

Hose Recoil Strikes Banksman

Alert 25-5

WHAT HAPPENED:

On a MODU a hydraulic reel mounted 4" potable water bulk hose at the starboard bulk loading station was in the process of being changed out as per its routine maintenance schedule. This involved picking up one end of the hose with the crane while simultaneously hydraulically paying out the hose from the reel prior to coiling it on the main deck for subsequent backload. During this process the hose parted from within the 4" ferrule near the lifting point. The hose recoiled back toward the bulk loading station and struck the Banksman.

CONTRIBUTING FACTORS:

- The hose parted because of its ferrule being subjected to excessive lateral overpull which exceeded the design limitations of the component
- Excessive overpull was caused by the hose becoming snagged while being extracted from the hose reel
- The hose recoiled rapidly back toward the Banksman at the loading station as it had stored energy from being stretched (while overpulled)
- The crew had successfully changed out hoses in this same manner historically and did not foresee the potential for the hose to recoil back toward their position at the loading station – they perceived that they were clear of any potential line of fire

LESSONS LEARNED:

1. Using a different hose extraction path for hose changeout than that normally used for bunkering operations means that the hose is more likely to become snagged on itself and / or the reel framework – snagging is far less common when the hose is deployed or retrieved for bunkering operations.
2. The simultaneous functioning of dual appliances (in this case a hydraulic hose reel being paid out while a crane auxiliary line is being picked up) presents an extra level of complexity to an operation.
3. When a load is subjected to strain, or overpull, the line of fire hazard may be altered.