



CIAIM REPORT 29/2017

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the “South Harbor” anchorage of the Port of Las Palmas on 13 March 2017

NOTICE

This report was written by the Maritime Accident and Incident Investigation Commission (CIAIAM), which is regulated by Article 265 of the Revised Text of the Law on State Ports and the Merchant Marine, approved by Royal Legislative Decree 2/2011 of 5 September, and by Royal Decree 800/2011 of 10 June.

The purpose of the CIAIM when investigating maritime accidents and incidents is to obtain conclusions and lessons learned that can reduce the risk of maritime accidents, and thus contribute to improving maritime safety and to preventing contamination from ships. To this end, the CIAIM conducts a technical investigation into each case that aims to determine the causes and circumstances that may have, directly or indirectly, influenced the accident or incident and to make the relevant safety recommendations.

This technical report does not, under any circumstance, prejudge any decision that may stem from legal proceedings, nor does it seek to evaluate responsibilities or assign blame.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017



Figure 1. Merchant Vessel (M/V)
INTERLINK UTILITY



Figure 2. Area of the accident

1. SUMMARY

On the morning of 13 March 2017, the bulk cargo merchant vessel (M/V) INTERLINK UTILITY, flying the flag of the Marshall Islands, arrived at the Port of Las Palmas for the purpose of refueling. Since there was a queue for refueling, the ship's captain was instructed to drop anchor in the south harbor at the Port of Las Palmas. The ship was anchored at this location without incident.

At some point, the officer of the deck noticed that the ship was starting to drag the anchor, so he called the captain. When he reached the bridge, the captain called the engine room to start start the main engine. The start was delayed a few minutes, enough for the ship, which had anchored near the coast, to continue dragging toward the coast until its stern impacted the rocky bottom.

The impact cracked several sheets in the hull near the engine room and in one ballast tank, resulting in various leaks that were able to be brought under control. The ship was instructed by the Harbor Master to proceed to port to repair the damage caused.

1.1. Research

The CIAIM was notified of the accident on 14 March 2017. That same day the event was classified as a "serious accident", and the Commission agreed to open an investigation. The CIAIM board approved the event's classification and the opening of a safety investigation. This report was reviewed by the CIAIM at its meeting of 15 November 2017 and, after its subsequent approval, was published on March 2018.

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CIAIM REPORT 29/2017

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

2. OBJECTIVE INFORMATION

Table 1. Ship/vessel information.

Name	INTERLINK UTILITY
Flag/Port of registry:	Marshall Islands / Majuro
Identification	IMO Number: 9714795 MMSI: 538005709 Call sign: V7GG9
Type	Dry bulk carrier with 4 cranes and 5 holds
Main characteristics:	<ul style="list-style-type: none"> • Overall length: 179.95 m • Length between perpendiculars: 177.0 m • Beam: 32 m • Maximum summer draft: 10.5 m • Gross tonnage: 25,546 GT • Displacement: 48,863.3 t • Dead weight: 38,706.3 t • Hull material: steel • Speed: 14 knots • Propulsion: MAN 5S 50ME-B9.3 diesel engine with a MCR of 6100kW at 99 rpm
Ownership and management	UTILITY MARITIME LLC
Registration Company	American Bureau of Shipping
Construction details	HUATAI HEAVY INDUSTRIAL LTD. (China), 2016

Table 2. Details of the voyage

Ports of arrival / transit / destination	Departed from Mykolaiv (Ukraine) / Port of call in Las Palmas to refuel / destination Lagos (Nigeria).
Type of voyage	International
Cargo information	Foll load of 35,093.6 t of bulk corn
Complement	21 crew, all of them Chinese nationals: - 1 Captain, 3 Bridge Officers, 1 Boatswain, 3 Seamen and 3 Ordinary Seamen - 1 Chief Engineer, 2 Engine Room Officers, 1 Electrical Officer, 1 Mechanic, 1 Engine Cadets and 2 Oilers - 1 galley chief and 1 galley assistant
Documentation	The Port Authority of Las Palmas conducted a MOU inspection ¹ of the vessel after the accident, finding no deficiencies in this area.

¹ *Memorandum of Understanding*. Initials used to denote inspections of foreign ships, as per the Paris Memorandum, by the State that runs the port, regulated in Spain by Royal Decree 1737/2010.

CIAIM REPORT 29/2017

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

Table 3. Information on the event

Type of event	Loss of control and subsequent flooding
Date and time	13 March 2017 at 15:00 UTC
Location	28°06.823' N; 015°24.202' E
Ship operation and segment of voyage	At anchor awaiting refueling
Shipboard location	Bottom plating
Damage to ship	A total of 13 damage areas, listed from bow to stern in the description included in section 2.1.1. This damage was found by the divers contracted by the shipowner. The most serious, which resulted in leaks, were the two hull breaches in the engine room (on the port and starboard sides, between frames 25 and 30), as well as the breach in the port no. 3 ballast tank (frame no. 140).
Injured / missing / fatalities onboard	No
Contamination	No
Other damage external to ship	No
Other personnel injuries	No

Table 4. Maritime and meteorological conditions

Wind	Beaufort scale 5 to 6 (17 to 27 knots) from the NE
Sea state	Heavy seas and ground swell from the NNE with a significant wave height of 3 to 4 m.
Visibility	Normal (2 to 5 miles)
Forecast issued prior to the accident	According to the AEMET forecast for the coastal waters of Gran Canaria, issued at 11:00 on the 13th and valid for the next 24 h: "Northeast force 6 or 7. Heavy with very heavy areas. 3 to 4 meter ground swell from the north".

Table 5. Response by officials on land and reaction by emergency services

Organizations involved	SASEMAR (Maritime Rescue) Rescue Coordination Center (CCS) at Las Palmas, Port Authority of Las Palmas
Resources used	<ul style="list-style-type: none"> • Rescue Ship (R/S) MIGUEL DE CERVANTES • R/S GUARDAMAR TALIA

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

	<ul style="list-style-type: none"> • Rescue vessel (R/V) SALVAMAR NUNKI • Port tug boats: <ul style="list-style-type: none"> ○ VB ALBORAN ○ VB BRANDY ○ VB MASTIN
Response time	Appropriate to circumstances.
Measures taken	Ship towed and safely docked. Assistance and escort until safely docked.
Results	Ship docked at port, flooding under control awaiting an inspection and evaluation of the damage prior to proceeding with repairs.

2.1. Other information

2.1.1. Description of the damage

Below is a description of the damage based on the report from the divers hired by the shipowner to conduct the underwater inspection after the accident (from the original report in English).

"Damage no. 1: The first of them, the crack N°1 is located in the frame 140, in the tank N°3 forward portside, it is located inside of an indent of 72 cm of large x 45 cm of wide and 1.3 cm of arrow, the aperture of the crack is big.

Damage no. 2 :More to aft between the frames 130-135 we observed one indent with friction and loss of paint of 65 cm large x 39 cm wide and 8 cm of arrow, no cracks.

"Damage no. 3: We continue toward stern and between the frames 125-130 we observed one indent with frictions and loss of paint of 49 cm large x 49 cm wide and 6 cm of arrow, no cracks.

Damage n°4 and n°5 : We continue toward stern and between the frames 120-125 we observed one indent with frictions and loss of paint of 71 cm large x 20 cm wide and 3 cm of arrow, no cracks. One meter more to aft from last one, we located other indent with frictions and loss of paint of 68 cm large x 15 cm wide and 7 cm of arrow

Damage no. 6 : We continue toward stern and in the frame 85 we observed one indent with frictions and loss of paint of 223 cm large x 116 cm wide and 7 cm of arrow, no cracks.

