

Report on the investigation of  
a collision between  
***Nordsee and Poole Scene***  
in the River Clyde on  
27 December 2000

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The fundamental purpose of investigating an accident under these Regulations is to determine its circumstances and the cause 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, nor, except so far as is necessary to achieve the fundamental purpose, to apportion blame.

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## **GLOSSARY OF ABBREVIATIONS**

<b>ARPA</b>	Automatic Radar Plotting Aid
<b>CPA</b>	Closest Point of Approach
<b>ETA</b>	Estimated Time of Arrival
<b>GPS</b>	Global Positioning System
<b>kW</b>	kilowatt
<b>m</b>	metre
<b>MAIB</b>	Marine Accident Investigation Branch
<b>MCA</b>	Maritime and Coastguard Agency
<b>MF</b>	Medium Frequency
<b>MGN</b>	Marine Guidance Note
<b>UK</b>	United Kingdom
<b>UTC</b>	Universal Co-ordinated Time
<b>VHF</b>	Very High Frequency
<b>VTS</b>	Vessel Traffic Services

## SYNOPSIS



The 2579gt Antigua and Barbados-registered feeder container vessel *Nordsee*, collided with the 119gt UK-registered class V passenger vessel *Poole Scene* on 27 December 2000, in the approaches to Greenock Harbour on the River Clyde. Visibility was severely restricted.

The accident was reported to the Marine Accident Investigation Branch (MAIB) on 27 December 2000 and an investigation began that day.

As a result of the collision, 17 of the 41 passengers on board *Poole Scene* were injured. They were taken to the Inverclyde Royal Hospital in Greenock. After treatment for minor injuries, 16 were released and one was admitted.

*Poole Scene* sustained substantial bow damage, while *Nordsee* sustained slight shell plate damage.

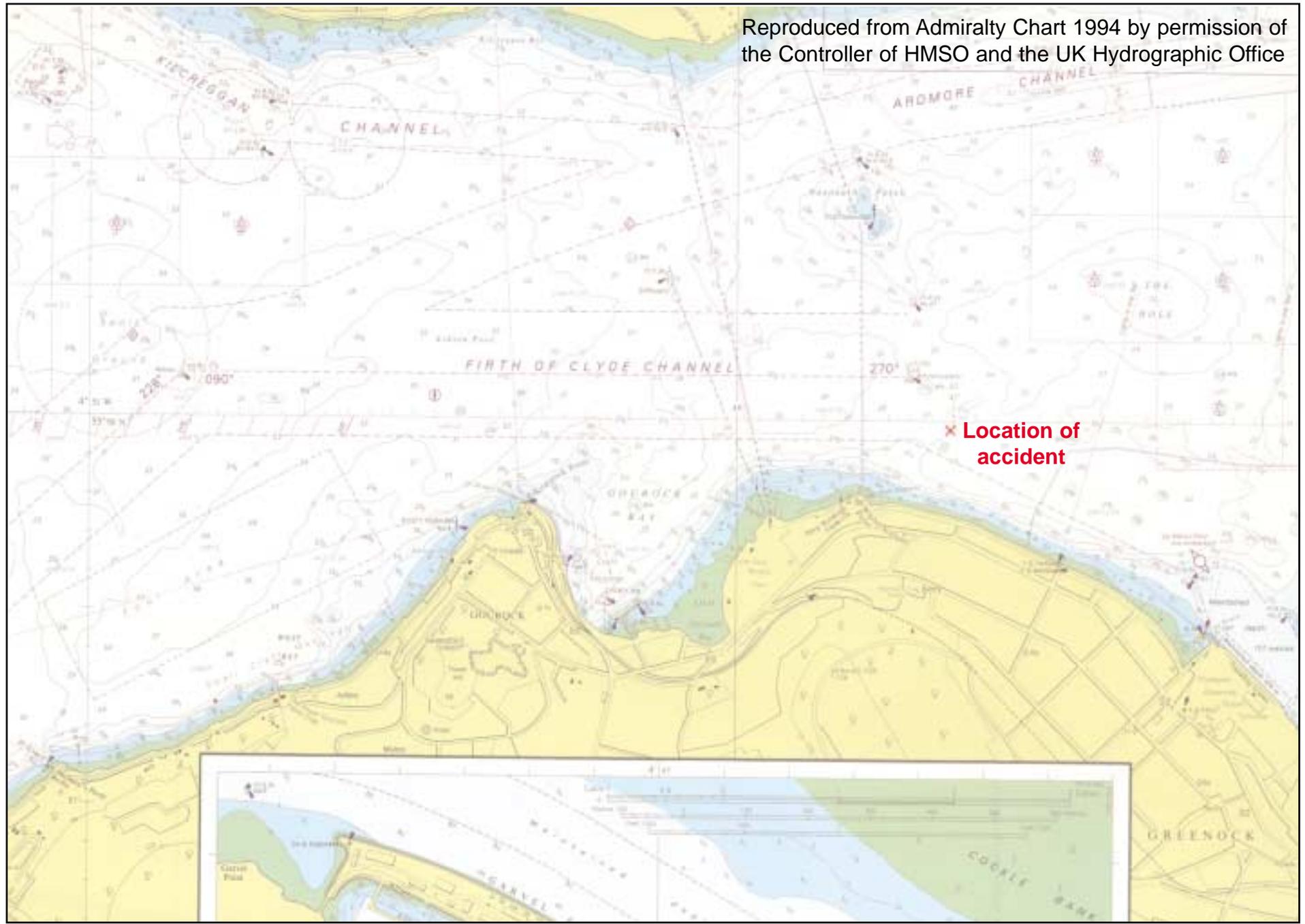
Contributory causes of the collision included:

