



### Report on marine incident

RNSA no: **2014-S082**

Ships name: **Samskip Akrafell (IMO 9271963)**

Date: **6 September 2014**

Location: **64°55'711N and 013°40'583W on shallows east of Bakur Skerry outside Vattarnes Point south of the Reydarfjörður entrance.**



Incident: **Runs aground, officer on watch (OOW) falls asleep**

**No. 2014-S082 Samskip Akrafell*****Runs aground at Vattarnes Point, OOW falls asleep***

Registration No. 9271963  
Built: China 2003, steel  
Flag: Cyprus  
Tonnage: 4,450 GT  
Length overall: 99.99 m  
Width: 18,60 m Depth: m m  
Engine: MAN 4320 kW, 2003  
Number of crew: 13



Samskip Akrafell ©Hilmar Snorrason

**Information:**

Master's report

Police reports

Icelandic Transportation Safety Board information

A final report was processed at the meeting on 29 April 2016 by Ingi Tryggvason, Hilmar Snorrason, Pálmi K Jónsson and Hjörtur Emilsson

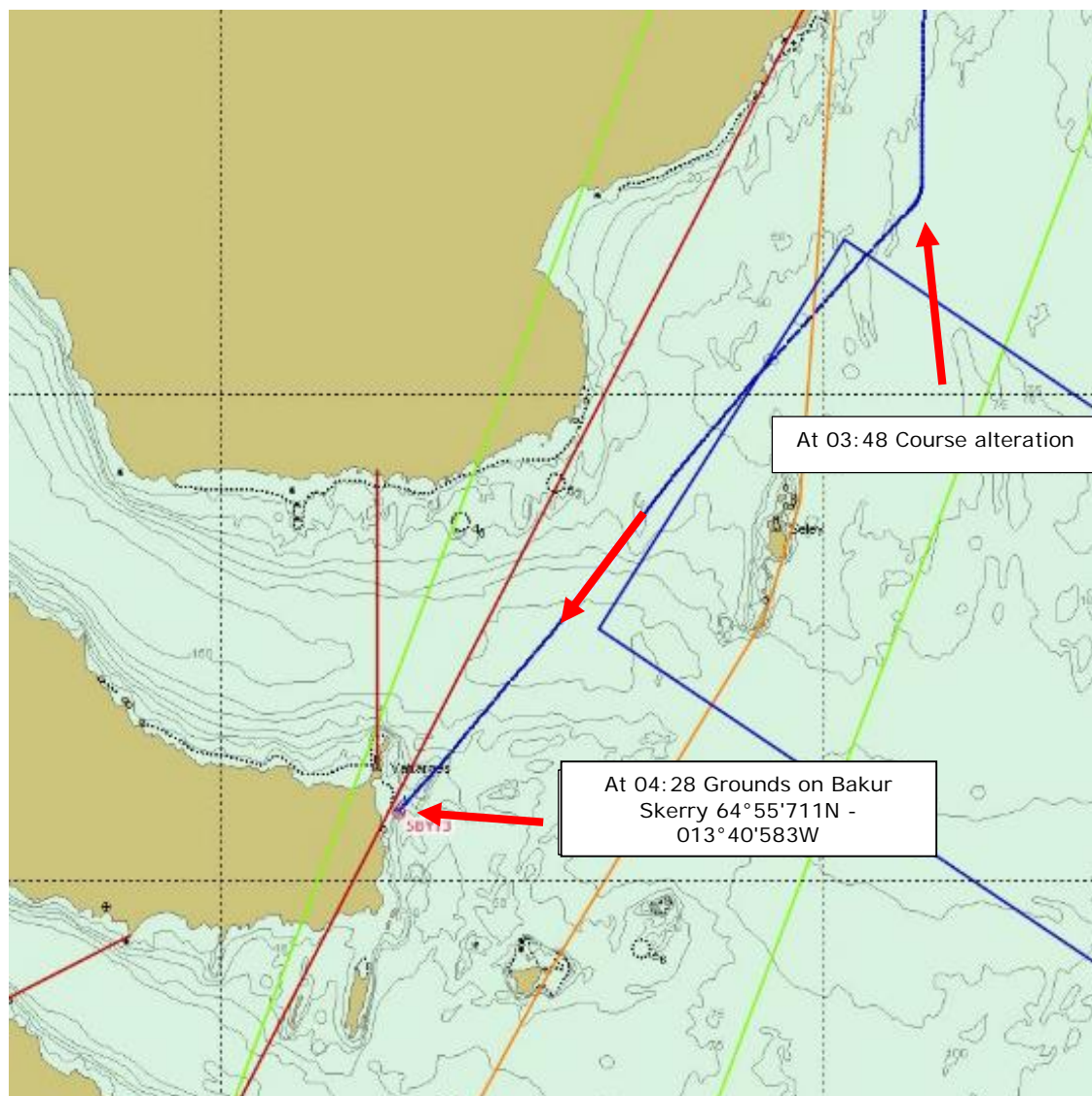
The purpose of the investigation is not to attribute or apportion liability and it shall not be used as evidence in any criminal proceedings

