SYNOPSIS

The Liquefied Petroleum Gas (LPG) carrier, *Gas Monarch*, collided with the sailing yacht, *Whispa*, in dense fog 6 miles ESE of Lowestoft on the evening of 16 April 2007. There were no physical injuries on either vessel. There was no damage to *Gas Monarch* and initial structural damage to *Whispa* was relatively minor. However, the damage to the yacht worsened due to progressive flooding as she was towed to Lowestoft by a lifeboat.

Gas Monarch was proceeding at full speed, in fog, when her master left the bridge in the hands of his third officer (3/O) and an able bodied seaman (AB), contrary to his own standing orders. The 3/O had been on watch for about 1hour 40 minutes when *Whispa* appeared out of the fog on a crossing course at very short range. Evasive action by both craft was unsuccessful and the vessels collided.

Prior to the collision, the 3/O on *Gas Monarch* had detected *Whispa* by radar and had calculated that the contact would pass clear to starboard. *Gas Monarch* lost *Whispa*'s radar contact at a distance of just under 3 miles, but carried on at full speed with no sound signals in the dense fog.

Whispa was motoring on her auxiliary engine with her skipper on watch and his crew member resting below. The yacht skipper had detected *Gas Monarch* by radar and monitored the target track close to his radar heading marker, for several miles. *Whispa's* skipper had limited knowledge of his radar's capabilities or limitations; without plotting, calculating a closest point of approach (CPA), or establishing *Gas Monarch's* speed he concluded that the vessels were on a collision course. *Whispa* made a bold alteration to starboard when the vessels were just over a mile apart (and closing at fully 18 knots) but this action, instead of moving *Whispa* clear of *Gas Monarch*, brought the two vessels onto a collision path.

Gas Monarch's bow struck *Whispa's* port transom and rudder, slewing the yacht round to port and pushing her clear, which allowed the vessels to pass without further contact.

The 3/O on *Gas Monarch* was in a state of shock as a result of the incident and did not slow the ship. Hearing *Whispa*'s distress call stimulated him into calling the master, who rushed to the bridge, immediately stopped the ship, and identified *Gas Monarch* to the coastguard. *Gas Monarch* stood by *Whispa* until the yacht was taken in tow by the lifeboat.

The MAIB investigation identified a number of contributing factors to the accident, including:

- A failure by both vessels to abide by collision avoidance regulations
- Deteriorated performance and accuracy of both vessels' radars
- Lack of experience by *Gas Monarch's* third officer, compounded by lack of support from the master
- Inappropriate use of radar equipment by both vessels.

As a result of the accident, the managers of Gas Monarch have:

- Serviced and replaced magnetrons in both radars
- Implemented bridge team refresher training
- Reviewed and intensified its fleet audit procedures
- Recommended to her owners the replacement of electronic radar plotting aids with Automatic Radar Plotting Aids (ARPA)
- Accelerated S-VDR installation throughout its fleet.

As a result of the accident, Whispa's owner has:

- Installed AIS "B" to improve detection by ships monitoring the system
- Installed a GMDSS DSC VHF radio
- Installed additional bilge pumps and bilge warning alarms.

In addition, the Oil Companies International Marine Forum (OCIMF) has:

- Added a Radar Performance Monitor guidance note to its Vessel Inspection Questionnaires
- Proposed amendments to its Tanker Management Self Assessment tool to reflect that all vessels should be fitted with ARPA as best practice.

Recommendations have been made to the Maritime and Coastguard Agency (MCA) and Comité International Radio-Maritime¹ (CIRM) regarding small commercial vessel training requirements and radar training.

¹ CIRM is an international association for companies engaged in maritime electronics whose objectives are to promote the application of electronic technology for the safety of life and efficient conduct of vessels at sea.



Gas Monarch