Damage no. 7 :We continue toward stern and between the frames 45-50 we observed one area with frictions of 1 meter large , no indents, no cracks, only frictions.

Damage no. 8:We continue toward stern and between the frames 40-45 we observed one indent with frictions and loss of paint of 20 cm large x 7 cm wide and 2 cm of arrow, no cracks.

Damage no. 9 and 10 :We continue toward stern and between the frames 35-40 we observed one indent with frictions and loss of paint of 337 cm large x 70 cm wide and 11 cm of arrow, no

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

cracks. In this frame we observed other indents more to aft of 200 cm large x 150 cm wide and 10 cm of arrow, no cracks.

Damage no. 11 : We continue toward stern and between the frames 30-25 we observed one indent with frictions and loss of paint of 70 cm large x 60 cm wide and 3 cm of arrow, no cracks.

Damage no. 12 : Between the frames 30-25 but in the centre line in the middle of the vessel we located one indent of 170 cm large x 48 cm wide and 4 cm of arrow, inside it we located the crack n°3, 80 mm large x 2mm wide.

Damage no. 13 : By the other side starboard is the last damage, one indent with a crack of 230 cm large x 70 cm wide x 30cm arrow, the aperture of this crack is big.

By other side we inspected the propeller, propeller cap and propeller blades, no locating any damages. The rudder was checked, locating friction in the down part in forward, one zone of 50cm with friction on the paint, no cracks."

2.1.2. International Cooperation

The CIAIM and the maritime accident investigation agency of the vessel's flag country, the Marshall Islands, reached an agreement pursuant to Chapter 7.1 of the Code of International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident (Casualty Investigation Code)², to have the CIAIM lead the investigation into this event, with the relevant agency in the Marshall Islands as a stakeholder in the investigation.

2.1.3. Voyage data recorder (VDR)

The CIAIM obtained a copy of the data stored on the VDR from the ship's captain. These data, however, were damaged and/or incomplete, and no valid data on the event were able to be extracted.

² Adopted by the International Maritime Organization by way of Resolution MSC.255 (84).

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

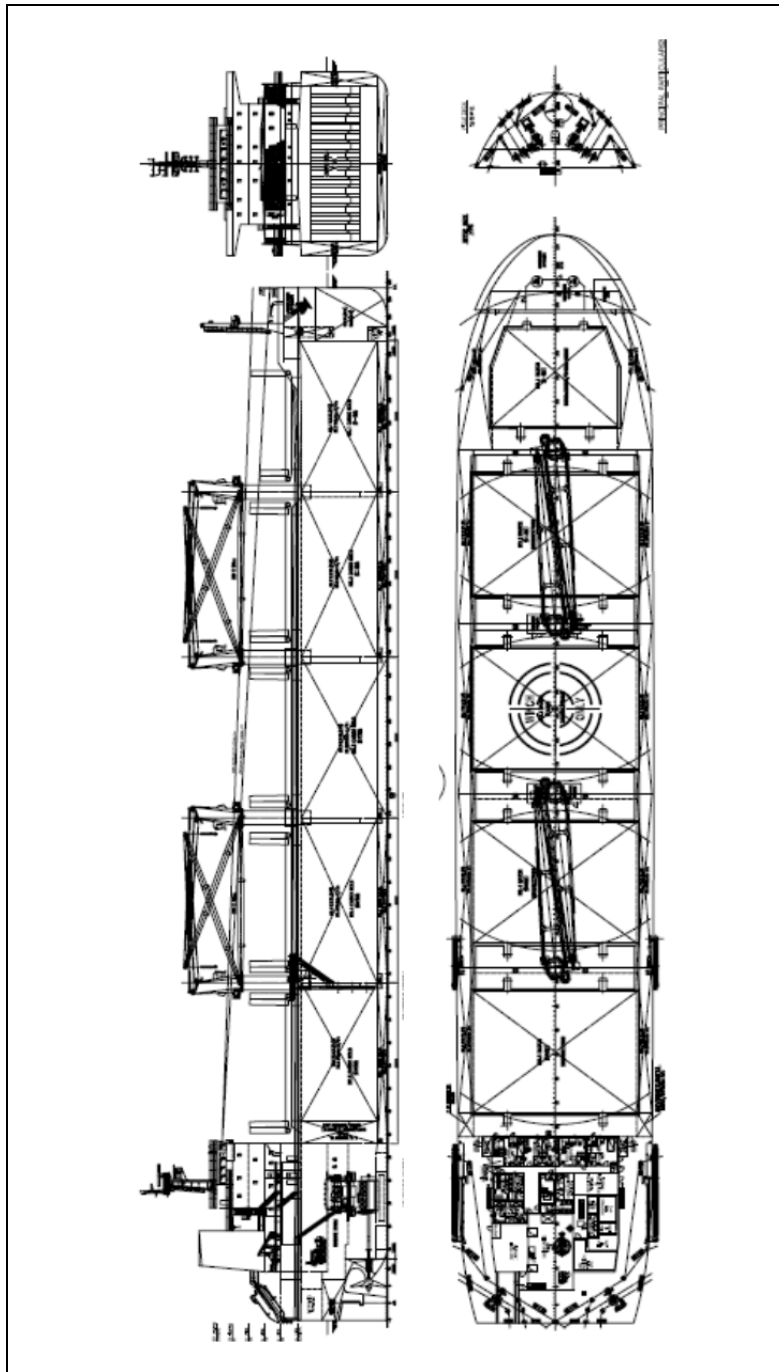


Figure 3. General layout

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

3. DETAILED DESCRIPTION

This description of the event is based on the available information, statements and reports. All times are local, which in this case is the same as UTC.

Certain discrepancies were identified between the times recorded by the ship, port services, rescue services and the communications between the parties, which were also examined by the CIAIM. There were disagreements between reports and records, all of a minor nature or understandable given the circumstances.

