

Safety Alert

From the International Association of Drilling Contractors

ALERT 12 - 20

HELIDECK OBSTRUCTION HAZARD: MARKING AND NOTIFICATION

ISSUE:

A recent fatal helicopter crash has highlighted the need for effective coordination of information between offshore facility operators and aviation service providers (ASPs) regarding helideck obstructions and closures.

As with most incidents, there were multiple barriers which, had any one of them been effectively managed and in place, could have prevented the incident. One such barrier, which is under the control of the management of the offshore facility, is the effective identification of possible obstructions to the helideck, declaring the helideck closed, properly marking its closure, and notifying aviation service providers of the helideck's closure. In this incident the pilot attempted to land on the helideck of a platform that was not marked as closed, even though it was apparently obstructed by a jackup that was working over the platform. It is not known why the pilot attempted to land on the platform's helideck instead of that of the MODU, or that the pilot did not identify that the flight path was obstructed, even without the helideck being marked as closed. After the incident, the platform's management did mark the helideck as closed.

DISCUSSION:

The Limited Obstacle Sector (LOS) of a helideck is normally marked on the helideck. However, routine MODU or platform operations can cause obstructions to helidecks or impinge on a helideck's LOS or obstacle free sector with the potential to adversely impact flight safety. These include, but are not limited to:

- Locating a MODU in a position such that the unit's structure obstructs the flight path to the helideck of another offshore facility;
- Locating the MODU in a position that obstructs the areas below the helideck of another facility, which should be kept clear in order to provide a clear flight path for a helicopter that may abort a landing or not gain full lift on take-off;
- Locating a MODU in a position such that its own helideck is obstructed by a structure on or below the platform;
- Allowing vessels to occupy a position that obstructs the area below the helideck of their own unit or another nearby facility, which should be kept clear in order to provide a clear flight path for a helicopter that may abort a landing or not gain full lift on take-off;
- Having the booms of cranes that have the ability to enter into the limited obstacle sector of a helideck;
- Placing unauthorized material or equipment on the helideck that causes an obstruction.

A helideck that is obstructed should be taken out of service and marked in accordance with applicable regulatory requirements or standards. The International Civil Aviation Organization (ICAO) has established standards for limiting obstacles in way of helidecks and for marking helidecks as closed. While the ICAO standards are only applicable to "international" aviation, their standards (often with modifications) are commonly reflected in national regulations or industry standards, the most comprehensive of which is the UK Civil Aviation Authority's CAP 437, *Standards for Offshore Helicopter Landing Areas*.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.



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ACTION RECOMMENDED:

Before moving a MODU onto a new operating location, an assessment should be made regarding the possibility that the unit, or its structure, could impinge on the limited obstacle areas of other offshore facilities in the area; or that the structure of such facilities may impinge on the limited obstacle areas of the MODU's own helideck.

For MODUs involved in combined operations, the bridging arrangements between the MODU and the associated facility should clearly identify if a helideck on either the MODU or the facility is to be taken out of service. The bridging arrangements should also make provisions for communication of information regarding operations on one installation that may necessitate, or warrant, the temporary closure of the helideck on the other installation, such as the potential for temporary obstructions posed by crane or vessel operations, or certain critical operations (e.g., involving explosives for perforating operations).

Regulatory authorities, aviation search and rescue services and ASPs should be notified of any helideck closures in accordance with appropriate procedures for the area of operation; and all closed helidecks should be marked appropriately.

The following references are available for further information:

- National civil aviation regulations
- UK Civil Aviation Authority
 - o CAP 437 Standards For Offshore Helicopter Landing Areas [link]
- HSAC (United States) Recommended Practices [link]
 - o 92-1 Helideck / Heliport Operational Hazard Warning(s) Procedure(s)
 - o 92-4 Gas Venting, Helideck/heliport Operational Hazard Warning(s) Procedure(s)
 - o 92-5 Closed Helidecks/Heliports, Helideck/Heliport Operational Hazard Warning(s) Procedure(s)
 - 2004-1 Offshore Helideck Inspections
 - o 2004-7 Helideck Hazards
 - o 2008-1 Gulf of Mexico Helideck Markings
- International Civil Aviation Organization (ICAO)
 - o ICAO Convention, Annex 14, Volume II (Heliports)
- International Association of Oil and Gas Producers (OGP)
 - o Aviation Management Guide
- International Maritime Organization (IMO)
 - o Code for the Construction and Equipment of Mobile Offshore Drilling Units, 2009, Chapter 13

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