BSU
Bundesstelle für Seeunfalluntersuchung
Federal Bureau of Maritime Casualty Investigation

Investigation Report No. 408/17

Date: 6 March 2019
Serious marine casualty
Grounding of the bulk carrier MV GLORY AMSTERDAM
on 29 October 2017 about 1.6 nm north of the North Sea island of Langeoog

1 Summary

At 1800 on 29 October 2017, the Panama-registered bulk carrier GLORY AMSTERDAM ran aground about 1.6 nm north of the German North Sea island of Langeoog.

The ship was sailing in ballast and despite two anchors dropped had drifted in a southerly direction from her anchor position (which was 18.5 nm from the subsequent scene of the accident) in hurricane force winds since early in the morning on the day of the accident (from about 0520 onwards). The GLORY AMSTERDAM was waiting there for the next cargo order.

The master notified the vessel traffic service (VTS) responsible for the area, German Bight Traffic (GBT), about his problems at 0618. He had already phoned the German agency that had supported his ship in Hamburg to request tug assistance. Since the VTS had doubts with regard to the short-term availability of a suitable vessel, as the further course of events confirmed were justified, it took the precautionary measure of ordering the emergency towing vessel (ETV) NORDIC, which was some 10 nm away from the GLORY AMSTERDAM, to proceed to the distressed vessel by phone at 0713. The tug arrived at the GLORY AMSTERDAM at about 0810. The master of the NORDIC then repeatedly tried to explain to the master of the GLORY AMSTERDAM on VHF radio (ultimately unsuccessfully due to considerable communication problems) that the NORDIC is not the tug assistance requested by the GLORY AMSTERDAM but an ETV, whose task is merely to establish a temporary towing connection to hold the distressed vessel in her position (emergency tow) in an emergency.

Not least because of the considerable problems the NORDIC and the VTS experienced while discussing the measures needed to manage the emergency situation with the GLORY AMSTERDAM's master in English, the Cuxhaven-based CCME decided to transfer the boarding team (BT) stationed on the NORDIC (BT NORDIC) especially for such tasks to the distressed vessel to assist with communication and provide technical support during the necessary emergency towing operation.

Given the wind and sea conditions, a helicopter represented the only feasible means of transfer. Therefore, at about 0940 the CCME contacted the Federal Police Air Wing at Fuhlendorf, requesting a helicopter stationed there, which was on call and equipped for maritime emergencies. The helicopter arrived at the area of operation at about 1120 and made several attempts to adopt the hover position necessary for winching up members of the BT waiting on the NORDIC's working deck. Every attempt to position the helicopter vertically over the winch area of the NORDIC for the period necessary failed due to the heavy movements of the tug in the stormy sea, however. Due to the excessive risk to life and limb of the people waiting to be winched up, the helicopter operation was abandoned at about 1150. Instead, the CCME contacted the Federal Police Air Wing at Fuhlendorf, requesting a second helicopter, which was

tasked with collecting the BT primarily responsible for emergency towing operations in and around the Baltic Sea stationed in Rostock, for a mission on the GLORY AMSTERDAM.

In the meantime, the NORDIC remained with the distressed vessel and, as far as language barriers allowed, coordinated the measures necessary for establishing a towing connection with her on VHF.

At about 1236, the NORDIC started to approach the GLORY AMSTERDAM to pass over the line without the support of a BT. The ensuing attempts to establish a towing connection failed at different stages several times due to the ongoing severe communication problems between the master of the NORDIC and ship's command of the GLORY AMSTERDAM. In particular, the distressed vessel's deck crew had enormous difficulty carrying out the work needed to establish a line connection.

They finally managed to establish a towing connection between the NORDIC and the GLORY AMSTERDAM, which continued to drift toward shallow water at a speed over ground of 2-3 kts, at about 1500. However, this parted at about 1546 because the towing cable had been improperly fastened on the distressed vessel.

Since the risk of the GLORY AMSTERDAM running aground was increasing all the time, the VTS ordered the distressed vessel to slip her anchors and move to deeper water under her own steam at 1548. At 1607, the VTS asked whether the two anchors had been slipped. The master of the GLORY AMSTERDAM then pointed out for the first time that he reportedly had problems with his rudder and would therefore need his anchors.

