



Bureau of Safety and Environmental Enforcement

BSEE Overview and Safety Alert 322 – Helideck Hazards

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October 20, 2016

“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”



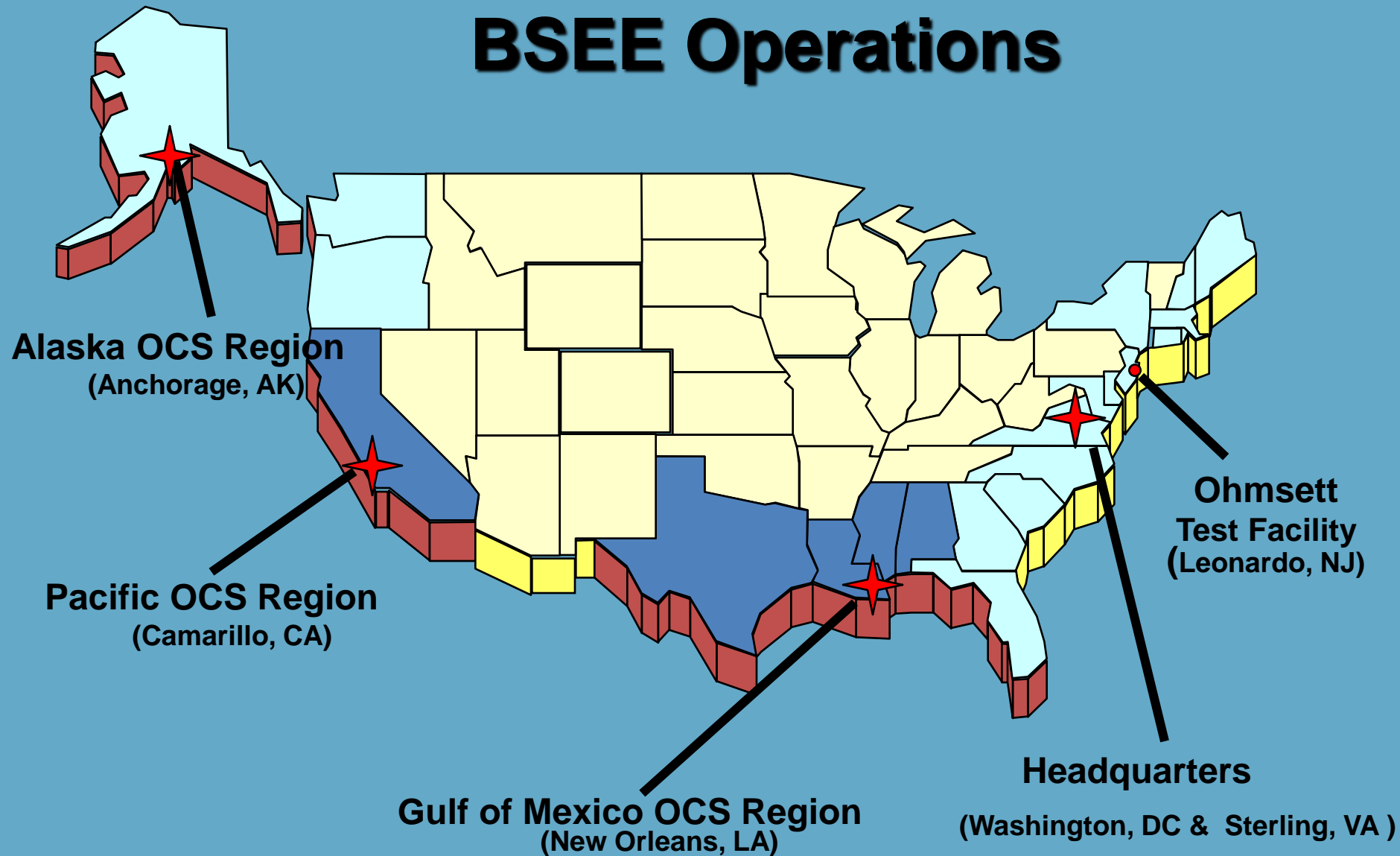
Bureau of Safety and Environmental Enforcement

Mission Statement

“BSEE works to promote safety and efficiency, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.