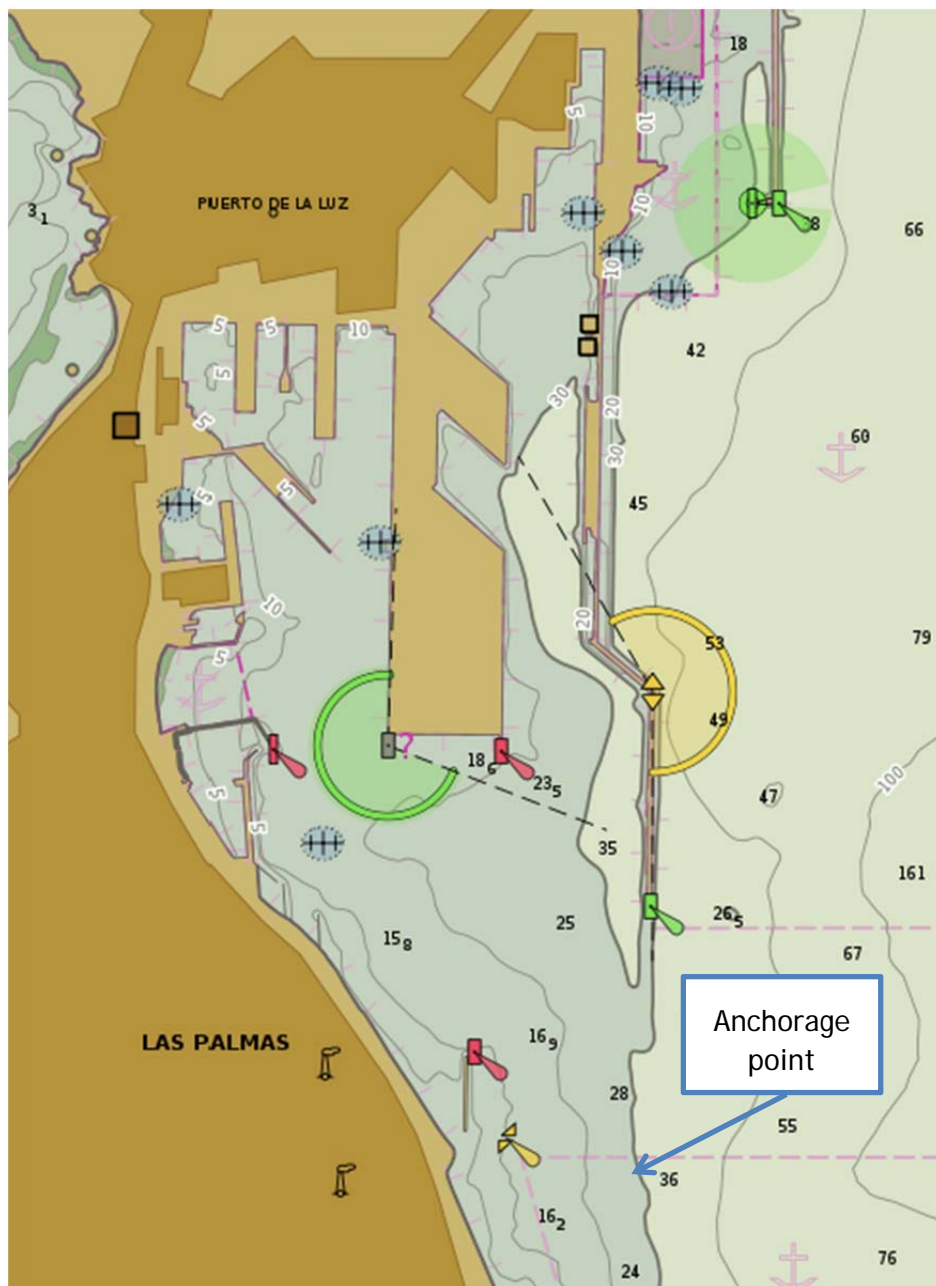


Figure 4. Puerto de La Luz and anchorage point of M/V INTERLINK UTILITY

CIAIM REPORT 29/2017

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

On 13 March 2017, the M/V INTERLINK UTILITY, flying the flag of the Marshall Islands, was sailing from the Ukrainian port of Mykolaiv to Lagos (Nigeria), with a cargo of 35,093.6 t of bulk corn. In keeping with the charterer's instructions, the ship was to make port in Las Palmas to refuel. After contacting the port's piloting service, it was instructed to drop anchor upon arriving.

As recorded in its Bell Book³, the ship logged the sea voyage as complete at 09:18, with the start of anchoring operations. It was assisted by the pilot's boat, which instructed it where to drop anchor, in the South Harbor. At 10:40 the ship was anchored with the starboard anchor, 7 shackles in the water, at position 28°06.823' N 015°24.202' W. The weather and sea conditions at the time were, as recorded in the Navigation Log, wind from the NE at 16 knots with a ground swell from the same direction and a significant wave height of 4 meters.

The captain of the M/V INTERLINK UTILITY stated that he gave the order to keep the engine ready for immediate use. The anchor watches were assigned as per usual practice, with an officer on watch in the bridge monitoring the anchor conditions and communications.

At around 15:00, the duty officer on the M/V INTERLINK UTILITY noticed that the ship might have been dragging the anchor. After making the necessary checks, he called the captain and the engine room.

Upon entering the bridge, the captain confirmed the officer's observations and, at 15:29, notified the Las Palmas Port Control Center over VHF channel 12 that the ship was dragging anchor. Two minutes later, the pilot, who was on the small boat en route to the ship, instructed the captain to raise the anchor, order half ahead and right full rudder.

The ship's speed had been increasing as it was dragged by the wind and sea to the SW, until it was very close to the coast, at an approximate distance of one cable length⁴, and part of its hull already inside the 10-m depth curve. In other words, part of its quick-work was under water at a vertical distance equal to the water depth at that location.

The evidence available indicates that the events took place almost simultaneously and in quick succession: shortly after starting the main engine, or at the same time, the ship ran aground, first on a rocky bottom before breaking loose a short time later.

figure 5 shows the M/V INTERLINK UTILITY very close to the coast, with the pilot boat proceeding at full speed toward the ship. The still was taken from the video surveillance system of the Port Authority of Las Palmas, and is from shortly after port services were notified of the problems with the ship. Based on the time stamp in the video, it was 15:35. The photo appears to show that the ship was under propulsion at the time.

At 15:40, the Las Palmas CCS contacted R/S MIGUEL DE CERVANTES and PUNTA SALINAS to request their ETA⁵ to the south anchorage at the Port of Las Palmas.

³ Engine log book which provides a record of the main maneuvers made by a ship.

⁴ One tenth of a nautical mile, or 185.2 m

⁵ Estimated time of arrival.

CIAIM REPORT 29/2017

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

At 15:45 the R/S MIGUEL DE CERVANTES reported it was 26 miles away from the anchorage, giving an ETA of two hours. The R/S PUNTA SALINAS provided a similar ETA, and was thus instructed to resume its activity.

At 15:48, the ship was seen on the SASEMAR screens moving away from the coast. The pilot was assisting the crew from the pilot boat.

At 15:55, the pilot informed the port control center that he was going to re-drop the anchor.

At 16:00, the Harbor Master suggested to the port control center to bring the ship into port in order to inspect it and check for damage so that the necessary repairs could be made as required.

It soon became evident that there was a leak in the engine room. The chief engineer informed the captain of the situation at 16:00, by which time the water level in the engine room was 30 cm. The captain did not immediately report this situation to the port control center. At that time the anchor was up.

The captain ordered level checks of all the tanks to see if any more compartments were affected. They found another leak in the number 3 port ballast tank, with a reading of 6 m. At about the same time this news was reported, the ship's main engine stopped due to a low oil pressure caused by a failure of the lubricating pump, since the water leaking into the engine room, and especially the splashing water, was starting to affect the electrical connections of equipment on the ship. The chief engineer lined up the ballast pumps to take a suction on the engine room first and then on the ballast tank, such that the flow rate of these pumps would be enough to bail out the water and keep the flooding under control.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017



Figure 5. Still from the surveillance video at the Port of Las Palmas at 15:35.

Before being aware of this situation, the captain had informed the pilot of his intention to leave the anchorage, as a result of which the pilot, after informing the port control center, moved away from the location where he was situated.

The Las Palmas CSS called the ship at 16:08 to ascertain its intentions, to which the crew replied that their "intention was to leave and return the following day". When asked about the damage, they replied "Stand by". Some minutes later, at 16:14, the port control center called to relay instructions involving expected port movements when the captain reported they had found water in the engine room.

CIAIM REPORT 29/2017

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

At 16:20, the M/V INTERLINK UTILITY reported to the port control center that the engine was offline due to water in the engine room, and that their intention was to drop anchor at their current location. The port control center activated two tugs as well as the pilot service. At 16:29, the tugs VB ALBORÁN and VB BRADY left the port en route to the ship.

In the minutes that followed, several internal communications were recorded between port services involving the next steps to take to deal with the emergency. At 16:35, the following was heard from the port control center operator in reply to one of its services: "Until the agent tells us... until the agent tells us something... because for now the agent doesn't know what they're going to do".

At 16:38, the port control center gave the instruction to continue with the tugs "until they decide what to do". An unidentified individual asked about the service to be provided, to which the port control center replied, "Whatever the pilot wants, that's what the Port Authority is telling me".