**Description of events:**

On 6 September 2014, Samskip Akrafell was sailing from Akureyri to Reydarfjörður. Draught forward: 5.50 m and aft 6.60 m. Speed over water (SOW) 12.7 knots. Weather: Calm wind, overcast and calm sea.

At 03:48 UTC when the vessel was located south of Gerpir Point, the course was set between Seley Island and the mainland but on that route the OOW (*Chief Officer*) fell asleep. According to the AIS track (*Figure 2*) from the Maritime Traffic Service (MTS), a course alteration was made at 03:48 UTC and after that the course 220° was maintained. At 04:28 UTC the vessel grounded at 64°55'711N and 013°40'583W on shallows east of Bakur Skerry outside Vattarnes Point south of the entrance of Reydarfjörður. (See *Figure 1*)

**Photo 1** Samskip Akrafell at the grounding site © RNSA



**Figure 2** AIS track chart and grounding site of Samskip Akrafell/VSS

Soon ingress of water into the engine room was noticed and the master requested that the main engine should be stopped but shortly afterwards the ingress had increased to a point that the auxiliaries needed also to be stopped.

According to a sounding conducted by the crew around the vessel on the grounding site, the depth was found to be in excess of 15 m, but the crew did not have a longer measuring tape at their disposal, except on the starboard quarter of the vessel, where it proved to be about 6 metres. While checking for leaks, the crew found leakage from the pipe tunnel between the bottom ballast tanks, which was open into the engine room.

Rescue units arrived quickly at the scene as well as the fishing vessel *Aðalsteinn Jónsson SU*, which had been under way in Reydarfjörður. Later the Coast Guard Vessel *Ægir* arrived at the scene. Pumps were brought on board *Samskip Akrafell* but initially pumping operations failed to contain the ingress. However, after divers managed to fully

close the tunnel watertight hatch in the engine room, the leak could be contained and lightening the vessel which resulted her to re-float from the grounding site at high tide. Draft after re-floating: 4.6 m forward and 7.0 m aft.

Aðalsteinn Jónsson SU towed Samskip Akrafell to the port of Eskifjörður and thereafter she was towed to Reydarfjörður where her cargo was discharged. The vessel had suffered considerable damage and the condition of the cargo remained uncertain. Reefer containers were without electricity for about 24 hours.

Ten rescuers who worked on pumping from the vessel's engine room in cramped and difficult conditions, required medical care due to carbon dioxide poisoning from fuel-powered pumping equipment. They all recovered fully.

After the incident, the vessel was declared total loss and was towed abroad to be broken up.

