## **SYNOPSIS**



On 30 June 2005, the fishing vessel *Auriga* (Figure 1) capsized and sank about 6 miles north-east of Portavogie, Northern Ireland. The skipper and his crewman were both rescued from the stricken vessel's liferaft. Sea conditions at the time were slight with light SSE winds.

Auriga was 3 hours into her second tow when she slowed down. It was felt that possibly a trawl door had dropped, but when attempts to rectify this showed no increase in the vessel's speed, it left the crew with little option other than to haul the gear.

As the trawl wires were hove in, it became apparent that there was an abnormal weight in, or on, the gear; this was indicated by the winch showing signs of strain as the hydraulic pressure relief valve lifted. Because of the strain on the winch, it took some time to ease the doors up to the gallows but, eventually, the doors were retrieved, secured alongside and unhooked from the trawl warps. The sweeps were transferred from the warp ends and wound onto the net drum; at first the net drum was able to haul in the sweeps and the wing ends of the net fairly easily, but as the net built up, the net drum hydraulic relief valve, like the winch before it, started to lift, and hauling slowed dramatically. At that point, there was no indication of what was causing the weight in the net. The crew were able to retrieve the dog rope, which led from the wing lastridge<sup>1</sup> to the cod end. This allowed them to haul in this rope onto the winch drum ends by leading the dog rope up and over the gantry above the fish hopper.

Slowly, by systematically hauling on the dog rope and winding slack netting onto the drum, recovery of the net continued. Until then, the boat had been idling at dead slow ahead before the wind. To take strain off the gear, the skipper put the vessel into neutral; once in neutral the vessel started to fall off the wind and, as this happened, the weight of the net, suspended from the gantry, affected the vessel's transverse stability, resulting in a dramatic list. This was not recognised until after starboard deck edge immersion had occurred and water was building up on deck.

Recognising their perilous situation, the crew abandoned to their liferaft, without having time to transmit a distress or don lifejackets. Fortunately, *Auriga's* EPIRB floated free as the vessel sank, and its transmissions alerted MRCC Falmouth of a possible emergency. SAR services were notified and tasked to the scene of the sinking.

After an hour in their liferaft, *Auriga*'s crew were rescued by a passing container ship, whose watchkeeper spotted their pinpoint flare. The survivors were then transferred to the Donaghadee lifeboat and returned to their home port of Portavogie. Neither of the crew were injured.

<sup>&</sup>lt;sup>1</sup> Lastridge: the "seams" in a net joining panels together, e.g. in a trawl these would join the top panel to the bottom panel or upper wing to lower wing etc.

Auriga capsized because of a heavy weight in her net which she was hauling over the top of a high gantry. This created a capsizing lever on the vessel. The small vessel carried a lot of top weight; her deck layout included deck shelter, gantry, fish hopper, net drum and a trawl winch containing a large quantity of wire, which were all instrumental in jeopardising her stability.

The MAIB investigation identified several safety issues, including:

- After recognising that they were dealing with an unusually large weight, the crew did not consider jettisoning their gear for later retrieval.
- The combination of the abnormal weight, and the high gantry over which it was being hauled, adversely affected the vessel's stability.
- Continuing the working practices of the previous owner, without applying a further and independent risk assessment, was instrumental in the vessel's loss.
- The ORC pack in the liferaft carried limited location aids.
- The liferaft and EPIRB carried by *Auriga* undoubtedly contributed to the saving of the crew members' lives.
- Vessels carrying four man liferafts, or smaller, should be aware that SOLAS approved weak links on HRUs may be too strong for the buoyancy of the raft, and it should be ensured that rafts are fitted with appropriate weak links.
- The crew of *Auriga* had not undertaken mandatory safety training in Sea Survival, Fire-Fighting, First-Aid or Safety Awareness.

Safety issues relating to vessel stability, risk assessment, liferafts and EPIRBs have been the subject of MAIB recommendations resulting from previous fishing vessel investigations. However, further recommendations have been made to the Maritime and Coastguard Agency (MCA), and the Fishermen's Training Advisory Group (FTAG) regarding:

- The enforcement of mandatory training for fishermen.
- The possible need for non-SOLAS type HRUs for smaller than six person liferafts.
- The safety and economic benefits of rigging gear with stone traps and flip up ropes when trawling in areas of rough or stony ground.
- The danger of lifting/hauling from high points to the detriment of vessel stability.