

# SAFETY ALERT

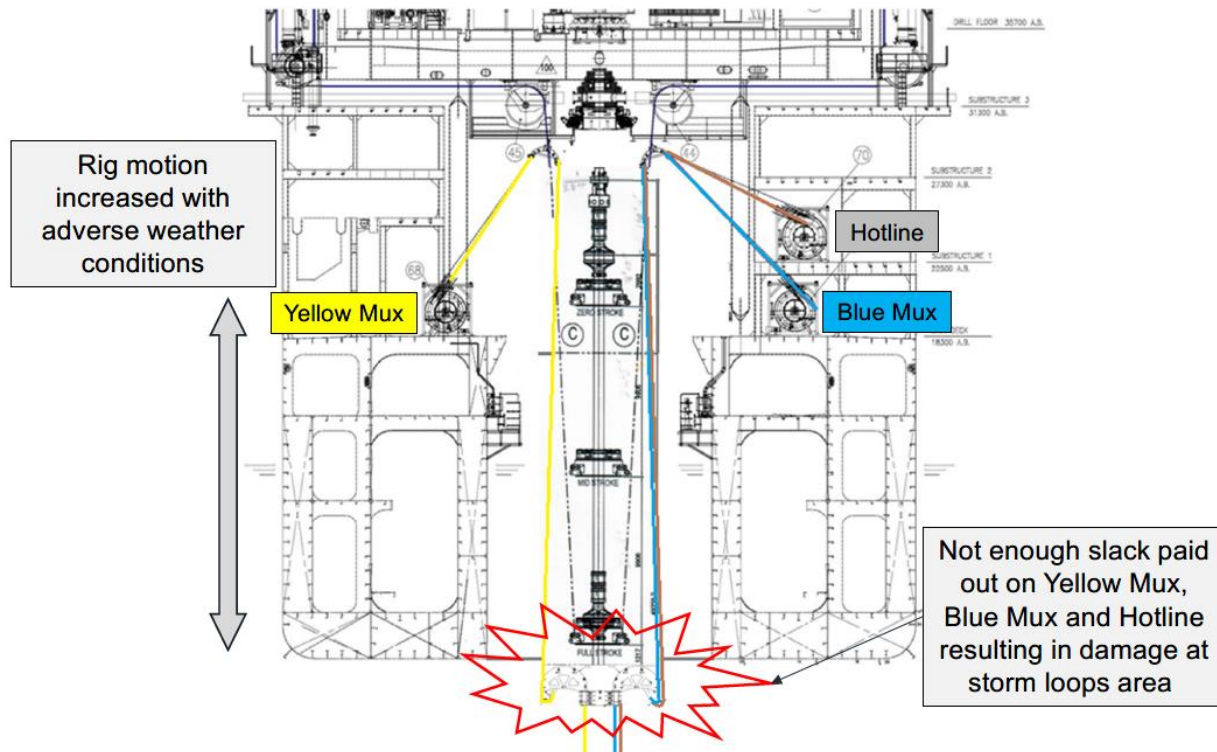


## MUX Cables and Hotline Hose Damage results in BOP Control Pods Losing Power and Communications

Alert 4-22

### WHAT HAPPENED:

Subsea Blow Out Preventer (BOP) loses partial communications while latched to a well. The hotline hose, the yellow pod and blue pod multiplexed communication (MUX) cables were damaged due to excessive tension during harsh weather and extreme heave conditions. Control and operability of the BOP were maintained through the Acoustic Pod and subsea Remotely Operative Vehicle (ROV) panel.



### CONTRIBUTING FACTORS:

- **Design Difficulty** - During BOP deployment, the length of Mux cables and Hot Line hose paid out between reels and storm loops was insufficient to accommodate the maximum anticipated heave amplitude under local environmental conditions.
- **Sea Conditions** – Deterioration of weather conditions rapidly increased heave amplitude beyond what the system as deployed could tolerate with insufficient time for the crew to make necessary adjustments.

### LESSONS LEARNED:

- Implement formal process for independent review and validation of the amount of slack paid out during BOP deployment (Mux cables, Hot line, other control lines as applicable) to accommodate the full stroke of the Telescopic Joint (TJ), plus an adequate safety factor.
- Depending on Rig design, perform an ROV inspection of the storm loop area after any weather conditions where heaving amplitude approached the maximum TJ stroke.

***A Safety Alert can consist of any type of health, safety & environment (HSE) notification or Near Miss/Near Hit alert. Proactive Alerts on jobs well done are also encouraged.***