

UPDATE SM-07-048-LTA



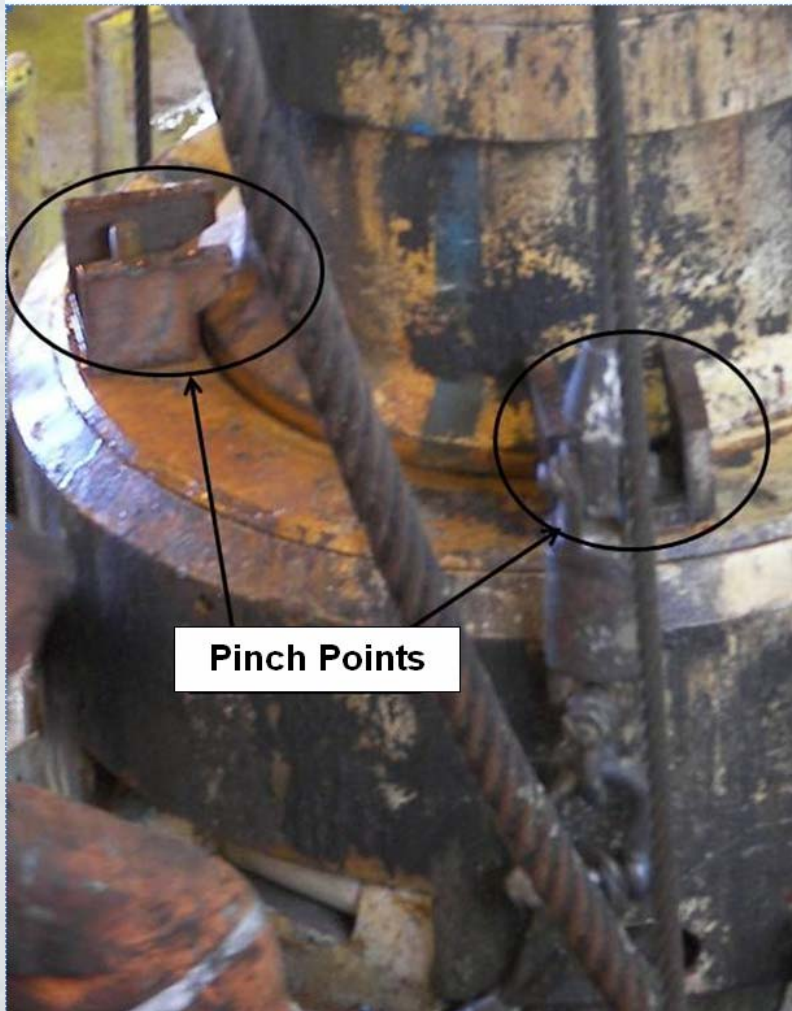
**Crushed Finger
Injury**

06 November 2007

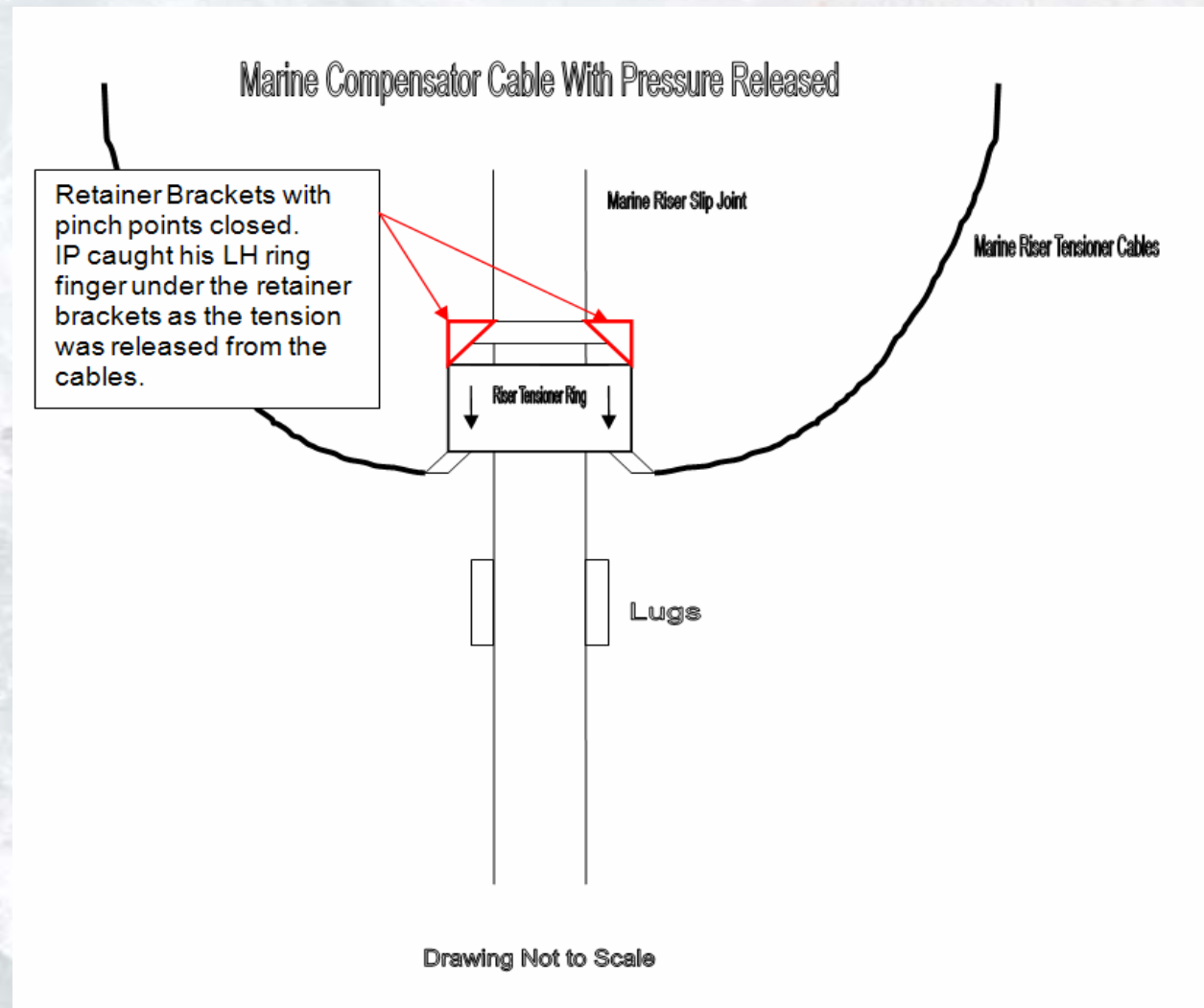
INCIDENT HISTORY

- **Who:** Derrickman
- **What:** Open fracture of the left ring finger
- **When:** 6 November 2007 at 17:55 hrs
- **How:** The Derrickman sustained a serious crush injury to his left hand ring finger during man riding activities to remove the marine riser tensioner cables from the Riser Tensioner Ring (RTR).
- **Why:** During the release of pressure from the Marine Compensators (a process required to ease the tension on the tensioner cables prior to removing the RTR clevis pins), the IP inadvertently placed his left hand ring finger between the load ring retainer brackets and slip joint.
- **NB** Tension on the marine compensator cables raises the RTR thereby creating a pinch point gap when the air pressure released.

INCIDENT HISTORY



INCIDENT HISTORY



INVESTIGATION – TapRoot®

An investigation team comprising of onshore and offshore personnel from both Songa and Santos initiated a TapRoot® investigation and identified a number of significant issues*.