### ***The investigation revealed:***

- that the OOW was alone on the bridge and said he had not fallen asleep, but had become absent-minded. He believed that this happened because he was tired;
- that the OOW was in charge of the navigational watch from 18:00-20:00 (UTC +2) the day before and after cargo inspection he had gone to bed around 21:15. At 03:30 (UTC +2) he woken up and assumed the navigational watch at 04:00 (UTC +2);
- that the last course alteration had been made at 03:48 UTC and after that the OOW had navigated carefully until he passed Seley Island. After that he had become absent-minded, his situational awareness degraded, until he felt the impact when the vessel ran a ground. The figure 3 (*scenario*) shows where and how the OOW had been standing on the bridge when the ship grounded. He said he tilted over the console when he became absent-minded and had been in that position at the time of grounding;



**Figure 3** The position of the OOW at the time of grounding (scenario)

- that the OOW said he had not rested adequately recently for personal reasons and the last three days had been difficult. It was stated that this situation had lasted for approximately a week;
- that the watch-keeping duties of the OOW had been two shifts in every 24 hours, i.e. from 04:00-08:00 and from 16:00-20:00 as well as unspecified work beyond these hours during loading and discharging in port. It was revealed that this arrangement in port had significantly impacted his intended rest hours;
- that the watch-keeping arrangement when sailing between domestic ports was to have a single watch-keeper on the bridge due to the heavy workload on the crewmembers in ports. This arrangement was the master decision;
- that various alarm equipment was available on the bridge but was not used, for example the watch-keeping alarm giving alarms at five-minute intervals and a radar alarm circle around the vessel. As to the master statement the watch-keeping alarm was always used, except on shorter routes, when it would be turned off but in this case they had forgotten to turn it on;
- that paper charts were used for navigation and the voyage plan was made by the second officer and approved by the master;
- that the OOW said he was familiar with this area and had sailed there five or six times before;
- that according to the Safety Management System (SMS) the watch-keeping arrangements on the bridge (*Document: STANDING ORDERS DECK*) there are no provisions on safe manning or instructions on the use of an alarm system such as a watch-keeping alarm. Below is a copy (*Figure 4*) of the vessel's watch-keeping principles to be observed by the OOW. Other orders in the same document request a for regular surveillance of the OOW the circumstances which the master should be notified;

Standing orders for watch keeping officer
<p><b>Principles to be observed in keeping a navigational watch:</b>            Keep the watch on the bridge            In no circumstances leave the bridge until properly relieved            Continue to be responsible for the safe navigation of the ship, despite the presence of the master on the bridge, until informed specially that the master has assumed that responsibility and this is mutually understood            Notify the master when in any doubt as to what action to take in the interest of safety            In case of need, the officer in charge shall not hesitate to use helm, engines and sound signaling apparatus            Officers of the navigational watch shall know the handling characteristics of their ship, including its stopping distance, and should appreciate that other ships may have different handling characteristics            A proper record shall be kept during the watch at the movements and activities relating to the navigation of the vessel</p>

**Figure 4** Watch-keeping rules according to the ship's Safety Management System (SMS)

- that it was revealed that the OOW thought the vessel was undermanned, an additional watch-keeping officer was needed due to the high workload according to the voyage plan;
- that according to the watch instructions of the ship (*Figure 5*), two men should always be on the navigational watch on the bridge. It was revealed that the master had changed these instructions to rest deck hands on this route;

Position / Rank <sup>1</sup>	Schedule Daily Work Hours at Sea		
	Watch keeping (from-to)	Non-Watching Duties (from - to) <sup>2</sup>	Watch (fr
MASTER	08.00-12.00 / 20.00-24.00	13.00-15.00	
CH. MATE	04.00-08.00 / 16.00-20.00	08.00-10.00	06.00-12.00
2ND. MATE	20.00-04.00 / 12.00-16.00	10.00-12.00	00.00-06.00
CH. ENGINEER		06.00-11.00 / 13.00-18.00	
2ND. ENGINEER		06.00-11.00 / 12.00-18.00	
EL. ENGINEER		06.00-12.00 / 13.00-18.00	
BOSUN		06.00-12.00 / 13.00-18.00	06.00-12.00
A/B	20.00-04.00 / 12.00-16.00	10.00-12.00	06.00-12.00
A/B	04.00-08.00 / 16.00-20.00	08.00-10.00	00.00-06.00
O/S	08.00-12.00 / 20.00-24.00	13.00-15.00	00.00-06.00
OILER		06.00-12.00 / 13.00-18.00	
COOK		06.00-10.00 / 14.00-18.00	

