Helideck Obstructions and Compounding Procedural Errors Contribute to Five Near Misses on OCS

In the past 4 months there have been at least 5 near misses involving helideck hazards on OCS oil and gas facilities.

Helicopter Safety Advisory Conference (HSAC) statistics for 2015 state that there have been 26 helicopter accidents associated with Gulf of Mexico oil and gas operations since 1999. Five of those accidents involved fatalities (19%), which resulted in 13 deaths and 16 injuries. The leading causes of the accidents since 1999 are listed below (some accidents fit in more than one category).

Significantly, the helideck size or design related issues are considered contributory in 11 of these accidents.

- 21 engine related,
- 25 loss of control or improper procedures,
- 17 helideck obstacle strikes,
- 11 controlled flight into terrain or water, and
- 11 other technical failures.

The following near misses involved BSEE personnel or have been reported to BSEE:

- May 26, 2016. A helicopter landed to a helideck that the Operator had closed by Notice to Airmen (NOTAM) but had not marked as closed in accordance with 30 CFR 250.107(b) and further clarified by Notice to Lessees (NTL) No. 2011 N-08. The pilot had failed to check NOTAMs before the flight. The Operator received an Incident of Noncompliance for failing to mark the helideck.
- July 6, 2016. After landing to the edge of a helideck (rather than to the aiming circle), the pilot saw a vent pipe sticking up two feet above and three feet beyond the edge of the helideck. The pipe was four feet from the tail rotor. The Operator had not issued a NOTAM or marked the obstruction. After the landing, the Operator removed the pipe.
- July 19, 2016. During an unannounced inspection, a pilot landed on the helideck before noticing the flashing red light indicating that the helideck was closed. The light was positioned so that it was only visible from a 90° arc around the facility. The facility did not have radio communications, and the operator had not issued a NOTAM to advise pilots that the helideck was closed.
- August 6, 2016. After landing on an unmanned facility, the pilot noticed a section of helideck skirting was missing and the three metal retaining bars that had held the skirting were bent upward creating a hazard. The closest metal bar was eight inches from the tail rotor. There was no indication that the helideck was closed (no NOTAM, marking, or status light).
August 15, 2016. A similar incident occurred on another facility when the pilot noticed several retaining bars for the helideck skirting that were raised and not properly attached to the skirting. The helicopter operator issued a NOTAM warning pilots while the facility operator was repairing the helideck.

Recommendations

Operators should:

- Immediately report aviation hazards on their facilities to their aviation service provider for dissemination as a NOTAM.
- Provide updated warnings of hazards to inbound and outbound aircraft during radio calls.
- Use recognized industry standards to indicate unsafe landing areas.
- Properly mark temporarily closed helidecks as provided in NTL No. 2011 N-08.
- Develop standardized documents that provide helideck information (aka Helideck Information Plates) for all OCS helidecks. Aviation Service Providers should assist Operators as needed.
- Ensure all markings and lighting are in good repair and clearly visible to pilots.

Pilots should:

- Check NOTAMs before each flight.
- Contact the facility by radio for clearance to land and to update any hazards.
- Visually check for hazards during the high and low recons.
- Use Crew Resource Management (CRM) to get everyone looking for hazards.
- Plan their approach to the “H” at the center of the Touchdown/Positioning Circle Marking (aka TDPM or aiming circle). Obstacle clearance is predicated on the pilot landing with their seat over the TDPM/aiming circle.
- Report any undocumented hazards to the helideck operator and to your company.

Safe aviation operations on the OCS is a team effort that demands the attention of oil and gas operators, aviation service providers, regulators, and pilots.

A Safety Alert is a tool used by BSEE to inform the offshore oil and gas industry of the circumstances surrounding an accident or a near miss. It also contains recommendations that should help prevent the recurrence of such an incident on the Outer Continental Shelf.