Sinking of the BALTIC ACE

At 1815 on Wednesday 5th December 2012, the RoRo car carrier Baltic Ace collided with the containership Corvus J close to the main route into Europoort. The Baltic Ace sank within 15 minutes of the collision and although 13 crew members were rescued, 11 were lost. The 13 survivors were rescued from liferafts, being picked up by the Corvus J or winched to helicopter.

RoRo Design Safety

Almost immediately after the accident questions were posed concerning the safety of RoRo ships. Concerns were expressed over their large open decks, which when flooded with even a relatively small volume of water can have a seriously detrimental effect on the stability of the vessel. Previous high profile losses to RoRo vessels include the passenger ferries Herald of Free Enterprise and Estonia, and the freight RoRos Tricolor and the Cougar Ace.

Other problems include the dangers of cargo movement in rough weather when lashings break and the proximity of the openings, eg car ramps, to the waterline. This makes them more susceptible to damage from collision, grounding and weather and prone to flooding.

The design of the ships, with high superstructures and relatively small draughts, make them vulnerable to high winds, particularly in the event of blackouts or mechanical failures. This can leave the ships likely to lie beam on to the elements, rolling heavily and increasing the chance of cargo movement or drifting into danger.

The high sides can make it difficult for the crew to abandon, and the rapid rate of flooding may leave very little time to do so. This appears to be the case with the Baltic Ace, where even the survivors had insufficient time to get adequately dressed and were severely hypothermic when recovered from the liferafts.

Danger to Navigation

The position and depth of water in which the wreck lies means that there is only a 6 m clearance for other ships, representing a serious hazard to navigation. The wreck remains marked by the five cardinal buoys and a Racon (radar beacon) transmitting the Morse code signal Delta (– .. ).

The wreck’s position is marked by a flag on this ECDIS screen

The same data is shown on this Radar screen, including the Racon delta; the long line and two short lines seen right of centre. The other vessels identified on the chart can also be seen on the radar.

With the incident occurring outside the Dutch territorial waters (12 nautical miles from the coastal State baseline) the Dutch police will not investigate. However, the Dutch Safety Board offered their investigative assistance to the Flag States, ie the Bahamas (Baltic Ace) and Cyprus (Corvus J), where the ships were registered.

Baltic Ace

Built in 2007, the Baltic Ace had a gross tonnage of 23,498 and measured 148 m long. She was carrying a cargo of 1417 cars, primarily Mitsubishi, but reportedly also carrying some luxury marques. The Baltic Ace was on passage from Zeebrugge (Belgium) to Kotka, Finland.

The Corvus J was built in 2003, has a gross tonnage of 6,370, is 134 m long and can carry up to 630 twenty foot containers. The ship was en-route from Grangemouth, Scotland to Antwerp, Belgium. The ship suffered significant damage to her bow but was able to get to port without any assistance, after aiding in the rescue of the survivors.

Corvus J

The collision occurred in position 51° 50'N 002° 53.2'N, in the southern section of the North Hinder (Noordhinder) Junction. This is a very busy area used by ships bound for Europoort.

No preliminary findings have yet been released. However, AIS historic data shows the Baltic Ace making a small alteration to port after the Corvus J had altered to starboard. Immediately before, or possibly during the impact, the Baltic Ace then appears to have made a large alteration to port. The AIS tracks also appear to concur with a reported statement from an observer, who advised that “The Corvus J was altering course to starboard while the Baltic Ace made a sharp turn to port.” According to him the collision is the result of a communication error.

After the incident two Dutch Naval ships, the Groningen and the Friesland, assisted the search for any survivors and remained near the sunken vessel. Later, the M/V Arca (a government hydrographic research/oil response ship) remained in position and deployed five cardinal buoys to mark the danger.