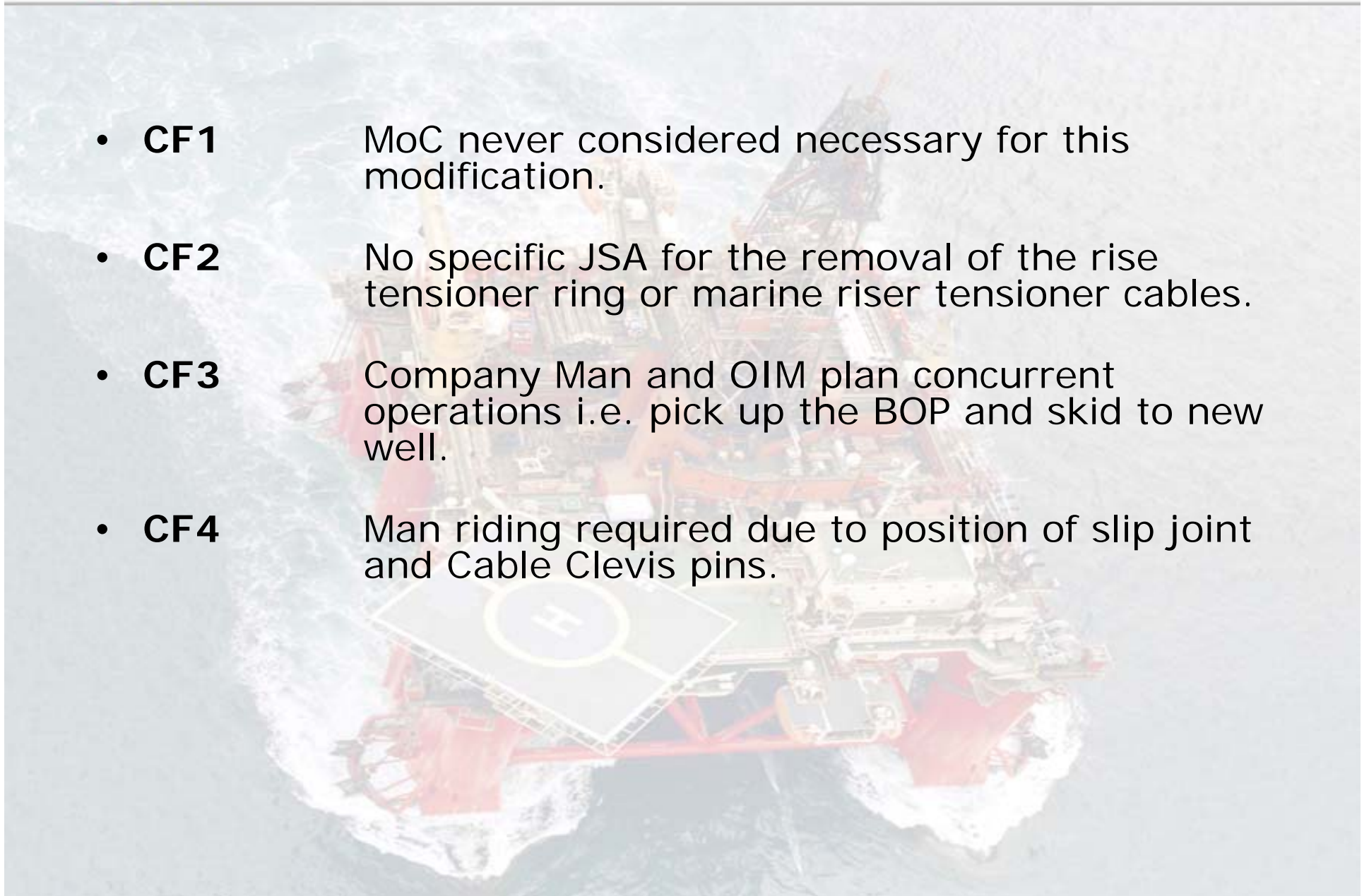
SIGNIFICANT ISSUES

1. Purchase of the marine riser slip joint.
2. Issues pertaining to the Management of Change (MoC).
3. Pursuit time efficiencies.
4. IP was working under a generic man riding JSA and not a JSA specific to the take he was performing. This was also considered a missed opportunity to identify and manage a potential hazard.
5. Man riding.

** TapRoot® Significant Issues: any problem associated with a process that if left uncorrected could cause an incident or could make incident consequences significantly worse.*

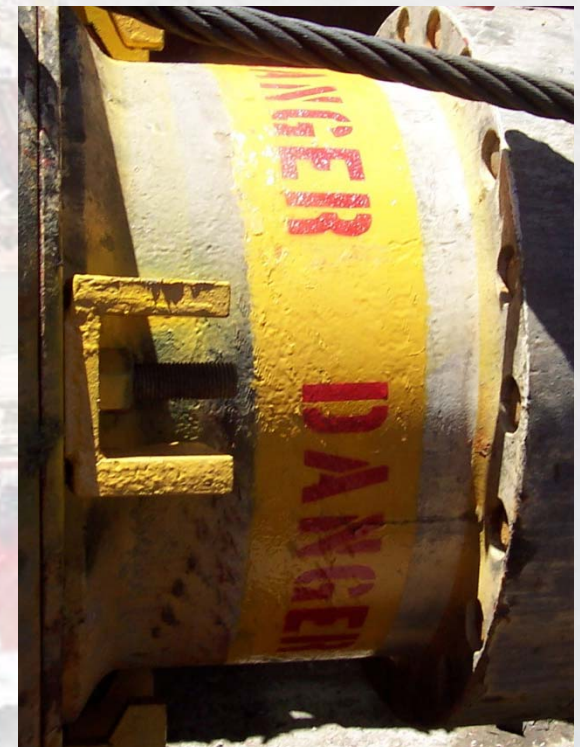
TapRoot® - CAUSAL FACTORS

- **CF1** MoC never considered necessary for this modification.
- **CF2** No specific JSA for the removal of the rise tensioner ring or marine riser tensioner cables.
- **CF3** Company Man and OIM plan concurrent operations i.e. pick up the BOP and skid to new well.
- **CF4** Man riding required due to position of slip joint and Cable Clevis pins.



CORRECTIVE ACTIONS

- **Review procedure** – completed
- **Review sheave placement** – completed
- **Investigate use of EWP** – ongoing, no practical system identified to date
- **Highlight pinch points** – completed
- **Review MoC procedure** – completed
- **Rollout MoC training** – in progress
- **Management to give clear guidelines on MoC process** – completed



CORRECTIVE ACTIONS

- **Review JSA procedure and training to include Hazard ID** – in progress
- **Concurrent operations to be included in client drilling plan** – Santos to incorporate identified concurrent operations in drilling programme
- **Manriding to have OIM approval**– implemented
- **Manriding to utilise supervisor/observer to assist in Hazard ID**– implemented