- Lack of planning and monitoring;
- Defective equipment;
- Flawed decision making.

Recommendations have been made to the owners of both vessels to provide a specific documented procedure, for adoption by the crew, for the safe operation of their vessels in restricted visibility.

A further recommendation has been made to the owner of *Nordsee* to replace the defective radar.

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## SECTION 1 - FACTUAL INFORMATION

### 1.1 PARTICULARS OF *NORDSEE/POOLE* SCENE AND ACCIDENT

<b>Vessel details</b>		<i>Nordsee</i>
Registered owner	:	Jess Schiffahrts Schacht-Audorf, Germany
Manager	:	Jess U Schacht-Audorf, Germany
Port of registry	:	Rendsburg
Flag	:	Antigua and Barbuda
Type	:	General cargo/feeder container
Built	:	1978 JJ Sietas KG Sciffswerft Hamburg
Classification society	:	Germanischer Lloyd
Construction	:	Steel
Length overall	:	88.6m
Gross tonnage	:	2579
Engine type and power	:	MAK 1471kW single screw shaft
Service speed	:	14.75 knots
<b>Accident details</b>		
Time and date	:	1023 UTC, 27 December 2000
Location of incident	:	55° 58'N 004° 47'W River Clyde
Persons on board	:	9 crew + 1 pilot
Injuries/fatalities	:	None
Damage	:	Slight shell plate damage

Figure 1



*Nordsee*

Figure 2



*Poole Scene*

**Vessel details***Poole Scene*

Registered owner : Clyde Marine Motoring Co Ltd, Princes Pier,  
Greenock PA16 8AW

Manager : As above

Port of registry : Southampton

Flag : UK

Type : Passenger Vessel Class V

Built : 1974

Classification society : None

Construction : Steel

Length overall : 23.1m

Gross tonnage : 119.15

Engine type and power : 2 X Gardner 6L3B diesels, serving twin azimuth  
thrusters

Service speed : 8.5 knots

**Accident details**

Time and date : 1023 UTC 27 December 2000

Location of incident : 55° 58'N 004° 47'W River Clyde

Persons on board : 3 crew + 41 passengers

Injuries/fatalities : Various injuries to 17 passengers

Damage : Substantial bow damage

## 1.2 DESCRIPTION OF VESSELS

### Nordsee

*Nordsee*, built of steel in 1978 as a general cargo vessel, was capable of carrying 208 teu containers. The vessel had one deck above the waterline and two cargo holds. The accommodation and engine room were situated aft (**see Figure 1**).

*Nordsee* was equipped with the following navigational equipment: a standard magnetic compass and gyrocompass, MF and VHF radios, two GPSs, one echo sounder, one anti-collision ARPA radar and one relative motion radar.

The majority of the navigational equipment was strategically housed in an operating console, positioned centrally forward on the bridge. The wheel, tiller and two bridge chairs were behind the console (**see Figure 3**).

Figure 3



*Nordsee* - bridge

### Poole Scene

*Poole Scene* built of steel in 1974, specifically as a river and inland waterway passenger vessel, had one deck above the waterline, which incorporated a covered passenger space with seating and a galley area. This was the main passenger area. A bar was fitted forward.