Aviation plays an important role in being able to accomplish that objective”

BSEE Operations





Accidents Happen:

- **Centers for Disease Control and Prevention (CDC), *Fatal Injuries in Offshore Oil & Gas Operations –U.S., 2003-2010***
 - **Transportation to and from offshore facilities was the leading cause of death for offshore oil & gas workers during 2003-2010.**
 - **Specifically, "75% of [fatal] transportation events were associated with helicopters (49 fatalities).**

SAFETY ALERT



Safety Alert No. 322
30 August 2016

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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).

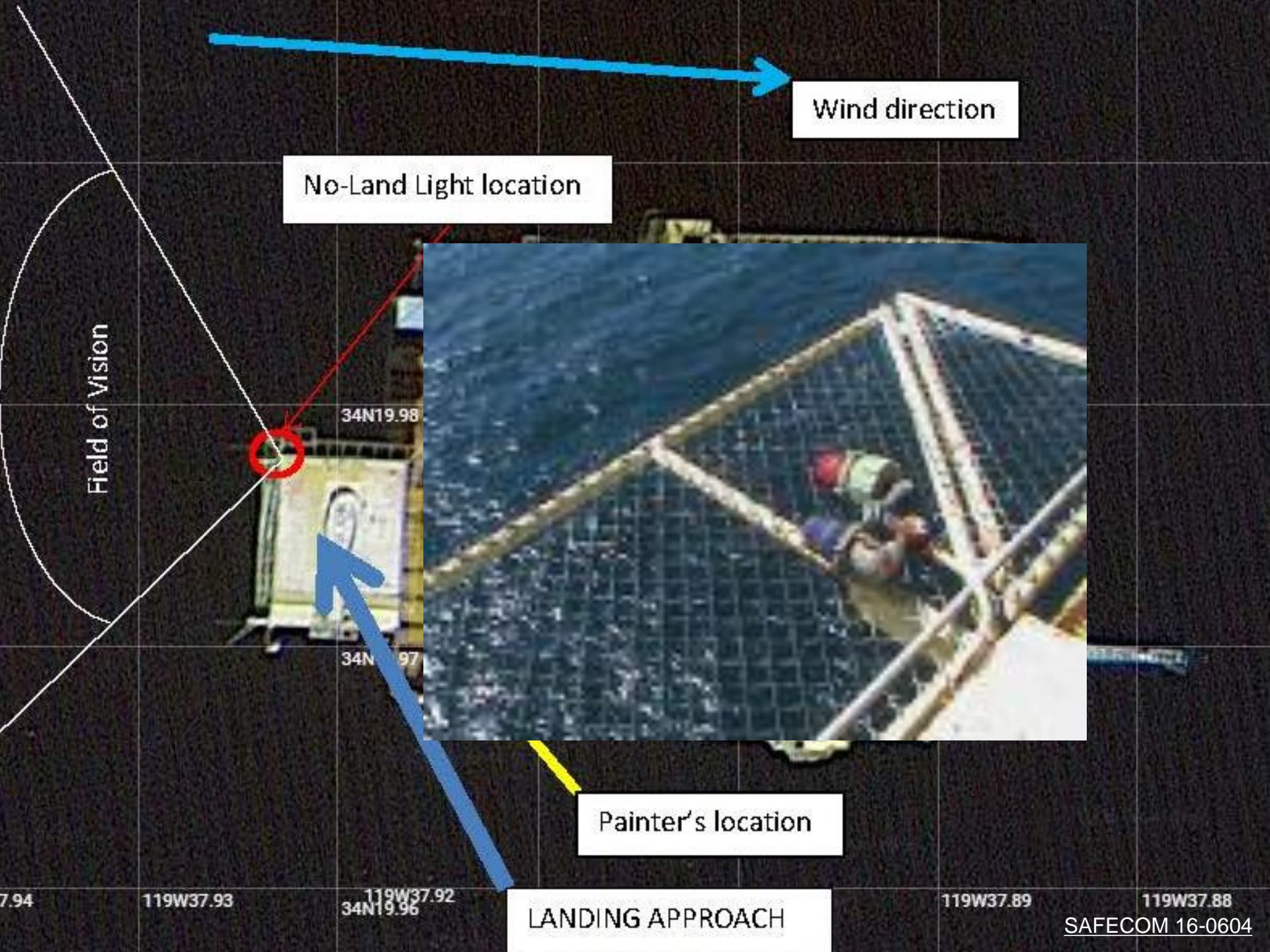
Significantly, the helideck size or design related issues are considered contributory in 11 of these accidents.