At 16:45, the ship dropped anchor with 10 shackles in the water at position 28°06.06' N 015°23.6' W. According to the captain, the ship was floating safely. The ship was pumping the water from the engine room and the no. 3 port ballast tank overboard using its ballast pumps. This was gradually reducing the water levels in both spaces. The tug VB ALBORÁN had a towing line over⁶.

17:02. The Las Palmas CCS asked the ship about its damage. They stated that the crew was checking the damage. There was damage to the after peak, where the water level was 0,5m. They stated the tug's line had still not been made fast. Communications on VHF channel 10 went down.

17:09. The Las Palmas CCS asked the ship's agent to contact the ship and to report if it had touched bottom and if it had damage and/or flooding⁷.

17:11. The port control center instructed the ship to prepare to be towed.

17:20. The agent was not successful in contacting the ship. It has sent emails via Inmarsat C and had yet to receive a reply. It would report back when it had an answer.

17:20. The tug VB ALBORÁN made fast at the stern-center as per the instructions from port control.

17:22. The R/S MIGUEL DE CERVANTES reported it was 3 miles out from the green light at the Port of Las Palmas.

17:37. The M/V INTERLINK UTILITY called the port control center to report the water levels were dropping and that they did not require assistance for the time being.

⁶ As per SASEMAR entry. According to the ship's bell book, the line from this tug was not made fast until 17:20.

⁷ The port control center was aware of this information at 16:14, when it was reported by the ship. It is worth asking why this information was not relayed immediately to the CCS or, if it was, why the CCS was attempting to obtain more information or was taking over the port control center's coordinating role, even if unintentionally. See the analysis.

CIAIM REPORT 29/2017

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

17:45. The head of the Las Palmas CCS center asked that the following message from the Harbor Master be relayed to the Port Authority: "The Harbor Master orders⁸ the ship to tie up and to send the divers to inspect the hull and plug the leaks". This message was relayed to the port control center.

18:02. A merchant vessel (different from the M/V INTERLINK UTILITY) reported on VHF channel 12 that it would not anchor, that it was too rough in the anchorage and that it would lie to some 5 miles out.

18:17. The M/V INTERLINK UTILITY was instructed by the port control center on VHF channel 12 to proceed to the dock. It was instructed to put the ladder for the pilot on the port side 1 meter above the waterline. Three tugs would aid in the docking maneuver.

18:28 The vessel had not acknowledged the instruction to enter the port, so the port control center repeated its instruction to put the ladder for the pilot 1 meter above the waterline.

18:32. R/V SALVAMAR NUNKI was dispatched to check the area where the ship had anchored for pollution.

18:36. The port control center relayed the pilot's order to prepare to be towed and aweigh the anchor.

18:47. The pilot repeated the orders indicated above.

18:50. The tug VB ALBORÁN shifted its position to bow-center.

18:53. The port control center asked about the availability of the R/S MIGUEL DE CERVANTES and submersible bilge pumps, without specifying whether they would be needed from the start of the maneuver or later, when the ship was moored. The pilot would go to the engine room when onboard and check the water level personally. They would report back. As noted in the emergency report opened by SASEMAR, "The JC⁹ is asking if the Port Authority has hired a company for the services that will be required. The Port Authority replies that the service must be requested by the agent".

18:55. Pilot onboard. The captain and pilot exchanged information from 18:57 to 19:07. At 18:56, the operation to lift the anchor commenced.

At 19:06, the tug VB BRANDY tied up alongside the port beam of the M/V INTERLINK UTILITY.

19:09. The R/V SALVAMAR NUNKI reported no signs of pollution in the area. The vessel had several hoses on the deck pumping water. The ship did not seem to be listing. The ship's draft was 10 to 10.5 m on both sides, fore and aft. It was instructed by the Las Palmas CCS to accompany the vessel in to port.

At the same time, the agent was informed that it would have to contract divers to inspect the hull and plug any holes, as well as a bilge pump service. The agent reported it had a team of divers standing by onshore.

⁸ This entry, as well as subsequent entries in the SASEMAR emergency report, drew the attention of the investigators in this case. See the analysis.

⁹ CCS Center Manager.

CIAIM REPORT 29/2017

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

19:21. The Harbor Master reported, via the Center Manager, that the R/S MIGUEL DE CERVANTES could be dispatched at the Port Authority's request if necessary.

19:25. Anchor up.

At 19:36, the tug VB MEDITERRANEO reached the area and tied up at the stern-center of the M/V INTERLINK UTILITY.

20:37. The port control center (after checking with the pilots) reported that the situation was under control. The R/S MIGUEL DE CERVANTES was asked to stand by.

20:48. The port control center was notified that the main engine on the vessel OPDR LISBOA was offline. The pilots ordered the tug VB MASTIN to assist it, and asked that it be replaced by the R/S MIGUEL DE CERVANTES assisting the M/V INTERLINK UTILITY.

20:50. The R/S MIGUEL DE CERVANTES was dispatched, which left its base 15 minutes later.

21:21. The M/V INTERLINK UTILITY was mooring at the port.

22:45. Maneuver complete. Ship moored safely. The water levels in the engine room and in the no. 3 port ballast tank were under control.

23:14. Divers reported ready to commence work on the R/V INTERLINK UTILITY.

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4. ANALYSIS

4.1. Effect of sea state in the South Harbor of the Port of Las Palmas on other ships

There are no calls on the communications log for that day for the working channel of the Port of Las Palmas control center from ships requesting aid or reporting they were dragging the anchor. However, that same day at 18:02, another ship lied to because its captain deemed the ship's movement, caused by the waves in the South Harbor anchorage, to be excessive.

No information, alert or recommendation call was made on the working channel of the Port of Las Palmas control center (VHF channel 12) regarding sea conditions or reporting problems involving any ships in the anchorage point.

