SYNOPSIS



At about 1430 on 2 July 2005, the sailing dinghy *Mollyanna* capsized 7 cables off Puffin Island, North Wales. Onboard were its owner, his son, and his two grandsons. After capsizing, the owner's son tried to right the dinghy, which had inverted. Despite the wind strength of force 5 to 6 and a wave height of about 1.5m, he twice successfully rotated the boat upright, but it quickly capsized, inverting again on both occasions. The dinghy's owner died about 10 minutes after the initial capsize. His son and two grandchildren were able to hold onto the up-turned hull, and at 1558, were seen by a passing charter fishing boat. The crew of the dinghy were recovered on board the fishing vessel. Both

children were taken to hospital by helicopter, but the youngest child was pronounced dead on arrival. The deceased owner and his son were taken to Beaumaris by an RNLI lifeboat, and the charter fishing vessel respectively. The dinghy, which could not be righted by RNLI personnel, was towed to Beaumaris and beached.

The investigation highlighted a number of causal and contributory factors, including:

- The dinghy could not be righted following capsize; it did not meet the stability and buoyancy requirements of EN ISO 12217-3 with respect to boat design category C.
- Calculations undertaken in 2001 regarding the dinghy's stability and buoyancy contained errors, and were possibly incomplete.
- A Statement of Conformity with the essential requirements of the RCD was issued by a notified body on the basis of the results of the calculations made in 2001, despite no evidence of calculation being produced in respect of the required flotation tests.
- Problems with the boat, such as its difficulty to right following capsize and water ingress into the flotation spaces between the dinghy's deck and outer hull when swamped, were not identified during the stability and buoyancy tests conducted on the boat in 2001.
- The crew were not aware that deteriorating weather conditions had been forecast.
- The crew were inexperienced dinghy sailors.
- The clothing worn by the crew would have afforded little protection.
- The owner's lifejacket was not securely fastened.
- A number of departures from the requirements of the RCD by the manufacture were evident, including the failure to provide an owner's manual.
- The departures from the RCD were not recognised by the importer of the boat, or the dealer who sold the boat.

In November 2005, the MAIB sent letters to MG Boats (supplier), DarekCo, and Poliglass (manufacturers), to advise the companies that the BEZ 2 dinghy did not meet the stability and buoyancy requirements for boat design category C, and to strongly recommend that customers who have already purchased a BEZ 2 were advised of the category limitations which should correctly apply to the dinghy. The Maritime and Coastguard Agency, The Royal Yachting Association, and the British Marine Federation have undertaken to implement measures to encourage boat users to undergo appropriate sailing courses, and to help boat users understand the technical information provided with each craft.

Recommendations have been made to the Department for Trade and Industry, the British Standards Institution, and the British Marine Federation with the aim of improving: the effectiveness of the stability and buoyancy test required by craft similar to the BEZ 2; the quality of the information provided regarding the limitations of a craft, and; the education of the recreational craft industry worldwide with respect to the requirements of the RCD.