

Safety Alert From the International Association of Drilling Contractors

ALERT 09 – 31

HELICOPTER WHEEL SNAGS HELIDECK NET Near Miss with High Severity Potential

WHAT HAPPENED:

Just before lifting off the helideck, the helicopter moved slightly forward and slid to the side causing the net on that side to buckle up and catch on the wheel. The Helicopter Landing Officer (HLO) observed the net caught on the wheel and radioed to inform the pilot. Fortunately the net self-released from the wheel as it was lifted about 30 cm (1 ft) off the helideck.

Potential Consequences:

Dynamic rollover resulting in multiple (including fatal) injuries and extensive property damage including destruction or loss of the helicopter overboard.

WHAT CAUSED IT:

- 1. The helideck net was not tensioned as recommended.
- 2. The helicopter moved forward and slid to the side causing the net to buckle up.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

- Ensure that the HLO and his crew are well trained to inspect the helideck and surrounding areas; be equipped with a constant means of communication with the pilot; and be fully alert during landing and takeoff for any sign of danger and know when to immediately inform the pilot.
- Check helideck net for proper tension (see below) before all helicopter arrivals.
- Comply with regional regulations governing helideck nets. One standard for guidance on offshore helidecks is **CAP 437** which goes into great detail on the layout and tensioning of helideck nets. (Rigs in the United States Gulf of Mexico are not required to have helideck nets so there are no governing regulations for the US GOM.) **CAP 437** states the following concerning tensioning the net:
 - Tautly-stretched rope netting should be provided to aid the landing of helicopters with wheeled undercarriages in adverse weather conditions. The intersections should be knotted or otherwise secured to prevent distortion of the mesh. It is preferable that the rope be 20 mm (0.787 in) diameter sisal (strong fiber rope), with a maximum mesh size of 200 mm (7.87 in). The rope should be secured every 1.5 meters round the landing perimeter and tensioned to at least 2225 N (500 lbs).netting may be made of other material but should *not* be constructed of polypropylene-type material which is known to readily deteriorate and flake when exposed to weather. Tensioning to a specific value may be impractical offshore. As a rule of thumb, it should not be possible to raise any part of the net by more than approximately 250 mm (7.8 in) above the helideck surface when applying a vigorous vertical pull by hand.

References:

Company's Helicopter Operations Guidelines: "Helideck tension, if fitted with a net."

U.K. Civil Aviation Authority, CAP 437 Offshore Helicopter Landing Areas – Guidance on Standards, Sixth Edition, December 2008. The entire document can be seen at <u>http://www.caa.co.uk/docs/33/CAP437.PDF</u> The above info on helideck netting is in chapter 3, page 12, Section 7.3.

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.