



Published December 2022

REPORT MARINE 2022/12

***Collision between the cargo ship 'Edmy'
and the fishing vessel 'Tornado' outside
Langesund on 4 October 2022***

The Norwegian Safety Investigation Authority (NSIA) has compiled this report for the sole purpose of improving safety at sea.

The object of a safety investigation is to clarify the sequence of events and causal factors, elucidate matters of significance for the prevention of maritime accidents and improvement of safety at sea, and to publish a report with possible safety recommendations. The NSIA shall not apportion any blame or liability.

Use of this report for any other purpose than for improvements of the safety at sea shall be avoided..

Factual information

Data relating to the incident

Vessel		
Name	Edmy	Tornado
Flag state	Portugal	Norway
Classification society	Rina	
IMO number / call sign	9263540/CQAH5	LG9021
Type	Cargo ship	Fishing vessel
Build year	2002	1999
Owner	Myklebusthaug Rederi AS	MH Havfiske AS
Operator / Responsible for ISM	Myklebusthaug Management AS	
Construction material	Steel	Steel
Length	118	14.9
Voyage		
Port of departure	Larvik	Langesund
Destination port	Copenhagen, Denmark	Langesund
Type of voyage	International	Inshore, coastal voyage
Cargo	Bulk	Prawns
Persons on board	11	2
Information about the accident		
Date	4 October 2022	
Type of accident	Collision	
Location/position where the accident occurred	Off Langesund	
Injuries/fatalities	None	
Damage to vessels/the environment	Material damage to the fishing vessel	
Environmental conditions	Good visibility, little wind, small waves	

Sequence of events

THE CARGO SHIP 'EDMY'

At 07:00 on 4 October 2022, the cargo ship 'Edmy' left the port of Larvik bound for Copenhagen, Denmark. There was a pilot on board until the ship reached Langesundbukta bay, where the pilot disembarked at approximately 08:00. The navigator was alone on the bridge and set a southerly course, and the vessel was moving at a speed of about 12 knots; see Figure 1.