A storage space and engine room were below deck. The wheelhouse was positioned centrally amidships above the passenger space (**see Figure 2**).

*Poole Scene* was fitted with the following navigational equipment: a standard magnetic compass, which was housed in the deckhead and visible through a mirror mounted centrally at seating height in the wheelhouse, VHF radio, echo sounder and two relative motion radars, of which one was not normally used (**see Figure 4**). The radar in use did not incorporate an integrated plotting facility, and there was no legal requirement for one to be fitted.

Figure 4



*Poole Scene* - wheelhouse

### 1.3 BACKGROUND

*Nordsee*, contracted to Clydeport, was engaged on a regular feeder container voyage between the ports of Southampton, Liverpool and Greenock on a weekly round trip.

She left the port of Southampton, bound for Greenock, on 25 December 2000. Her cargo consisted of 60 empty and four laden 40-foot containers.

During the passage the weather conditions were favourable, with no disruption to the normal routine on board.

*Poole Scene*, a class V passenger vessel, owned and operated by Clyde Marine Motoring Co Ltd, was engaged in the private charter market. The company also owned and operated two tugs, four mooring launches and another four passenger vessels. *Poole Scene* was purchased in 1999, having previously operated on the south coast of England.

On the day of the accident she was privately chartered for a party of 40, for a cruise to the Kyles of Bute.

### 1.4 THE CREWS

#### *Nordsee*

*Nordsee* carried a crew of nine: master, chief officer, chief and assistant engineers, cook, three seamen and a deck trainee.

The German master had been employed on board merchant vessels since 1963. He had served as master since 1983, mainly on board feeder container vessels, and had been in command of *Nordsee* for the past 15 years. He held an unrestricted German master's certificate of competency.

The remainder of the crew, including an experienced chief officer and chief engineer were Filipino and Burmese nationals.

#### *Poole Scene*

*Poole Scene* carried a crew of three: the skipper and two deckhands.

The skipper had spent 25 years on board coastal vessels and tugs; 20 years were spent as skipper. He had been employed on board *Poole Scene* for 2 years and was the holder of a grade 1 boatmaster's licence. He was also the holder of a certificate of service as master (excluding passenger vessels). Both were issued by the Maritime and Coastguard Agency.

Both deckhands were experienced, and holders of a grade 1 boatmaster's licence; one had been employed with the company for more than 5 years,

including 2 years on board *Poole Scene*. The other had been employed with the company for more than 3 years, with only a limited amount of time spent aboard *Poole Scene*.

## 1.5 PASSENGERS AND CATERING STAFF (*POOLE SCENE*)

At the time of the accident 41 passengers were on board the vessel.

Included in this number were four catering staff who had been contracted in from a local catering firm by Clyde Marine Motoring. The remainder of the passengers consisted of men, women and children of various ages.

Seventeen passengers were injured in the accident and later taken to Inverclyde Royal Hospital in Greenock. Sixteen passengers were released after treatment for minor injuries, with one being admitted.

## 1.6 ENVIRONMENTAL CONDITIONS

The weather conditions at the time of the incident were a cyclonic wind of force 3 to 4 with no surface swell. Visibility was poor, to very poor in patches of dense fog, and the tide in the River Clyde was flooding at a rate of 0.5 knots.

## 1.7 PILOTAGE NAVIGATION

### *Nordsee*

When engaged in pilotage navigation, the master assumed the responsibility of the watch. However, he did not hold a pilotage exemption certificate and, consequently, *Nordsee* was required to engage the services of a pilot whenever entering or leaving port.

Only in restricted visibility was an additional person called to the bridge to act as lookout.

When entering or leaving the port of Greenock, it was normal practice for the pilot to board at a position 4 cables north-west of Kempock point. Positions were not normally plotted on the chart during the latter of stages of approach, and a passage plan was not normally used for the pilotage passage.

### *Poole Scene*

The skipper assumed responsibility for all the pilotage navigation on the vessel. As *Poole Scene* was limited in its area of operation to inland waterways and estuaries, there was no requirement to engage the services of a pilot.

On occasion, the skipper called one of the deckhands to the wheelhouse to act as lookout during periods of restricted visibility. Passage plans were never used.

## 1.8 FATIGUE

Before the master of *Nordsee* came on watch, on the day of the accident, he had spent 6 hours off duty. He spent most of this time sleeping.

The skipper of *Poole Scene* had spent the previous evening at home, and was well rested before joining the vessel at 0830.