Signature of Master \_\_\_\_\_

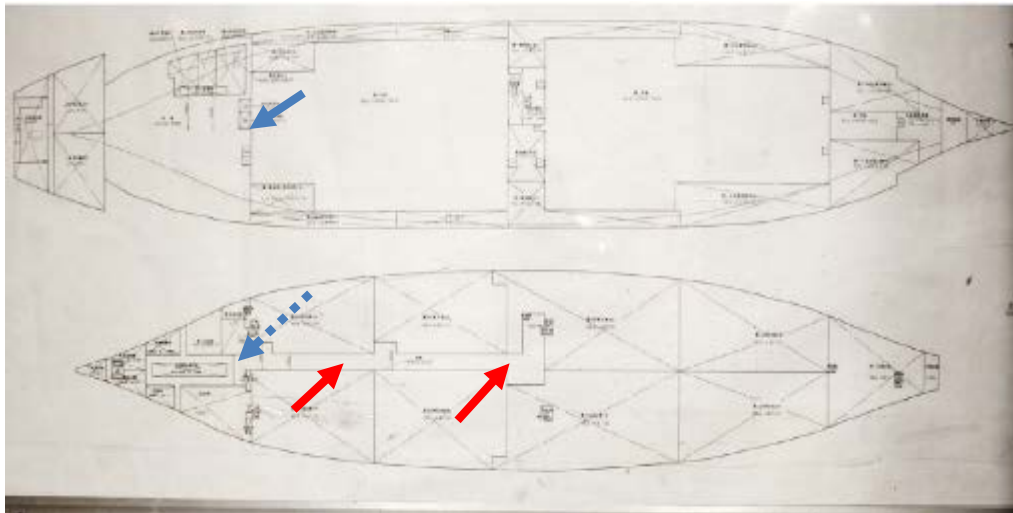
MASTER  
m.v. "Samskip Akrafell"

Figure 5 Watch instructions of the ship

- that according to the AIS track, the ship grounded at 04:28 UTC but it was not until 04:50 UTC, i.e. 22 minutes later, that the master reported the incident and the situation on board to MTS;
- that no oil spill leaked from the ship after the grounding. On board the vessel were 160/165 mt of heavy fuel oil (*HFO LS*) and 35 mt of marine diesel oil (*MDO*);
- that considerable ingress of water was to the engine room and when engineers arrived there, they saw a leakage from the pipe tunnel watertight hatch in the forward part of the engine room (*Figure 6 and 7*). The watertight hatch was clamped down but not tightly and water could freely flood in. The engineers had tried to clamped the watertight hatch tighter but also believed that they had seen leaks further down in the engine room in an unspecified location;