4.2. Analysis of the ship's movement

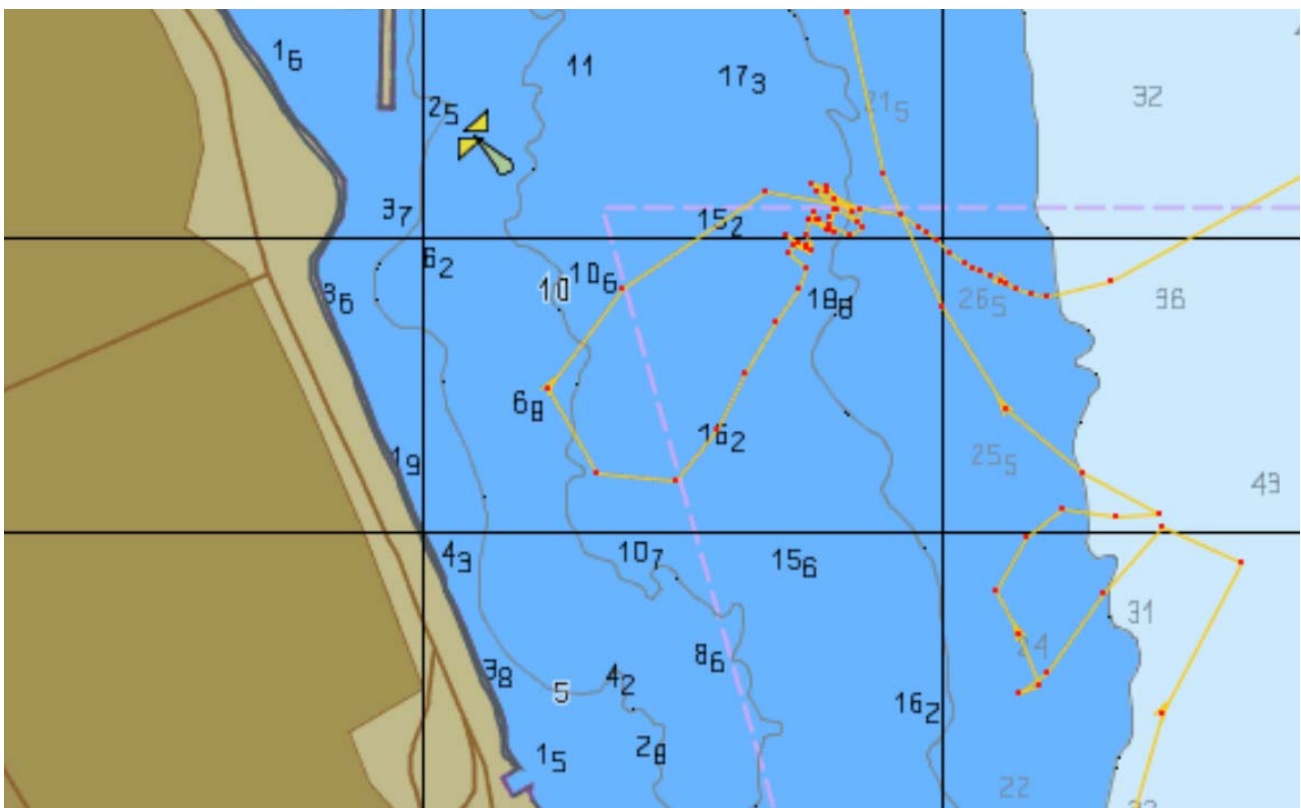


Figure 6. Track of the AIS antenna on the M/V INTERLINK UTILITY.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

A study of the movements of the ship's AIS (figure 6) shows that the point of closest approach of the ship's antenna¹⁰ to the coast took place shortly after 15:34, at a distance of one cable length. That was when the ship crossed the 10-m depth curve and stopped dragging its anchor. It was thus after this point when the ship contacted the bottom with its hull.

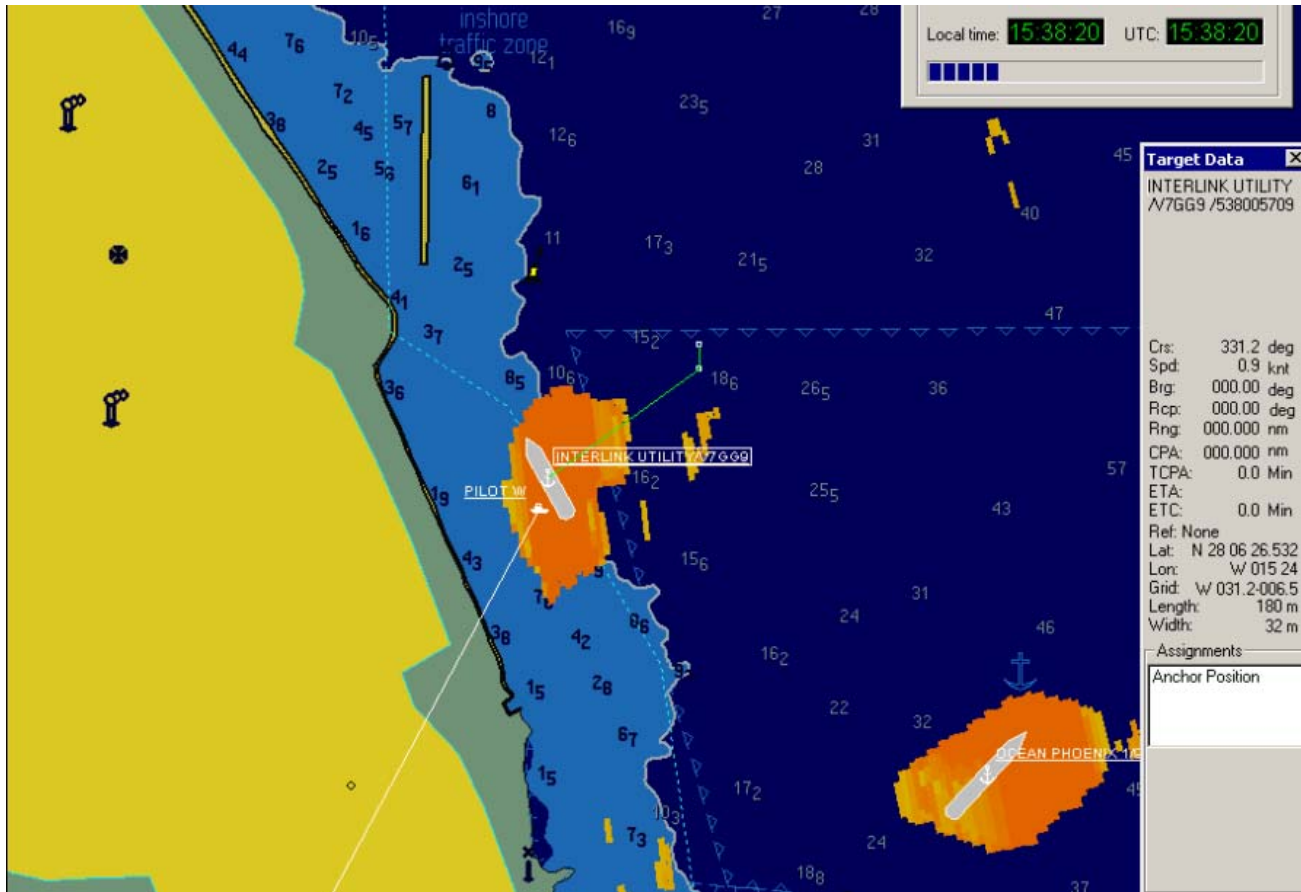


Figure 7. Radar images obtained by SASEMAR

The point of maximum penetration inside the 10-m depth curve was at 15:38. See figure 7. From then on, the ship started moving away from the coast.

In light of the circumstances at the time, and taking into consideration the image taken from the Las Palmas video surveillance system shown in figure 5, it is reasonable to assume that the ship's main engine was not started until 15:34 or 15:35.

¹⁰ The ship's heading at that point is not known as this information was not broadcast by the AIS. However, since the ship was being blown toward the shore by the wind, the track calculated by the SASEMAR radar is acceptable.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

4.3. Immediate cause of the accident

At least 35 minutes elapsed between the time when the duty officer noticed signs that the ship was dragging anchor toward the coast, supposedly at 15:00, and when the ship's crew engaged the main engine, at approximately 15:35. At some point around 15:34, the ship touched bottom, causing the damage described in this report. Once drifting toward the coast, the time required for the ship to stop and reverse this motion with a forward bell and head out to open sea is not known, but it would not be trivial. The ship was fully loaded, and therefore carrying considerable momentum, or inertia.

If, as the crew stated, the main engine was in good condition and ready to be started at any moment¹¹, the only immediate cause of the grounding is the failure of the crew to take any actions during those 35 minutes to start the engine and keep the ship from running aground.

However, this statement does not fully explain the causes of the event.

4.4. Factors contributing to the accident

4.4.1. Faults in the ship's Safety Management System (SMS)

The ship was practically new and in good condition. According to the crew, the main engine was ready to be started from the bridge to move the ship away from danger. Engine control had supposedly been transferred to the bridge¹². However, according to the ship's captain, company procedures required a duty officer to be on watch in the engine room before starting it¹³. On this point, the crew's statements are ambiguous, but the CIAIM estimates that at least 15-20 minutes were used starting the main engine from the time the duty officer confirmed that the ship was dragging the anchor and called the captain, and when the captain was ready to give orders once the ship was dragging the anchor and drifting toward the coast.

