



Safety Alert 11

Potential Man-overboard Hazards – Jettison Skids

NOPSA inspectors visiting Mobile Offshore Drilling Units have noted potential man-overboard hazards associated with the configuration of explosives magazines stored on jettison skids.

Explosives used in well operations are typically stored within dedicated magazines, which in turn are stored on jettison skids. The jettison skids allow the explosives magazines to be dumped into the sea in the event of a major fire.

What is wrong?

There are a variety of types of jettison skids in use, mounted or configured in a number of ways. NOPSA's concerns relates to situations where people working on or around those jettison skids are exposed to unacceptable risks of falling overboard.

The type of work may include installation of magazines, handling of explosives and maintenance of the magazine or jettison skid.

Jettison skids are often located outboard of the handrails or edge of the deck, and the magazines are often positioned so that people wanting to open the doors have to climb up to access the door catches.

A poor design may mean that workers are tempted to climb up on the handrail to access the doors – and in many cases there are no barriers or fall protection to prevent them falling overboard if they slip or lose their footing.

The design of the jettison support structure and its location, whether it is sitting inboard or out board of the handrail, has important implication for the safe handling of both the explosives and the magazines. Examples of both good and poor¹ design are provided in the attached photographs.

By incorporating human factors considerations into the design, operators can provide safe access for installation, maintenance and general use of explosives magazines and jettison skids.

¹ Improvements have already been made to several installations including the one identified as poor design

Key Lessons

- Equipment that is “added on” tends not to receive adequate level of risk assessment prior to installation.
- Mitigating one risk (having explosives on board during a fire) may increase other risks (falling over board) if not properly planned.
- The most practical consideration is to **incorporate human factors in the design** of these platforms by including **safe** access, removing the need to climb or stretch, and reducing the potential for man-overboard situations during the use, inspection and maintenance of the skids.

Recommendations

Facility operators should review their current jettison skid arrangements and improve the structure and/or system of work as appropriate. Operators and contractors should also review the work instructions or JSA's² related to these tasks to ensure hazards are properly identified and managed.

The Petroleum (Submerged Lands) (Management of Safety on Offshore Facilities) Regulations 1996³ address design issues under regulation 16.

Examples of jettison skid installations

Good Design	Poor design
	
Explosives can be retrieved standing on main-deck.	No easy way to climb up to retrieve explosives. No fall protection.

² JSA – Job Safety Analysis

³ <http://www.comlaw.gov.au/ComLaw/Legislation/LegislativeInstrumentCompilation1.nsf/current%5Cbytitle/7EDAC4B06D19CA67CA25706000167272?OpenDocument&mostrecent=1>