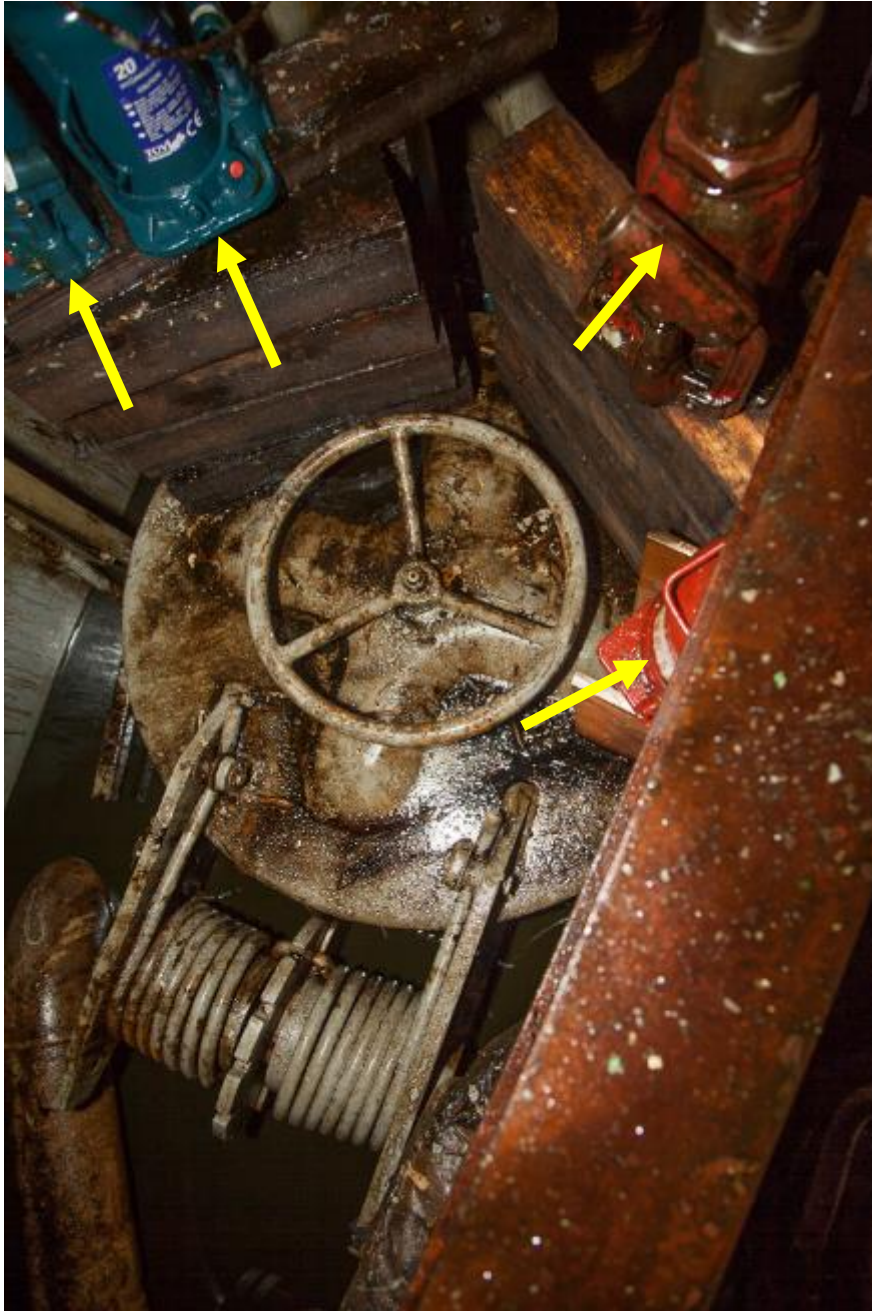
**Figure 6** The hatch to the pipe tunnel



**Figure 7** The blue arrows indicate the location of the hatch openings and the red ones indicate the pipe tunnel

- that since pumping from the engine room proved difficult, it was necessary to send divers down to contain the leak by the hatch. In order to tighten the hatch, the divers had to fit wooden blocks and use four powerful jacks to press the

hatch down (*Figure 8*). Upon completion of that operation, pumping proved successful;



**Figure 8** Jacks and wooden blocks beneath them on top of the hatch cover

- that it was not clear why the watertight hatch to the tunnel was open during the final voyage;
- that the ITSB retrieved information from the vessel's VDR (*Voyage Data Recorder*);
- that the OOW joined the ship in November 2013 and had seagoing service experience as a deck officer since 2001;
- that all crew members underwent an alcohol test which was found to be negative.



*Conclusion of the Board:*

The cause of the grounding was that the OOW fell asleep while navigating the vessel.

The Board believes that all watch-keeping arrangements, i.e. manning and/or the use of a watch-keeping alarm, had not been in accordance with important emphasis on the safety of the vessel, crew, cargo and the environment.

The Board also notes that the pipe tunnel watertight hatch should have been closed during a voyage, according applicable rules.