According to the captain, he did not consider ignoring said company requirement, even in this case of imminent danger. He waited for the engine room officer to report to the engine room and then started the main engine as per the instructions of the pilot, who was on the boat approaching the ship.

He did not use his own judgment when faced with imminent danger and waited for the pilot to tell him what to do.

The Safety Management System in place on the ship includes the procedures shown in figure 8 for the duty officer on the bridge. In the case at hand, these procedures state that the officer must notify the captain and the engine room if the ship starts to drag the anchor.

¹¹ It is noted once again that data from the RDT, which could have confirmed or ruled out this point, were not available.

¹² According to the crew.

¹³ These procedures were not made available to the CIAIM.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

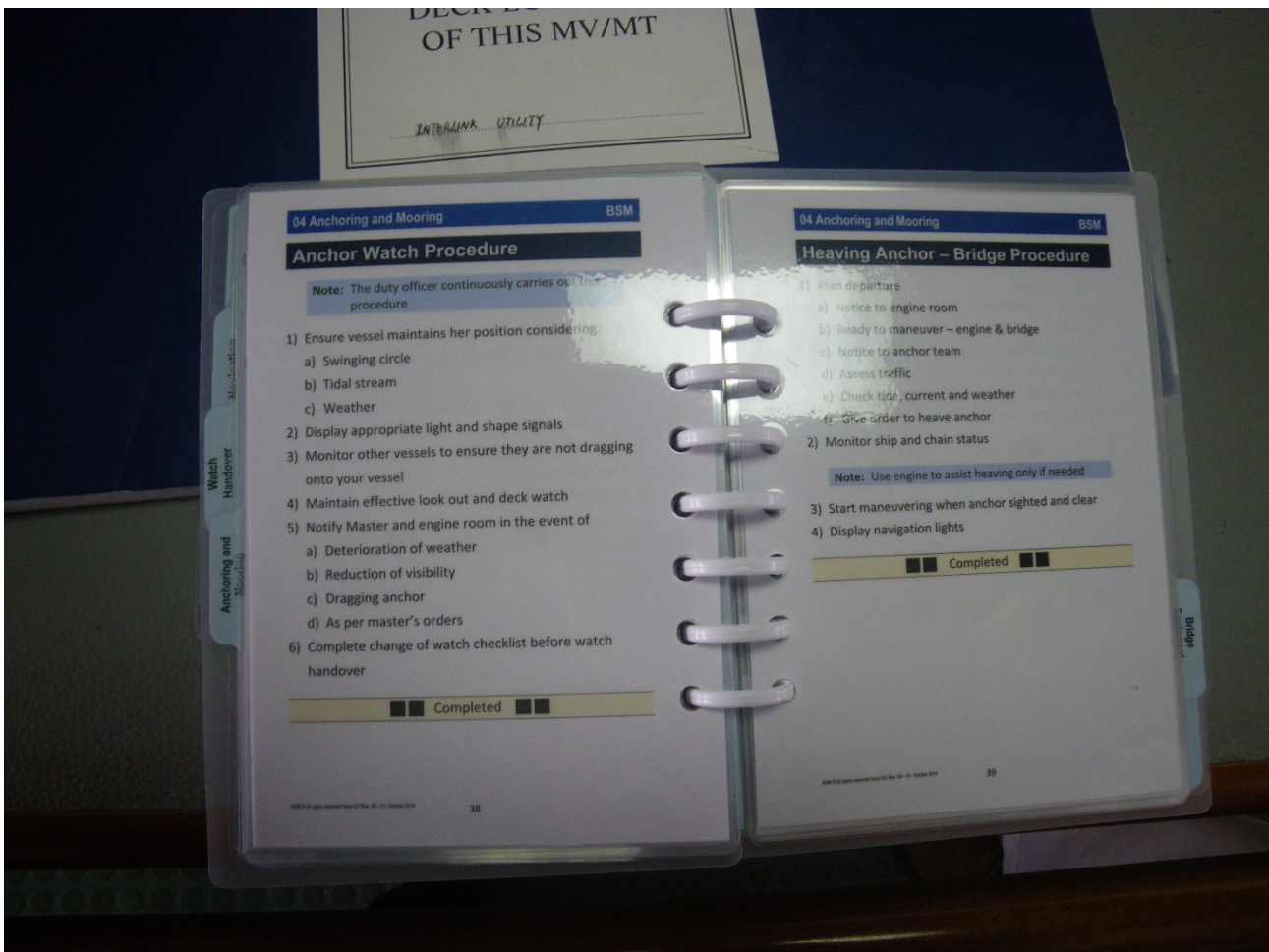


Figure 8. Company instructions for anchoring.

4.4.2. Lack of accountability by the captain as per the IGS Code

When interviewed by the CIAIM, the captain was not aware of the contents of Article 5.2 of the International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code)¹⁴, which states, regarding the captain's responsibility and authority: "...The Company should establish in the SMS that the master has the overriding authority and the responsibility to make decisions with respect to safety and pollution prevention and to request the Company's assistance as may be necessary".

Although this instruction was contained in the documentation available onboard, the captain was not aware of its implications. During the episode described above concerning the crew's claim that they had to wait for a duty officer had to be present in the engine room before being able to start the engine, the captain did not consider ignoring this supposed company regulation in order to ensure the ship's safety in the face of an imminent danger.

¹⁴ Adopted by IMO Resolution A.741(18) and published in the Official Journal of Spain on 22 May 1998.

4.4.3. Information upon arrival. Suitability of anchorage. Monitoring of safety conditions at anchorage to keep ships from running aground. Considerations when proposing the anchorage

The ship was not warned of the bad anchoring conditions present in the South Harbor at the Port of Las Palmas during adverse sea and wind conditions. Neither the ship's agent nor the port control center provided this information.

The ship's captain said that he had not received any such warnings, and so he thought that anchoring in that location under those conditions was safe. Moreover, the site was indicated to him from the pilot's boat with no further information or warnings.

The control center of the Port of Las Palmas did not issue any alerts, recommendations or information about the wind and sea conditions at the South Harbor anchorage. It still does not, even after the event involving the M/V INTERLINK UTILITY.

The above is no excuse for the captain's failure to ensure that it was safe to anchor given the prevailing conditions, as was his obligation. He could even have rejected the location proposed by the pilot or have taken additional measures to ensure his ship's safety, such as paying out more chain¹⁵ so the ship would stay anchored in place, or if this proved ineffective, going out to open sea and moving away from the port area until conditions improved or until the refueling operation that required the M/V INTERLINK UTILITY to stop at the Port of Las Palmas was approved.

The conditions at the South Harbor anchorage are not favorable. It has a bad holding ground with a rocky bottom¹⁶, and increasing soundings that make the anchor and chain lose effectiveness further out to the east of the anchorage. The ship had anchored too close to the coast, at the limit of the anchorage area¹⁷. There was also another ship nearby, 4 cable lengths away. The captain did not assess if the location indicated by the pilot was suitable for the prevailing and forecast wind and sea conditions.

4.5. Handling of the emergency

4.5.1. Analysis of communications during the emergency

At 16:01, after the ship made contact with the bottom and before its crew realized that they were taking on water, the manager of the Las Palmas CCS center instructed that the Port Authority be informed that the harbor master recommended¹⁸ that the ship pull into port.

By 16:07, the crew realized there was one leak, a situation they did not report to port control until 16:14.

¹⁵ The ship had 10 shackles to starboard and anchored with 7 on deck.

¹⁶ Shown on the map.

¹⁷ It was also the shallowest point, which made it most the efficient for the chain and anchor to hold the ship.