The pilot had been off-duty the night before. He, too, was well rested before reporting for duty at 0930.

## 1.9 THE HARBOUR AUTHORITY

Clydeport operates the port of Greenock, and navigational matters are the harbour master's responsibility.

There is no VTS for the port, but an estuary control station, situated on the north end of the Greenock Ocean Terminal, provides a port operations and information service on request. VHF channels 12 and 16 are manned 24 hours continuously.

There is also a mandatory requirement for certain vessels to report in and out of the control area.

## 1.10 NARRATIVE OF EVENTS (All times are UTC. All courses are true)

At 0600, 27 December 2000, the master relieved the mate of the navigational watch on the bridge of *Nordsee*. At that time the vessel's position was near the island of Ailsa Craig, and her speed was approximately 13 knots. She was bound for the port of Greenock.

Later on, at 0800, the master contacted Clydeport Estuary Control, reported his ETA and ordered a pilot for 1000. After ordering the pilot, Estuary Control informed him that the visibility in the Firth of Clyde was poor, because of fog.

At the same time, the skipper and both deckhands of *Poole Scene*, arrived at James Watt Dock in Greenock, where the vessel was berthed. After boarding, they carried out the required preliminary checks, started the main engine and then left the dock, bound for Princes Pier, downriver. They arrived at 0850 and made fast, to await the arrival of the passengers.

At approximately 0930, as *Nordsee* approached Cowal buoy, in the Firth of Clyde Channel, the visibility began to deteriorate in patchy fog, reducing at times from 0.5 to 0.1 mile. Still in autopilot, the master reduced speed and began navigating the vessel using the ARPA radar which was set to the 1.5 mile range. The other radar was not in operation. He then called the deck trainee to the bridge to act as lookout. No sound signals were made.

At 0955, the passengers destined for *Poole Scene* arrived at Princes Pier by coach, the catering staff having arrived 10 minutes earlier.

At 1005, the pilot boarded *Nordsee* when the vessel was approaching Ashton buoy. He was familiar with both the vessel and her master, having attended the vessel several times before. As soon as he was on the bridge, he called Estuary Control by VHF radio and obtained clearance for the Ocean Terminal. The deck trainee then left the bridge in preparation for berthing. By that time, *Nordsee* had cleared Ashton buoy and was on a heading of 092°. The pilot, who was then sitting in the starboard chair, altered course to 094° and then reduced the range of the radar from 1.5 to 0.75 miles. The master was sitting in the port chair. There was no other traffic in the channel, except the pilot cutter and the cross-river ferry *Kenilworth*.

After the passengers were escorted on board *Poole Scene*, her skipper made a brief safety announcement. It consisted of advising passengers to read safety instructions, which were fixed to the bulkheads in the main passenger area, about donning lifejackets and abandoning ship. He contacted Estuary Control at approximately 1008, to report he was ready to leave the berth. He then passed over details of the number of passengers and crew on board, his destination, and his expected time of return. The watchkeeper in Estuary Control informed him that an inbound vessel, *Nordsee*, with a pilot on board, was in the vicinity of Ashton buoy and was bound for the Ocean Terminal. He also asked the skipper whether he would prefer to wait alongside until *Nordsee* was past and clear. However, *Poole Scene* was now 30 minutes late in departing, so the skipper replied that he would still sail, but would keep well clear to the south. Both the pilot and the master on board *Nordsee* heard this conversation. The visibility at the berth was less than 0.1 mile.

At 1010, *Poole Scene* left Princes Pier bound for the Kyles of Bute. Her skipper was alone in the wheelhouse and was navigating by radar, which was set to the 1.5 mile range, with the echo of No. 1 buoy clearly identifiable. The skipper had decided not to use the outward bound channel but to steer a course parallel with the land, at a distance of 1 cable, just outside the inward bound channel. Despite the poor visibility, no sound signals were made.

Shortly after letting go, *Poole Scene* passed No. 1 buoy, leaving it on her starboard side.

On board *Nordsee*, both the pilot and the master, aware of *Poole Scene*'s departure, detected her on radar approaching Whiteforeland buoy. *Poole Scene* appeared to be on a reciprocal course and would eventually pass her clear on *Nordsee*'s starboard side. Both the pilot and the master thought it unnecessary to carry out a radar plot. They were both content with a CPA of approximately 0.1 mile.

