

IMCA Safety Flash 14/09

October 2009

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links. Additional links should be submitted to webmaster@imca-int.com.

1 Failure of Gas Supply to Diving Bell

A member has reported an incident in which there was a failure of the breathing system in a diving bell. During diving operations at a storage depth of 102 metres, bell checks were being carried out on one of the bells. The bellman did a full function test on the built-in-breathing system (BIBS) of the bell and it was established that the gas supply system had reduced flow to the BIBS at depth. After getting all divers to put on their own individual BIBS in the bell, to test the gas system, it was found that there was reduced and insufficient gas to supply the full dive team in the bell.

The following actions were taken as part of the investigation.

The dive team made similar checks on the BIBS in the second (port side) diving bell and the same problem was discovered. The starboard bell was surfaced and BIBS was then checked at the surface. The BIBS system could supply three divers at the surface, but under pressure the supply to the divers was inadequate.

The dive system was a new build and it was the first time it had been at a depth of 102 metres. The BIBS system had not been fully tested at this depth. The regulators were stripped to check for defects and none were found. A test rig was then set up in the workshop to mimic the BIBS arrangement and the pressure in the diving bell, where the flow was similarly found to be inadequate.

The problem was solved by fitting a higher performance regulator. This was found to give a far better flow rate on surface. The bell was then blown back down to storage depth, all three divers donned BIBS and a full function test was carried out. Good flow was reported from all divers. The same process was repeated with the port side diving bell with good results.

The company involved drew the following lessons from the incident:

- ◆ A full function test of the breathing system (BIBS and dive hats/band masks) at all maximum working depths should be conducted whenever there is significant change, including the following occasions:
 - when a new build saturation system is first put into commission
 - if the depth range of the dive system has changed to a deeper depth
 - following any changes, any maintenance or any modifications
- ◆ It can be shown that during set-up for any new dive operations (e.g. at new locations or new depths) a simple purge of the BIBS and dive hats/band masks is not adequate to establish the full functionality of the breathing system.

2 Torn Ankle Ligaments

The Marine Safety Forum has published the attached safety flash concerning a crew member injured whilst stepping from one vessel to another when no gangway was available.

3 'Potential Threat to Aviation Posed by Skysails

We have received two safety alerts – from CHC Helicopter and the European Organisation for Safety of Air Navigation (Eurocontrol) – concerning a recent incident involving a Skysail, an experimental supplement to standard ship propulsion.

Marine Safety Forum – Safety Flash 09/30

Issued: 31st August 2009

Subject: Torn Ankle Ligaments

Summary:

A vessel was moored along side another ship, port side too. No means of gangway was available, due to the fact that the lay out of both vessels differed. He climbed from the rail fence of the vessel on to the fence of the vessel alongside, turning around with his face towards his own vessel and placed his right foot on an edge of a hole of the deck (see picture for clarification). Because he stepped on this edge (which is about 3 cm high) he twisted his right ankle resulting in the injury as described. He was aware of the grid, but did not see the edge around it.

Facts found during the investigation

The following facts were acknowledged and recognised as a contributing factor.

- Edge is the same colour as the surrounding deck
- Due to the different shape of both vessels, no means of gangway was installed
- Crewmember did not see where he put his right foot, possibly caused by the shadows of the railwork.



Preventive actions Using a gangway when leaving the ship or coming on board is essential. All efforts must be taken to avoid people climbing and scrambling from one vessel to another. When alongside other vessels, contact your colleague on the other vessel, when you think a safe passageway can not be created.

The vessel where the accident took place has been requested to mark the edges in a different colour, to pinpoint the difference in height.



We advise all vessels to check all decks and identify and mark all possible obstacles.

The involved crewmember resumed his job, after 7 weeks of absence.

Watch your step when walking around your vessel. A miss-step is easily made; the consequences can be very severe!

CHC Helicopter Safety Alert

Area:	Southern North Sea	Date of Incident:	15 Sep 09
Operation:	Oil & Gas	Incident Location:	Offshore
Contact:	Duncan Trapp, Safety & Regulatory Manager, EO	Contact details:	+44 (0) 1224 846455 dtrapp@chc.ca

Title: Potential Threat to Aviation from Skysails

Brief Account of Events:

The aircraft was descending to the operating area in the Dutch offshore sector and identified a large kite/skysail flying at around **1000 ft** (just below the clouds) ahead of a vessel.

The 'skysail' itself was in the flightpath of the aircraft as it headed towards a nearby installation and, although difficult to see against the cloudy backdrop, was seen to be moving around ahead of the vessel in an erratic manner. The long cable, on which the skysail was extended, was also difficult to see.

The vessel can be seen in the picture below with the 'skysail' circled in red. The approximate line of the cable has also been marked on the picture.

Details of the vessel, its location and the potential threat to aviation posed by the 'kite' were passed to the local ATC unit and onwards to the Coastguard.

The crew advised another nearby platform that the vessel was moving towards their operating area and also informed base operations as soon as possible.

Further research has shown that this is one of the first in a line of 'experimental' vessels using 'skysails' to supplement the traditional propulsion units.



Findings:

Root Cause(s) (Preliminary Findings):

The introduction of new, 'environmentally-friendly' propulsion methods posing a potential threat to aviation.

CHC's Response:

The following actions must be adhered to:

The issue has been raised with the Dutch Coastguard and the Regulatory Authorities to allow them to consider the issue in broader terms.

Interim solutions will be explored to identify the potential threat posed by this specific vessel when operating under Skysail within the Southern North Sea.

For now, all crews are to be aware of the existence of this threat and should report any sightings through the local ATC frequency to allow other aviation assets to be made aware.

In addition, events such as those described are to be reported using the CHC Safety & Quality Integrated Database (SQID).

For absolutely every decision we make, safety must be the first consideration!"

Sylvain Allard, President and CEO

This information does not supersede any Company or OEM manual
Safety Information Only

Safety Warning Message

- *Safety Subject:* Maritime kite flying incident
 - *Origin:* Aircraft Operator
 - *Date:* 17/09/2009
 - *Distribution:* Aviation Safety Professionals
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SYNOPSIS

- EUROCONTROL Agency has been informed of an incident that happened on 15 September 2009 over the Southern North Sea:
 - **“The aircraft was descending and identified a large kite/skysail flying ahead of the vessel and at around 1000 ft (just below the clouds).**

It was attached to the vessel and was in the flight path of the aircraft as it headed towards a nearby installation. The 'skysail' was extended on a long cable and was moving around the vessel in an erratic manner

Further research has shown that this is one of the first in a line of ‘experimental’ vessels using ‘skysails’ to supplement the traditional propulsion units.”

- The photograph below is an illustrative example of a “skysail”:



YOUR ATTENTION IS REQUIRED

- Aviation Authorities are invited to review their kite flying legislation, rules, applicable constraints and required coordination.
- Aviation Service Providers are invited to note the subject and investigate the relevance in their operational environment.
- Aviation Professionals are invited to share their knowledge and experience about the described issue.

DISCLAIMER

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