¹⁸ Underlined by the CIAIM.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

Four minutes later, at 16:18, unidentified services at the port called the port control center requesting instructions. The center replied: "The harbor master recommends docking. The Port Authority knows but hasn't said anything yet... they're looking for a berth... they're dealing with the agent".

16:20. After calling the ship from the port control center three times, the M/V INTERLINK UTILITY replied that a water leak in the engine room had rendered the main engine inoperable and that they intended to drop anchor at their current location. The control center replied that the pilot was en route.

16:33. A pilot asked the control center "if the agent spoke with anyone at Rescue to see what problem the ship has".

16:35. The port control center replied to the above message that the ship had dropped anchor and that: "Until the agent tells us... until the agent tells us something... because so far the agent doesn't know what they're going to do".

16:38. The port control center gave the instruction to continue with the tugs "until they decide what to do". An unidentified individual gave a garbled reply, to which the port control center responded, "Whatever the pilot wants, that's what the Port Authority is telling me".

At 17:45, the Las Palmas CCS relayed the following message to the Port Authority: "The Harbor Master orders¹⁹ the ship to tie up and to send the divers to inspect the hull and plug the leaks". This message was relayed to the port control center.

The CIAIM does not know what communications were held between the ship and the pilot or the port control center on any channels other than VHF channel 12. Any such communications were not relayed to the remaining port services²⁰, which would have to intervene immediately in case of an emergency (such as the flooding that was taking place on M/V INTERLINK UTILITY).

As noted earlier, at a certain point a message went out on VHF channel 12 that the Port Authority, without specifying who, was checking with the agent on the ship's next actions.

Moreover, SASEMAR (Maritime Rescue) was not actively informed beyond requesting the activation of its seagoing tugs. While the SASEMAR tugs were not immediately available, they could provide their knowledge and experience in these cases.

At one point, the port services, when talking to one another on VHF channel 12, the working channel for the port control center, noted that "they haven't even called Maritime Rescue". This is an indication that they expected, if only subconsciously, that the task of controlling emergencies in the port area corresponded, or should correspond, to SASEMAR during an emergency involving flooding on a ship.

At 17:09, the Las Palmas CCS contacted the ship's agent to have it contact the ship and report if it had touched the bottom and if there was any damage and/or flooding. It is surprising that, in an emergency situation such as this, a single operator was not tasked with obtaining

¹⁹ Underlined by the CIAIM.

²⁰ Basically the control center operator and the port's tugs (although not identified, the content of the conversation is consistent with this occupation).

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

information, instead of having the Las Palmas CCS and the port control center compete for information.

4.5.2. Coordination of the emergency following the grounding

After reviewing the communications between the parties following the grounding, the CIAIM concludes that the Port Authority services did not make firm decisions, or they were not effectively communicated, to ascertain that the ship was safe and that there was no risk of a further accident occurring (for example, that the ship would run aground again after losing propulsion as a result of the flooding caused by the grounding). Although there were no further consequences, the monitoring of the ship after it contacted the bottom could have been better.

This deficiency seems to have stemmed from the lack of updated emergency plans that reflect the applicable regulations for managing emergencies in ports. For more information, see the Annex to this report.

4.6. Flooding of the engine room

According to the shipowner, the draft gauge sensor penetration pipe to the void space under the engine was not water tight. This cause flooding of the engine room bilges. The lack of packing was a fault existing from shipyard.

* * *

5. CONCLUSIONS

1. The immediate cause of the accident was the crew's delay in reacting to the ship dragging the anchor and drifting toward the coast.
2. There was a combination of factors that contributed to the accident:
 - a. The captain did not ensure that, given the characteristics of his ship, its fully laden condition, the characteristics of the anchorage and of the wind and sea, all of them known, it was safe to drop anchor at the location assigned by the pilots on that day.
 - b. The captain could have taken additional measures, such as paying out more chain or refusing to anchor and heaving to until it was his turn to bunker
 - c. The captain could also have strictly monitored the anchor condition so that at the slightest sign of dragging, the engine could be started immediately even without any engineering officers in the control room. In light of the results, this was not the case.
 - d. After studying the circumstances of the grounding, it seems that the captain exhibited a complacent attitude toward:
 - i. the instructions, or lack thereof, received from port services, and
 - ii. the instructions in the company's procedures

This indicates a serious deficiency in understanding the role that the ISM Code assigns to the ship's captain to make the necessary decisions with respect to safety and pollution prevention.
 - e. Regardless of whether it was their job to do so or not, the pilots did not warn the ship's captain that he could have problems in that specific anchorage due to the nature of the bottom and to the wind and, especially, sea conditions.
3. A study of the communications during the emergency reveals a lack of emergency management coordination within the structure of the Port of Las Palmas. This should be corrected by updating the emergency plan so that it reflects the current regulations on managing emergencies in ports.

6. SAFETY RECOMMENDATIONS

To the shipowner company:

1. Verify the knowledge and understanding within its fleet of the contents of ISM Code Article 5.2 regarding how the master has the overriding authority and the responsibility to make decisions with respect to safety and pollution prevention, even if these are contrary to instructions provided by the company.

To the Port Authority of the Port of Las Palmas:

2. Approve as quickly as possible an updated emergency plan that reflects current regulations.
3. It must be proactive in terms of providing updated information on unfavorable conditions in an anchorage when such conditions exist.

To Ports of the State:

4. Establish a model emergency plan to be used by Port Authorities, or guidelines for updating the existing plans.

6.1. Actions taken after the accident

The company opened an internal investigation after the accident. As a result, the following actions were taken by the company:

1. The incident and lessons learnt to be promulgated to the fleet through Fleet Leaders Meeting and briefings
2. Masters to be made well aware of, and encouraged, to exercise overriding authority to ensure security/safety of the ship if asked to anchor in adverse conditions.
3. The penetration glands from the void space to be checked on all sister ships.

* * *

ANNEX. HANDLING OF THE EMERGENCY

Analysis of the regulation

The reference regulation that defines the tasks and duties of the various organizations involved in port operations is the Revised Text of the Law of the Ports of the State and the Merchant Marine (TRLPEMM), approved by Royal Legislative Decree 2/2011 of 5 September. Subsequently, the Final Third Stipulation of Law 14/2014 of 14 July, on Maritime Navigation, introduced substantial changes to the TRLPEMM.

The following aspects, regulated in the TRLPEMM, are relevant to this report:

- On the duties of Harbor Masters, Article 266.4.g) states that "*...The Harbor Master's functions shall include the following: [...] And, in general, all those duties involving navigation, maritime safety, maritime rescue and the prevention of pollution of the marine environment in all those waters located in areas where Spain exerts sovereignty, sovereign rights or jurisdiction, except in cases of pollution taking place in port service areas, which shall fall under the purview of port authorities, with which they have a special duty to cooperate in such cases*".
- As concerns the duties assigned to the Port Authorities, Article 25.h) states, among others, "*The organization and coordination of both maritime and land traffic in ports*". Article 26.c) specifies the following duties: "*Coordinate the actions of the various administrative agencies, and of the entities they control, that engage in activities at the port, except when this duty is expressly assigned to other Authorities*". In Article 26.j) "*In the port, enforce compliance with the regulation affecting the receipt, handling and storage of hazardous materials, as well as oversee systems to protect against terrorist and anti-social activities, against fires and to prevent and control emergencies, under the terms specified by the regulation on civil protection, without prejudice to the powers assigned to other government agencies, as well as to cooperate with the relevant government agencies on civil protection, fire prevention and extinction, search and rescue and pollution prevention*". Article 106 tasks Port Authorities with: a) "*the organization, coordination and control of both maritime and land traffic in ports*", and g) "*services to prevent and control emergencies, under the terms specified by the regulation on civil protection, in concert with the relevant government agencies on civil protection, fire prevention and extinction, search and rescue and pollution prevention*".