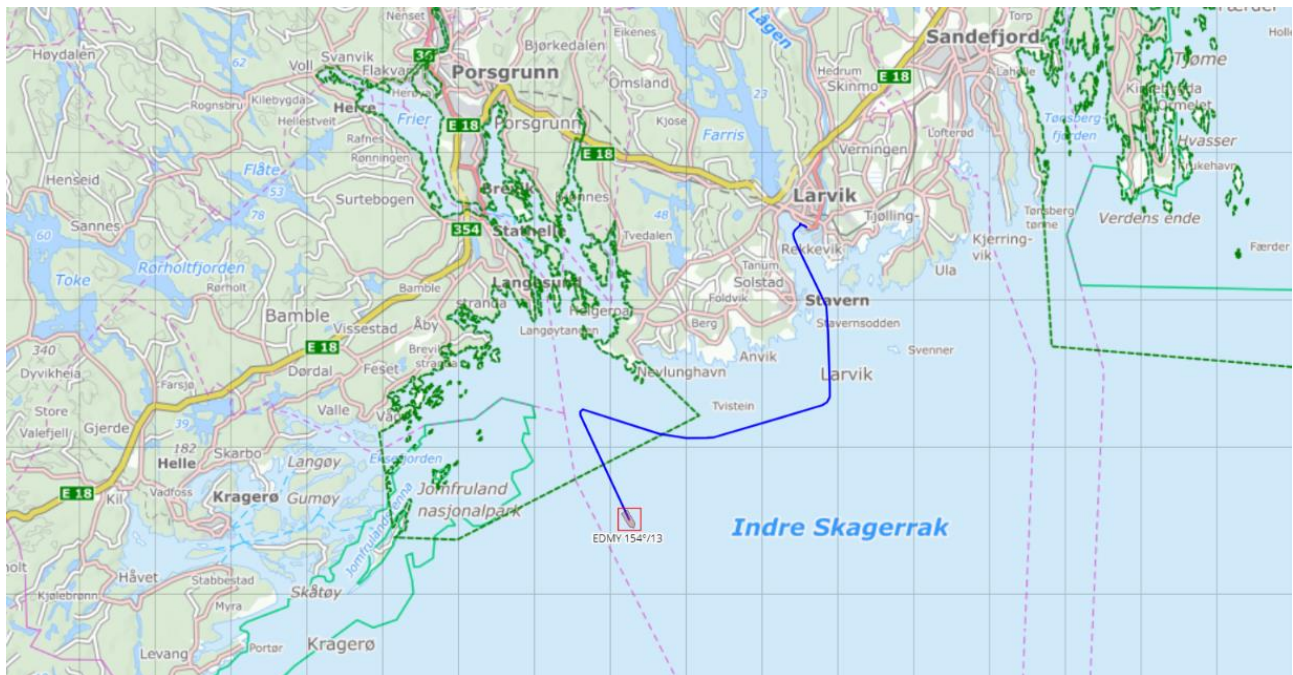


Figure 1: The collision occurred off Langesund after the pilot had left 'Edmy'. The VTS¹ area is indicated with a green dotted line. Map: Kystinfo, the Norwegian Coastal Administration

The navigator on 'Edmy' looked for potential dangers through the bridge windows and has stated that visibility was good and the sea was calm. Figure 2 shows the view through the bridge window.

¹ Vessel traffic service



Figure 2: View from the bridge of 'Edmy'. Photo: NSIA

The navigator was aware that they were in a fishing area, and observed AIS signals from a few smaller vessels on the radar. No vessels were observed in the vicinity that would conflict with the planned course; see Figure 3.

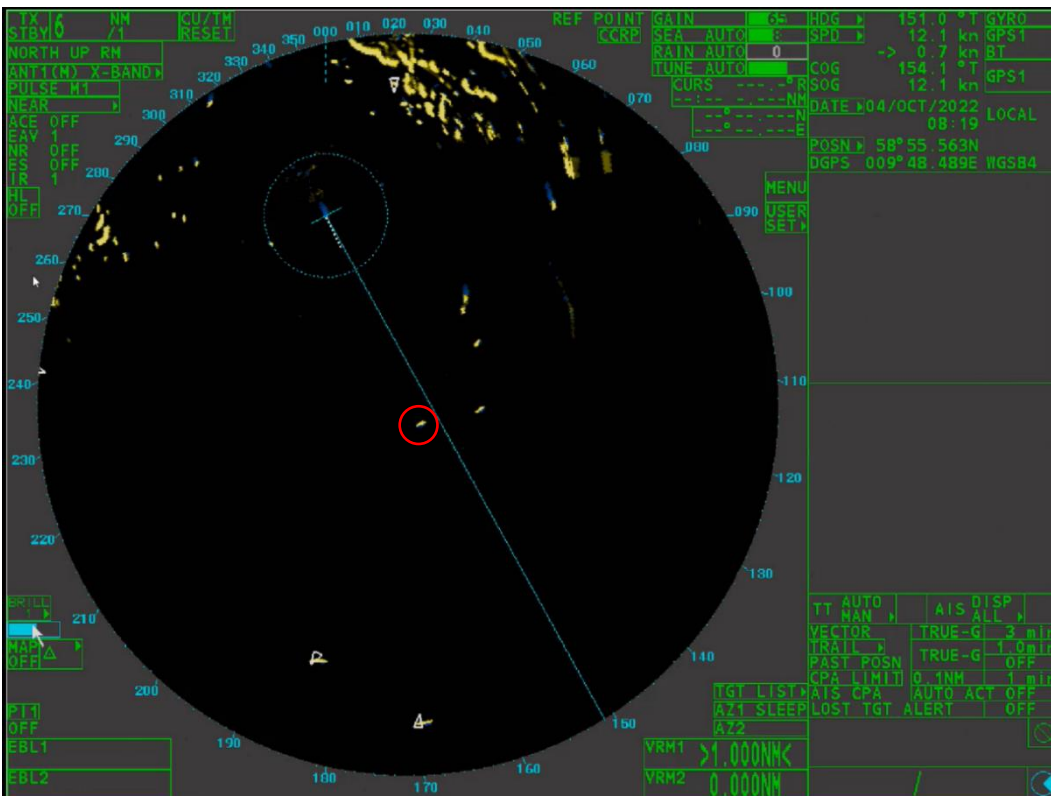


Figure 3: The radar plot the navigator checked after the pilot left the ship. 'Tornado' is marked with a red circle. Illustration: Myklebusthaug Rederi AS

The navigator then turned his attention to a computer placed aft in the wheelhouse to carry out administrative tasks. They had plenty of time before they were due to arrive in Denmark, but the navigator wanted to finish this work as soon as possible.