The Federal Police helicopter reached the distressed vessel with the Baltic Sea boarding team (BT Baltic Sea) on board at about 1626 and lowered it onto the main deck.

Following a situation analysis on board and an exchange of information with the NORDIC, the BT started to prepare for the establishment of the towing connection on the aft deck of the distressed vessel. However, it became clear shortly after in radio calls between the BT and the NORDIC that the GLORY AMSTERDAM had now drifted so far into shallow water that it would be almost impossible for the NORDIC to move close enough to the distressed vessel to establish a line connection safely because of her draught.
The first, initially only sporadic indications of grounding were felt on board the GLORY AMSTERDAM at about 1730, causing, inter alia, the stern of the distressed vessel to occasionally settle on the sea floor. This resulted in mechanical damage to the rudder blade and its support system, meaning the GLORY AMSTERDAM had to be classified as completely not under command (NUC) from this point at the latest.

Since the distressed vessel was drifting into ever shallower water, it was no longer possible for the NORDIC to approach her without running the risk of damaging her underwater hull or grounding.

The GLORY AMSTERDAM finally grounded at 1800 in the area of the 5 m depth contour north of the island of Langeoog. Immediately arranged inspections on board revealed that the grounding had apparently not damaged the shell plating. At no time was water ingress or escaped pollutants detected.

During the night leading up to 30 October, the CCME consulted on possible options for salvaging the distressed vessel. For its part, the owner of the GLORY AMSTERDAM contacted the Dutch salvage company SMIT, with which it concluded a salvage contract.

While liaising on the salvage strategy, the CCME and salvage company concluded that partially unloading the heavy fuel oil (HFO) tanks in the surf zone prior to towing the ship clear would pose too great a risk. Instead, an agreement was made to promptly establish a line connection between the GLORY AMSTERDAM and two seagoing tugs (UNION MANTA and FAIRMOUNT SUMMIT) to prevent the distressed vessel from drifting closer to the coast during the controlled draining of ballast water.

The vessels referred to arrive at the GLORY AMSTERDAM on the evening of 1 November. It was possible to establish line connections from the two tugs. Following that, they started to drain the ballast water, as planned.

The GLORY AMSTERDAM refloated at high tide on the morning of 2 November after some 16,000 t of ballast water had been pumped out of her. The ship was then towed to Wilhelmshaven, where she made fast on the evening of that same day.

The GLORY AMSTERDAM was able to leave her berth there for the repair yard after a three-week stay.

2 Safety Recommendations

The following safety recommendations do not attribute a presumption of blame or liability in respect of type, number or sequence.

2.1 **BMVI**

The BSU makes the following recommendation to the BMVI as the body responsible for the technical implementation of the traffic safety strategy for the German coast adopted by the Federal Republic of Germany and the emergency towing strategy contained therein:

2.1.1 **External recognition of vessels used as an ETV**

As is the case in other countries, the NORDIC and other vessels chartered by the federal government and used on its behalf as ETVs should be furnished with the same colours and markings as the WSV vessels owned by the federal government.

If current legislation does not permit such a measure, then the BMVI should work toward ensuring that the necessary legislative framework be established or amended accordingly as quickly as possible.

2.1.2 **Replacement of the term 'Boarding Team'**

The term 'Boarding Team' should be replaced by a designation which clearly indicates that its deployment pursues the non-commercial objective of maritime emergency preparedness and is on behalf of the state. This could be achieved by replacing the name 'Boarding Team' with 'German Emergency Assistance Team', for example.

2.1.3 **Material resources of the CCME**

The CCME should have direct access to all AIS data and radar images available from the WSV in order to perform its tasks efficiently. The most practicable solution is to provide the CCME with an ECDIS system in which all AIS and radar data available within the WSV are implemented. Moreover, the technical prerequisites for enabling the CCME to participate passively and actively in VHF radio traffic in Germany's territorial sea using the call sign assigned to it on 2 May 2016 by the Federal Network Agency (German Maritime Emergency Command) on the associated frequencies should be established immediately or finalised if already started. In this respect, the

CCME's coastal radio station should be enabled to use VHF channel 16 without restrictions and to monitor the VTS's radio channels.