The regulation seems to suggest that in an emergency involving a ship in a port's service area, the decision-making responsibility cannot be categorically assigned to the Harbor Master or to the Port Authority, except to prevent pollution.

This apparent shortcoming resulted in questions posed to the State Legal Office in 2013 and 2016 by Ports of the State and the Office of Transportation, before and after the entry into force of the amendments to the TRLPEMM by the Maritime Navigation Law (LNV). Below are some of the conclusions from the two reports issued by the State Legal Office in response to these queries.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

- The responsibility of Port Authorities in terms of preventing and controlling emergencies is specified in the Emergency Plan and in the actions taken required to implement and comply with said Plan²¹. The scope of the cooperation between Port Authorities and the relevant government agencies shall be dictated as specified in the Emergency Plan and in the civil protection regulations²².
- Any actions taken by Port Authorities to provide emergency services to prevent and control emergencies in concert with Harbor Masters shall be governed in keeping with the following "notes":
 1. It is not a collaboration; rather, the Port Authorities have authority in the matter²³.
 2. Said authority is not absolute. It is limited by the assignment of certain authorities to the Ministry of Development, to Harbor Masters and to SASEMAR.
 3. Pursuant to Article 264.1 of the TRLPEMM on the public rescue service, the action or involvement of Port Authorities *"is as determined in the associated plans and programs referred to in this legal provision"*.
- The changes made to the articles in the TRLPEMM by the Maritime Navigation Law are intended to constrain the powers of Port Authorities in the area of emergency prevention and management, and of cleaning and tracking pollution in the waters served by the ports. This constraint was made by attributing to these agencies powers in the area of emergency prevention and control and of fighting marine pollution in the service areas of ports.
- For emergencies in the port service area that do not involve pollution, the powers of prevention and control shall be exercised by Port Authorities *"under the terms specified by the regulation on civil protection, in concert with the relevant government agencies on civil protection, fire prevention and extinction, search and rescue and pollution prevention"*. This means that said powers are not absolute, but limited by the authority given to other agencies in this area, such that the scope of the powers assigned to each shall be as specified in the corresponding plans and programs laid out in the law on Civil Protection.

It should be noted that the closest precedent to Article 106.g) of the TRLPEMM is set in the almost equally worded Article 58.2.g) of Law 48/2003 of 26 November, on the economic system and provision of services in ports of general interest. Thus, the allocation of powers described above for managing emergencies is not recent.

Emergency Plan (EP) for the Port of Las Palmas and emergency management

The civil protection law places considerable emphasis on Emergency Plans, which are designed to provide a roadmap for ports in how to respond to emergencies.

²¹ This conclusion is drawn "under the terms established in the regulation on civil protection", as per the same Legal Office report. This conclusion assigns no duties to Harbor Masters.

²² Law 2/1985 on Civil Protection, and Royal Decree 407/1992 of 24 April, which approves the Basic Civil Protection Regulation.

²³ Authority assigned by Article 106.g) of the TRLPEMM.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

In the case at hand, the EP for the Port of Las Palmas, in place since 2008, applies. Chapter 3 of this plan, on emergency management, states that: *"Land operations (inside the port area) shall be directed and coordinated by the Director of the Port, and maritime operations (maritime Zones I and II) by the Harbor Master"*.

The Port Authority did not formally activate this EP²⁴ in response to the emergency at hand, nor was an emergency director designated.

An analysis of the communications reveals that the management of emergencies within the waters of the Port of Las Palmas is limited to using the routine pilot service to provide expert advice. The CIAIM, without disregarding in the slightest the job of harbor pilots, deems that the expertise and skill demonstrated every day by pilots should be limited to routine, everyday port traffic situations, and not be applied to emergency situations like the one at hand, which require assessments, tracking, guidance and decision making that involve the allocation of additional human and technical resources, as well as a knowledge of the plans and procedures required in these cases, resources and knowledge that are outside the normal piloting service.

By way of example, it would not be acceptable, in a potential emergency situation, to depend on the shipping agent's decision to allow a ship to moor.

The Harbor Master's "order" for the ship to enter port was made in good faith in the absence of other efforts to manage the emergency, and in order to avoid greater damage. He was aware that he had no authority assigned to him in this area²⁵,

As for the Port Authority, during the emergency it claimed to follow what the contents of the EP, which, in its interpretation, made the Harbor Master the emergency director. The Port Authority is of the opinion that the current system for handling emergencies in the waters served by the port is not consistent with the regulation, and that:

- 1) The EP has to be updated to reflect the current law, to which end it has requested guidelines from Ports of the State²⁶.
- 2) A dedicated service to control the port, including emergencies, has to be set up. A contract has been written for this purpose that, at the time of the accident, was in the bidding phase.

In the CIAIM's opinion, the supposed lack of authority of the Harbor Master is debatable, since the definition of powers contained in the EP is not necessarily contrary to the TRLPEMM. Assigning the role of emergency director or coordinator to the Harbor Master does not imply that the Port Authority is powerless; rather, that the position specified in the Plan for organizing the cooperation between the relevant organizations is the Harbor Master.

²⁴ The National Regulation for the Receipt, Handling and Storage of Hazardous Goods in Ports, approved by R.D. 145/1989 of 20 January, requires the preparation of an Emergency Plan. This is only the main regulation that implements the obligation to prepare the emergency plans required by the Civil Prevention and Occupational Risk Prevention law. The version of the EP in effect at the Port of Las Palmas dates from 2008.

²⁵ Thus his initial "suggestion" that the ship enter port.

²⁶ As of the writing of this report, there is no record that Ports of the State has written said guidelines.

Dragging of anchor and subsequent grounding of the bulk carrier INTERLINK UTILITY at the "South Harbor" anchorage of the Port of Las Palmas on 13 March 2017

Having said this, what is relevant to the investigation is that the various parties involved in handling maritime emergencies doubt that what is specified in the EP of the Port of Las Palmas is within the boundaries of the law, which conditions their role within the outline laid out by the EP in the event of a maritime accident. Thus, in this case the Harbor Master thought that, according to the TRLPEMM, he was unable to issue orders, which is why he initially "advised" bringing the ship into port. The Port Authority also did not take the clear initiative in handling this emergency, believing it was not its duty, as per the EP.

It seems necessary, therefore, to enforce the regulation for handling maritime emergencies by drafting an EP that reflects said regulation and is accepted by all the parties involved.

Corrective actions involving the handling of the emergency

The Port Authority of Las Palmas sent to the CIAIM a copy of the contract for "Services to organize, coordinate and control maritime port traffic, and to coordinate the operations associated with technical-nautical port services at the Port of Las Palmas (including Salinetes and Arinaga)", signed with the Pilots' Association of the Port of La Luz and Las Palmas on 3 August 2017.

In the articles of the contract's specifications, as concerns this report, it states the following on basic operations:

"the successful bidder shall adhere to at least the following basic operations when rendering its service, which are provided as guidelines and not meant to be exhaustive: (...)

8. Constantly monitor the channel(s) specified by the Port Authority for the service for the purpose of providing vessels any general or specific information as requested, and in particular the instructions received from the Port Authority involving their arrival, departure or anchoring maneuvers or internal traffic, etc.

9. Provide support managing emergencies as per the stipulations of the Emergency Plan and the Internal Maritime Plan [PIM] of the ports of Las Palmas, Salinetas and Anaga".

The CIAIM regards this as a positive measure but does not deem it effective by itself until an updated EP is approved that, along with a complete PIM, identifies those responsible for managing emergencies at the Port of Las Palmas and the procedures to be followed.

* * *