The ship had a bridge navigational watch alarm system installed, but it was not activated when the incident occurred. It was stated that the system was only used in the evening and at night.²

After half an hour on the same course, the navigator suddenly felt something hit the bow of the ship, and then saw the mast of a fishing vessel along the starboard side. Figure 4 shows the cargo ship after the incident.



Figure 4: The cargo ship 'Edmy' alongside the quay. She sustained only minor scratches and a small dent at the bow. Photo: NSIA

THE FISHING VESSEL 'TORNADO'

'Tornado' was trawling for prawns in Langesundbukta bay with two persons on board. They used both navigation lights and day shapes for trawling. The AIS was set to passive mode during the night to conceal the vessel's position, as the exact location of fishing grounds was considered trade secrets. AIS transmission was activated 5–6 minutes before the collision occurred.³

The crew had just stopped trawling and started hauling the trawl at 08:28. It was around that time that the skipper noticed the cargo ship coming towards them, but he perceived it as part of the normal traffic in the area. The skipper considered calling the cargo ship over the VHF, but did not think it was necessary, as it was daylight and visibility was good. The crew continued hauling the trawl with the engine in forward gear. In reality, however, due to currents in the water and because they were being pulled towards the trawl while hauling, the vessel was moving backwards at a speed of around one knot. After a while, the skipper observed the cargo ship approaching, but assumed that she would pass without any risk of collision. When he realised that they were going to collide, he set the engine to full speed astern, but was unable to avoid impact.

The cargo ship collided with the fishing vessel at 08:35; see Figure 5.

² SOLAS regulation V/19.2.2.3 and res. MSC.128(75) BNWAS (Bridge Navigational Watch Alarm System). BNWAS shall be in operation whenever the ship is under way at sea.

³ The fishing vessel had a length overall of less than 15 metres and was thus not required to have AIS pursuant to Regulations of 22 November 2013 No 1404.

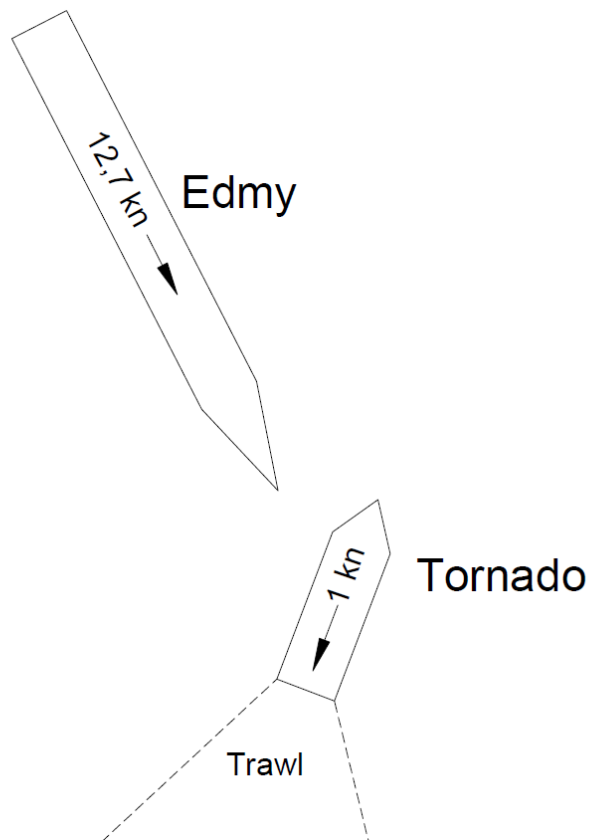


Figure 5: 'Tornado' was almost stationary, moving backwards at a speed of about 1 kt, while 'Edmy' was travelling at a speed of 12.7 kt. Illustration: NSIA

