motor and undersized for the application to be installed on the main hoist winch drum. Note: The SEATRAX **crane** Manual was onboard but not used by the Mechanic to reference the correct part number for the main hoist winch. **AM I ALWAYS USING THE CORRECT TOOL FOR THE JOB?**
- This **motor** had been sourced from the Mechanic's workshop. It was not new, and furthermore, its usage and history is unknown. **DOES THIS FEEL LIKE THE CORRECT WAY OF MANAGING PARTS?**
- The **tree** is also fitted with the following items, which are not a permanent feature of the tree: Seal kit (VX gasket) in wooden box, Tree cap in parking position on tree top plate, CHC Debris Cap, REH Tea Cosy (one which fell) on pedestal, Choke Tea Cosy ,Tree lift cap and sling assembly. **DO I MAKE DROP OBJECTS AS A BIG DEAL ON MY RIG?**

## Pictures related to the incident causes



Tree #7 on XT Trolley

Blue circle  
- Tea Cosy pedestal

White circle  
- Tea Cosy final position

Tea Cosy



TC 2006 Motor Behind  
TC 2010 Motor



Failed  
TC 2010 Motor



## » Crane

- › Inspect all 4 cranes and verify that the correct motors are fitted as per the manufacturer manual and / or Manufacturer latest documentation
- › Verify personnel have access to the Manufactures Manual which provides the appropriate and current technical details of crane motors / Part Number / Model Types. This must include that the suitable motors to be fitted to the various applications.

## » Tree

- › Prepare TSTP for this operation in conjunction with Total & Third Party (subsea tree owners) for lifting the tree to the rig and around the rig.
- › Use of lifting checklist prior to any tree movements : Ensure all items identified as potential dropped objects are secured in a manner approved by Total and the tree supplier engineering department.

## » Process

- › START Tours and START Monitoring of THINK plans to be used to ensure effective barrier management. Raise the profile of barrier management through the PTW controls for critical tasks. Responsible Person to be ensure observers are not inside the defined barrier area.
- › Review Steve Newman Video and engage a dropped Object identification /Hazard Hunt.
- › Training in the appropriate level of detail to be provided with respect to PMs & repairs in RMS.



***Refer to Total / Cameron HAZID for Fastening,  
Handling & Transport of Subsea Equipment from  
Shore to Installation***