Collision between

*Ash and Dutch Aquamarine*

south-east of Hastings

in the Dover Traffic Separation Scheme

with the loss of one life

9 October 2001
MAIB SAFETY BULLETIN 2/2001

This document, containing Safety Recommendations, has been produced for marine safety purposes only on the basis of information available to date.

The Merchant Shipping (Accident Reporting and Investigation) Regulations 1999 provide for the Chief Inspector of Marine Accidents to make recommendations at any time during the course of an investigation if, in his opinion, it is necessary or desirable to do so.

The Marine Accident Investigation Branch (MAIB) is carrying out an investigation of the collision on 9 October 2001 between the motor vessels Ash and Dutch Aquamarine, which resulted in the foundering of Ash and the death of her master. The MAIB will publish a full report on completion of the investigation.

This accident is the latest and most serious of four similar collisions which have occurred in the south-west lane of the Dover Traffic Separation Scheme in 13 months. The MAIB believes that modern navigational methods and equipment may be contributing to overcrowding in the traffic lanes, and this Safety Bulletin is issued to alert the Maritime and Coastguard Agency (MCA), owners and masters to the potential hazards involved.

J S Lang
Rear Admiral
Chief Inspector of Marine Accidents
SAFETY RECOMMENDATIONS

Background

On 9 October 2001 the 1,009 gross tons (gt) motor vessel Ash was en route from Odense, Denmark, to the Spanish port of Pasajes with a cargo of steel coils. She had six crew on board and was making a speed of about 6.25 knots in the south-west traffic lane to the south-east of Hastings. The 4,671gt chemical tanker Dutch Aquamarine was also on passage in the same traffic lane en route from Antwerp to Swansea and was making about 12.5 knots over the ground. She had a mixed chemical cargo and a crew of 12 on board. There were a number of other vessels in the vicinity, all of which were bunched towards the northern edge of the lane. Close passing was commonplace.

Although the investigation into this accident is still underway, it has been established that Dutch Aquamarine had been the overtaking vessel, and her watchkeeper did not notice the developing collision situation until it was too late. Ash took no effective last minute avoiding action. The subsequent collision caused Ash to founder with the loss of her master.

As part of its investigation the MAIB studied the tracks taken by all vessels on passage in the south-west traffic lane of the Dover traffic separation scheme (TSS) during a six-hour period. This showed that most vessels hug the northern edge of the lane with only two or three choosing to pass to the south of the Varne. Where traffic is bunched in this way, close passing is commonplace. It only requires a brief lapse of concentration to lead to a collision; especially when the speeds of vessels are very different.

This is the latest in a number of collisions that have recently occurred in the Dover TSS. The circumstances in each have been very similar.

In September 2000, Kinsale collided with the stern of Eastfern. Kinsale was the overtaking vessel, with a speed about 6 knots faster than that of Eastfern. In January 2001 the overtaking vessel Unden collided with the stern of Star Maria, causing substantial damage to both ships. In June 2001 the larger and much faster Atlantic Mermaid collided with the stern of the smaller cargo ship Hampool. Hampool was substantially damaged. The MCA has successfully prosecuted those in charge of the overtaking vessels in two of these accidents.
The problem of traffic bunching in the south-west lane of the Dover TSS is well known. The guidance given on Admiralty chart 5500 “Mariners Routing Guide, English Channel and Southern North Sea” warns that:

- many vessels keep too close to the north side of the west-bound lane between South Falls and Dungeness; and,

- vessels should make use of the full width of the traffic lanes and open waters to reduce collision risks.

It is apparent that this advice is not being heeded. The fact that four collisions in overtaking situations have occurred in this area in the past 13 months may be indicative of a worsening situation.

The MAIB believes that a possible explanation lies with the increasing use of Global Positioning Systems (GPS) and electronic chart systems for forming, and then storing, passage plans. Where stored plans are being executed by reference to the GPS navigator, electronic chart system and/or track control system, watchkeepers can be reluctant to stray from the planned track. Further, where circumstances force a deviation, there appears to be a tendency to return to the original track instead of revising the passage plan. This serves to cause and maintain the bunching of traffic, the danger of which is enhanced when the vessels involved have markedly different speeds.

**Safety Recommendations**

1. **Ship owners and masters** should:
   1. consider carefully whether their passage planning strategy is adding to congestion in the Dover TSS;
   2. consider whether the way electronic navigation aids are used on their vessels could be reducing the flexibility of watchkeepers to use the whole traffic lane in areas of congestion;
   3. remind themselves and watchkeeping officers of the advice contained on Admiralty chart 5500, in particular, to make use of the full width of the traffic lanes to reduce collision risks.

2. **The Maritime and Coastguard Agency** is recommended to:
   1. conduct research into the extent to which modern navigational practices, together with electronic navigation equipment, is contributing to bunching of traffic in the south-west traffic lane of the Dover TSS; and,
   2. on completion of the research, seek to ensure that effective measures are put in place to mitigate the problem.