Obstacles in terms of security or of a legal nature that would prevent access to AIS and radar data or to VHF radio traffic must be removed by the competent authorities.

2.1.4 **Legislative powers of the CCME**

As soon as the CCME has been given the technical means to access AIS data and radar images in real time and to participate in VHF radio traffic passively and actively (see Recommendation 7.1.3 above) without any constraints, the BMVI should initiate an investigation into the question of whether it would be possible and appropriate from a legal or factual perspective to temporarily confer upon the CCME the legislative powers to issue shipping police instructions and orders to a distressed vessel or third party (including ETVs chartered by the federal government).

2.1.5 **Material resources of the BTs**

The BT should be equipped with long-range handheld radios and at least two satphones. The BT's equipment should also include an internet-enabled, shockproof and at least splash-proof netbook.

2.2 **BMVI/GDWS – CCME's scope for accessing multi-purpose vessels of the WSV**

The BSU makes the following recommendation to the BMVI as the body responsible for the technical implementation of the traffic safety strategy for the German coast adopted by the Federal Republic of Germany and to the GDWS as the body responsible for supervising the use of multi-purpose vessels of the WSV:

The safety strategy for the German coast should be amended to the effect that the GDWS or the competent WSA informs the CCME in good time if a multi-purpose vessel belonging to the WSV cannot be used as an ETV for several weeks or even months. Moreover, scheduled dry dock overhauls should not be carried out in the winter months (1 October to 31 March). However, if longer shipyard stays are necessary, then the competent authorities should consider temporarily chartering an additional replacement tug from the private sector at least for the winter months.

2.3 **CCME**

The BSU makes the following recommendation to the CCME:

2.3.1 **Briefing of the distressed vessel**

In cooperation with the ETV ship's commands, the CCME should develop printed matter which in addition to legal information on the actions of the ETV and a BT should, in particular, contain a concise description of the steps needed to establish an emergency towing connection. The printed matter should be sent to the distressed vessel using the communication options fax and – as far as possible – email. Ideally, the printed matter should be available in the languages most widely used in the maritime sector, so that the version that the ship's command of the distressed vessel is most likely to understand can be sent.

2.3.2 **Briefing of the BT**

The CCME should improve its procedures to ensure that the BT is provided with the most accurate knowledge of the distressed vessel's condition possible and the specific task order before reaching the distressed vessel. The means of communication available on board the Federal Police helicopters should be used for this purpose during the BT's transfer. Where possible, the briefing should be carried out by the ship's command of the respective ETV or possibly an OSC and/or the CCME itself.

2.3.3 **Communication with the BT**

The CCME should develop and implement a standardised procedure for establishing and maintaining contact between the ETV (OSC/CCME) and the BT operating on board a distressed vessel, e.g. in respect of the radio channels to be used, which enables both sides to establish and maintain contact with each other immediately from the moment and for as long as the BT is on board the distressed vessel.

2.4 **BMVI**

The BSU makes the following recommendation to the BMVI in its capacity as representative of the Federal Republic of Germany in the various committees of the IMO:

The BMVI should liaise with classification society representatives, as well as recognised experts in shipbuilding and ship safety from the scientific and maritime communities and formulate a position on the question of whether and to what extent the environmental requirements of the IMO may affect the manoeuvrability of seagoing ships in extreme weather conditions now and in the future or critically scrutinise the current position. Taking into account the position formulated, the BMVI should continue to work internationally at the IMO toward ensuring that the relevant regulations are amended such that this conflict of objectives be resolved to the mutual benefit of all parties.

2.5 **Owner of the GLORY AMSTERDAM**

The BSU makes the following recommendation to the shipowner:

2.5.1 **Revision of the ETB**

The GLORY AMSTERDAM's ETB should be reviewed for practicality and revised if necessary.

2.5.2 **Awareness of ship's crew of the existence and content of the ETB**

The content of the ETB must be made known to the ship's command and crew members responsible. It should be ensured that the ETB is considered in an emergency.

2.5.3 **Briefing/training ship's crews**

Training on the operating procedures described in the ETB should be provided, as far as regular on-board operation permits. However, they should at least be the subject of regular briefings.