The collision caused the fishing vessel to lean to the side, and her course was turned almost 180 degrees. Once clear of the cargo ship, the fishing vessel still had propulsion, and the crew were able to turn her in the right direction. The crew were physically unharmed and proceeded to check the status of the vessel. She had sustained considerable damage to the port bow bulwark. The forward cargo hold was also checked, but no damage was observed. The skipper therefore continued the hauling process, as they had only had time to haul about 100 metres of wire and had 600 metres left.

After the collision, the navigator reduced the speed of the cargo ship, turned the ship around, called the fishing vessel on VHF and asked whether they needed assistance. The navigator was asked to stand by, but to keep a safe distance because of the fishing gear.

The coastal radio station Kystradio Sør called the fishing vessel to learn her status. By that time, the crew had observed seawater leaking into the cargo hold and reported that they needed help. They started pumping out water from the cargo hold, but the pump clogged up repeatedly, as prawns that had ended up on deck in the collision got into the pump. The crew managed to haul the trawl and continued to pump out water using extra pumps supplied by a service vessel from Skjærgårdstjenesten that had arrived on the scene. The fishing vessel then set course for Langesund, where she was put in dock; see Figure 6 and Figure 7.



Figure 6: Damage to the forward end of the bulwark and to the mast. Photo: NSIA



Figure 7: Damage to the hull that resulted in ingress of water into the cargo hold. Photo: NSIA

The cargo ship sailed back to Larvik for an inspection, where she was found to have sustained only minimal damage.

Measures implemented

The following has been implemented on board all vessels:

- Watchkeeping procedure was updated by adding the requirement on the minimum setup of navigation bridge and lookout for various sailing scenarios.
- Established minimum recommended CPA/TCPA values were established and posted next to radars / ARPAs.
- Bridge change-over check list was reviewed and updated with additional check points, such as status of BNWAS, ARPA's CPA settings, listening watch on appropriate VHF channel and Ch16.
- Departure check list was reviewed and updated with additional check points, such as status of BNWAS, ARPA's CPA settings, listening watch on appropriate VHF channel and Ch16.
- Master's standing orders were updated and re-issued reflecting above items as well as statement prohibiting paper work and use of IT equipment when there is no back up lookout.

All the above was communicated to all vessels with request to review watchkeeping routines onboard and propose further improvements where necessary.

The NSIA's assessments

The sequence of events that appears in the first part of this report describes a situation where active navigation was not carried out over a period of time. NSIA has chosen to focus on some of the contributing factors to the accident. This is to highlight factors that NSIA believe provide the most universal safety learning.

The navigator of the cargo ship checked the radar for potential dangers, without identifying the fishing vessel. The NSIA believes this was because the fishing vessel was only shown on the radar as an echo, with no AIS information on the radar or ECDIS displays. Use of navigational aids such as ECDIS and AIS allows navigators to rely more on the technology and thereby engage less actively in traditional outlook-based navigation. The NSIA believes that the expectation that most vessels transmit AIS information can lead to a false sense of security, as there is a possibility that not all dangers are identified.

The bridge navigational watch alarm system is a tool that can help navigators to maintain attention over time. The system was deactivated on the cargo ship during the day, and the NSIA believes that the system would have contributed to safer navigation had it been active, because then the navigator had to acknowledge the alarm at the navigation instruments at the front of the wheelhouse.

The NSIA experience fishermen's wish to not transmit their position via AIS and thereby risk revealing their fishing grounds, but by not doing so, they also remove an important digital safety barrier by not enabling other vessels to identify them. Although visibility was good and the fishing vessel was clearly visible with day shapes and navigation lights, active AIS transmission at an earlier stage would probably have increased the likelihood of the cargo ship identifying the fishing vessel.

Norwegian Safety Investigation Authority
Lillestrøm, 13 December 2022