



THE SOUTHAMPTON MASTER MARINERS' CLUB

"HIGH SPEED - SAFE SPEED"

**A Report on the
TECHNICAL SEMINAR
held at the Southampton Club-room
on
Wednesday 23rd April 2003**



THE SOUTHAMPTON MASTER MARINERS' CLUB ANNUAL TECHNICAL SEMINAR

“HIGH SPEED – SAFE SPEED”

Following a welcome from Captain Geoffrey Lee, Captain of the Club, the forty-four members and guests assembled in the Clubroom on the evening of Wednesday, April 23rd. heard Captain Cliff Brand, a Marine Accident Investigation Branch Inspector speak on the investigation of the collision between **DIAMANT** and **NORTHERN MERCHANT**, three miles SE of Dover on January 6th. 2002. – an investigation in which he was deeply involved.

The former – a high-speed wave-piercing catamaran is arranged to operate as a passenger and vehicle-carrying ferry on short domestic and short international voyages. With a complement of 18, her passenger capacity is 650 and she can carry 180 motor vehicles. Capable of a speed of 40 knots, her operational speed is 32 knots.

The latter vessel is a conventional ro-ro/passenger ferry capable of carrying 400 souls inclusive of her complement of 18, and 146 lorries. Her operational speed is 22.5 knots.

At 0743 on January 6th DIAMANT departed Oostende en-route for Dover. The visibility was 300/500 metres and, on clearing the piers, the automatic fog signal was activated and two lookouts were posted. In light traffic, speed was increased to 32 knots but at 0755 an engine malfunction reduced this to 24 knots. Repairs were successful and at 0850 she was again travelling at 32 knots. Having crossed the TSS she set course for the western entrance to Dover Harbour and shortly afterwards she heard NORTHERN MERCHANT request permission to depart from Dover Harbour. This granted, the ro-ro ferry cast off at 0930 and in visibility of 150/200 metres she immediately activated her automatic fog signal. Traffic prevented her immediate departure but, at 0940, she cleared the breakwater, increased speed and set course for Dunkerque. An inward bound ferry caused a speed reduction to 12 knots but once this was clear speed was increased to 20 knots and the auto-pilot engaged; the vessel heard DIAMANT requesting permission to enter Dover Harbour.

DIAMANT was told that the late departure of another ferry meant that her berth was not available so, at 0943, speed was reduced to 29 knots and the ETA amended.

At 0945, as DIAMANT passed the S.Goodwin Lt.Vessel the visibility deteriorated.

Each vessel had identified the other and was constantly plotting its movement by radar and ARPA. NORTHERN MERCHANT then engaged a helmsman and altered course 7/10 degrees to starboard. DIAMANT had estimated a “Closest point of Approach” as 2 cables and shortly afterwards this increased to 3 cables.

Fearful of the developing situation, NORTHERN MERCHANT ordered 20 degrees of starboard helm but aboard DIAMANT, the radar echo of the target having started to arc through 180 degrees, course was altered to port – 5 degrees initially then hard over. Almost immediately, DIAMANT saw the port side of NORTHERN MERCHANT emerge from the fog at a distance of some 50/150 metres and in an endeavour to increase her rate of turn she reversed her port engine.

At 0952 DIAMANT struck the port side of NORTHERN MERCHANT at a point slightly aft of amidships, her prow making contact first followed by her starboard wave piercer. Fortunately, the impact was lessened by the fact that both vessels were swinging away from each other so damage was light and there were no deaths or injuries aboard either vessel. DIAMANT subsequently berthed safely in Dover and

NORTHERN MERCHANT continued on passage to Dunkerque.

The fundamental purpose of investigating an accident under the Merchant Shipping Regulations 1999 is to determine its circumstances and the causes with the aim of improving the safety of life at sea and the avoidance of accidents in the future.

It is not the purpose to apportion liability.

On January 6th, 2002, the MAIB was informed of the accident and an investigation began that day.

The Inspectors ascertained that as the vessels approached each other, with a CPA of 3 cables in fog, DIAMANT was travelling at 29 knots and NORTHERN MERCHANT at 21 knots. The former assumed, incorrectly, that it was a “green to green” passing situation and maintained course and speed whilst on board NORTHERN MERCHANT they fully expected DIAMANT to keep clear because of a perceived unwritten rule that high-speed craft keep clear of all other vessels at all times.

Once it became apparent to NORTHERN MERCHANT that this might not be the case that vessel made a small alteration of course to starboard and, as the situation rapidly worsened, she applied 20 of starboard helm. As the vessels closed radar arcing on DIAMANT meant that she could no longer plot the rapidly closing target and as the radar appeared to indicate danger on her starboard side she altered course to port.

Captain Brand said that the accident had raised three important safety issues:

1. The perceived unwritten rule that the high speed craft always keeps clear
2. The determination of a “safe speed” and
3. The extent to which reliance can be placed on radar for detection in restricted visibility.

