

## SYNOPSIS



At about 1640 on 12 July 2003, a 4.6m long GRP boat was swamped while underway on Loch Ryan, Scotland. On board were four members of one family (two boys, their father and their grandfather) and a friend of the grandfather. They had been returning to the slipway at Lady Bay, where they had launched the boat, after a successful day's fishing. The swamped boat continued to take on water until it sank, leaving all five people in the water. The weather, which had been good earlier in the day, had deteriorated slightly and there was a fresh wind from the south-south-west which was causing a choppy sea.

The boat's bow later rose to the surface and provided support for two of the party, but the others, the father and his two sons, drifted away. Although conventional and high speed ferries, fishing boats and yachts operate through the loch, no one saw their plight until, after about 4 hours spent in the cold water clinging to the bow, the grandfather and family friend were finally seen by a passing yacht and recovered.

One and a half hours later, during extensive search and rescue efforts, the father and younger boy were located 2 cables north of where the grandfather and friend had been found. They were airlifted to hospital but, despite resuscitation efforts, were later pronounced dead. The body of the older boy was discovered nearly 6 weeks later.

Examination of the boat and her engine revealed that the hull had been substantially modified from the original design. The modifications had resulted in a reduction in her integral buoyancy. The 48kW(65hp) outboard engine had been modified and poorly maintained. There had been insufficient lifejackets and safety equipment on the boat. She was heavily loaded at the time of the accident.

The radar recordings taken from the Voyage Data Recorders (VDRs) belonging to five ferries which were operating through Loch Ryan, were analysed and were effective in determining the probable time of swamping and the involvement of vessels in the area: a conventional ferry had passed the boat at a speed of about 17 knots at a distance of about 3 cables. The boat rode the waves from the ferry without causing undue concern although some spray and water was taken on board. She was then steered further out into the loch and her speed was increased. The boat was heading into choppy seas. About 4 minutes later, with little warning, a wave broke on board the boat over her starboard quarter. This shorted the battery and stopped the bilge pump and engine. The weight of water decreased the already low freeboard. More waves came on board and the vessel sank. There was no time to make a distress call or retrieve the flares that had been carried. There had been just enough time to retrieve two lifejackets from their plastic bags and hurriedly put them on the boys. The MAIB cannot determine with certainty the source of the wave(s) that led to the demise of the boat. The boat was very vulnerable to swamping especially from waves, wind generated or wash, approaching her stern.