SYNOPSIS

This accident was notified to the Marine Accident Investigation Branch (MAIB) by the owner of *Chapter Two* (a 9.45m Targa 28 motorised pleasure craft), at the beginning of January 2000. Following an incident involving carbon monoxide poisoning on board his vessel, the owner arranged for a senior engineer from the cabin heater manufacturer, Messrs Eberspächer to inspect the installation. On receipt of the manufacturers report, the owner contacted the MAIB and an investigation started shortly afterwards.

On the morning of Friday 31 December 1999 the owner, together with his wife, his two children aged fourteen and ten, another couple and their eight year old daughter, boarded the boat at Medway Bridge Marina with the intention of sailing up the Thames to celebrate the New Year at Tower Bridge.

The boat was moved to the fuel pontoon where the potable water tanks were filled. As it was rather cold, the canvas hood covering the cockpit area was left up and the cabin heater started. They left the marina at 0815 and started down the River Medway.

During the early part of the passage, the children complained of being ill, and by 0845 the majority of the passengers were feeling seasick and complaining of headaches. The boat was, by that time, close to buoy 31, with the owner at the helm. Within the next few minutes one of the children collapsed, followed shortly afterwards by the owner's wife. Realising that they all appeared to be suffering from carbon monoxide poisoning, he ordered everybody out on deck before informing the emergency services by a 999 telephone call that an ambulance would be needed on arrival at the marina. The owner turned the boat around and headed back to the Medway Bridge. On arrival, they were met by the police, fire and ambulance services when all on board were treated with oxygen before going to hospital for a check-up. Following further checks and blood tests, three of the passengers were sent for further treatment in a hyperbaric chamber at Portsmouth. All fully recovered.

The carbon monoxide poisoning was the result of exhaust fumes from the main engines being drawn in by the cabin heater air intake and being circulated throughout the accommodation. When the boat was stationary or moving slowly, the main engine exhaust gas emissions seeped into this area, were sucked into the heater system, heated, and discharged throughout the boat.