- 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.

<https://www.bsee.gov/guidance-and-regulations/guidance/safety-alerts>

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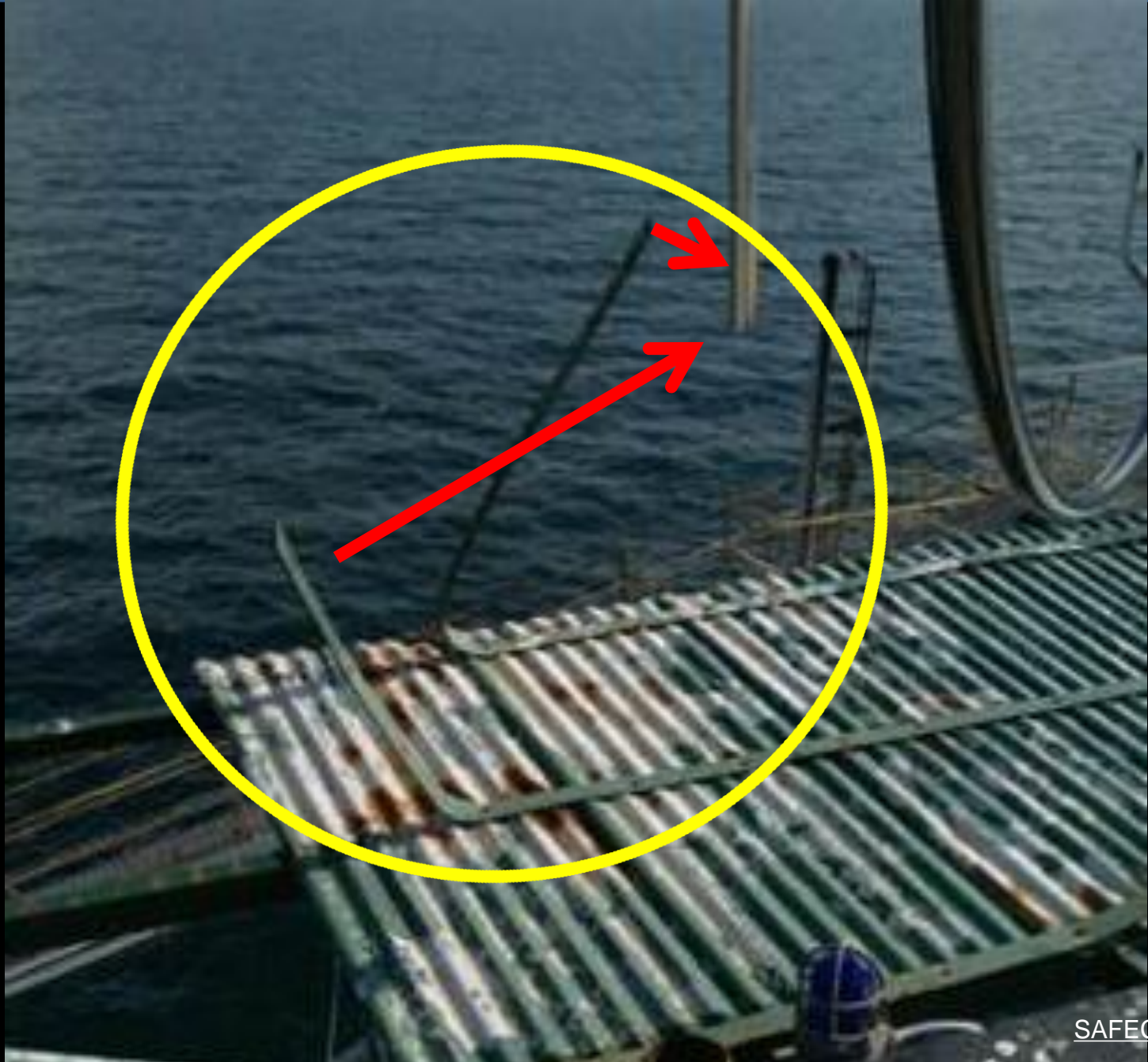




SAFECOM 16-0734

Missing section of helideck skirting.

The retaining bars have been bent downward and secured with rope. Also, notice how the color of the damaged skirting blends with the background.



SAFECOM 16-0734

These bars were approximately 3 feet from the tail rotor.

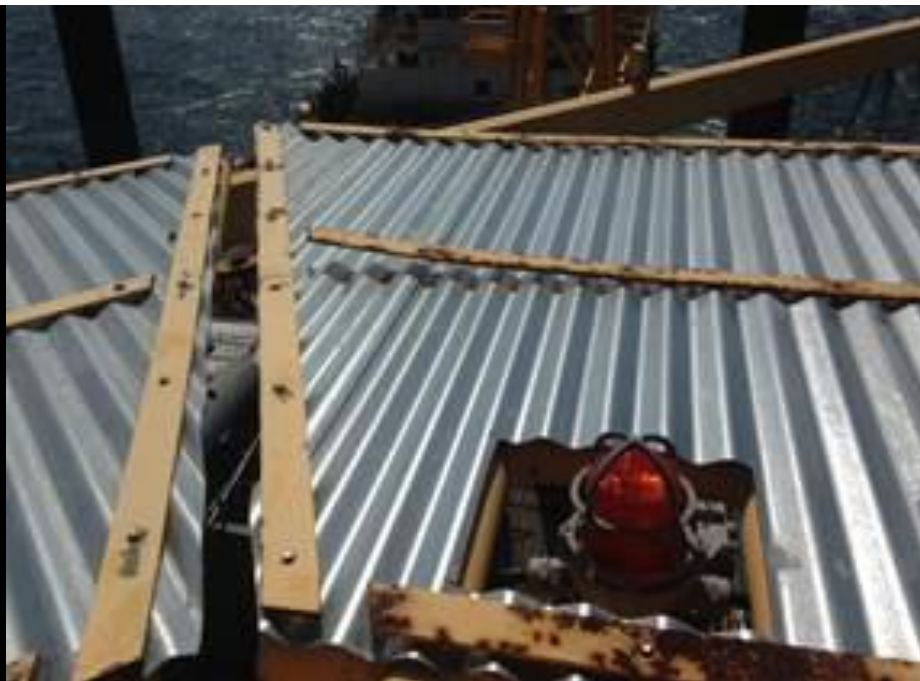


SAFECOM 16-0734

This bar was originally found bent upwards approximately 8 inches from the tail rotor. It was bent down prior to take off



Hazard Reporting Success



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.



Aviation Challenges

➤ Risk Tolerance (Seduced by Success)

BSEE 41+ years of accident free aircraft operations

Confidence in Vendor

+

Lack of Accidents

+

Competing Priorities

=

**Tolerance of inherent hazards and resistance to change
(seeing risks as normal)**



Tolerance for Risk

- **The Challenge is to maintain alertness at all levels of BSEE and our vendors.**
- **What BSEE's doing:**
 - Focus on reporting and investigation of minor events
 - Daily feedback up and down the chain of command
 - Entire senior leadership team from the Director on down reviews new SAFECOMs as the are received



Bureau of Safety and Environmental Enforcement

➤ **Involvement of vendors and BSEE**

- District-level weekly safety briefings led by vendor pilots
- Regional-level monthly Operations and Safety meetings (BSEE and vendor managers and operational personnel)
- Annual review of BSEE aviation incidents at Inspector's Workshop (all BSEE managers and inspectors).

Questions