The skipper on *Poole Scene*, navigating and mentally plotting *Nordsee* on radar, heard the pilot cutter call *Kenilworth* on VHF radio, to inform her that they were past and clear, and that the container vessel was in the process of doing so at that moment. Shortly after this, the pilot cutter passed close to *Poole Scene*'s starboard side. Her wake was felt by everybody on board, and distracted the skipper momentarily. The next time he looked at the radar, *Nordsee*'s echo appeared to have merged with that of Whiteforeland Buoy.

As *Nordsee* passed Whiteforeland Buoy, the pilot could no longer detect the echo of *Poole Scene*; it had entered a "sunspot" at the centre of the radar screen. After passing the buoy, by approximately one ship's length, the master stopped the main engine in an effort to take the way off the vessel because of the close proximity of *Poole Scene*. Her speed was approximately 5 to 6 knots.

On board *Poole Scene*, the skipper was still unable to distinguish the echo of *Nordsee*. As a precautionary measure he decided to reduce speed from the 2 to 3 knots the vessel was making. Just as he was doing so, he became aware of another vessel's bow looming out of the fog. Immediately he came full astern on the engines, but his actions were insufficient to prevent the bow of *Poole Scene* colliding with *Nordsee*'s starboard side.

The impact of the collision caused many of the passengers below deck to lose their footing and be thrown against tables, chairs, bulkheads and each other. A number of injuries were also caused by the movement of unsecured fixtures and fittings. The skipper was unable to inform the passengers what had happened as the tannoy had been damaged in the collision. In the initial panic, confused passengers, unaware of what was happening, began scrambling up the main stairway in an effort to get to the upper deck. However, shortly after this, they were informed of the situation by the two deckhands who were checking for any ingress of water.

Once the pilot on board *Nordsee* realised what had happened, he called Estuary Control by VHF radio, and informed them of the situation. He then called *Poole Scene* to ascertain her status. The skipper of *Poole Scene* also contacted Estuary Control and reported his situation, including the injuries to passengers.

After establishing there was no imminent danger to either vessel, both made their way back to Greenock Harbour. *Nordsee* arrived at the Ocean Terminal, and *Poole Scene* returned to Princes Pier.

On arrival, waiting ambulances ferried the injured passengers from *Poole Scene* to hospital.

*Nordsee* sustained only slight damage to her hull plating on the starboard side. *Poole Scene* however, sustained substantial damage to her bow (**see Figure 5 and 6**).

Figure 5



Damage to *Poole Scene*

Figure 6



## 1.11 INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA 1972 (COLLISION REGULATIONS)

Rule 2(a) of the *International Regulations for Preventing Collisions at Sea 1972 (Collision Regulations)* states:

*Nothing in these rules shall exonerate any vessel, or the owner, master and crew thereof, from the consequences of any neglect to comply with the rules or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.*

Rule 5 states:

*Every vessel shall at all times maintain a proper look out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.*

Rule 6 (in part) states:

*Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.*

*In determining a safe speed the following factors shall be among those taken into account:*

- (a) *By all vessels*
  - (i) *the state of visibility*
  - (ii) *The manoeuvrability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions*
- (b) *Additionally, by vessels with operational radar:*
  - (i) *the characteristics, efficiency and limitations of the radar equipment*

Rule 8 (in part) states:

(e) *If necessary to avoid collision or allow more time to assess the situation, a vessel shall slacken her speed or take all way off by stopping or reversing her means of propulsion.*

Rule 19 states:

- (a) *This rule applies to vessels not in sight of one another when navigating in or near an area of restricted visibility.*
- (b) *Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines available for immediate manoeuvre.*
- (c) *A vessel which detects by radar alone the presence of another vessel shall determine if a close-quarters situation is developing and /or risk of collision exists. If so, she shall take avoiding action in ample time, provided that when such action consists of an alteration of course, so far as possible the following shall be avoided:*
  - (i) *an alteration of course to port for a vessel forward of the beam, other than for a vessel being overtaken.*
  - (ii) *An alteration of course towards a vessel abeam or abaft the beam.*

Rule 35 states:

*In or near an area of restricted visibility, whether by day or by night, the signals prescribed in this Rule shall be used as follows:*

- (a) *A power-driven vessel making way through the water shall sound at intervals of not more than 2 minutes one prolonged blast.*
- (b) *A power-driven vessel underway but stopped and making no way through the water shall sound at intervals of not more than 2 minutes two prolonged blasts in succession with an interval of about 2 seconds between them.*

## **1.12 MARINE GUIDANCE NOTES (MGNs)**

Marine Guidance Notes, issued by the Maritime and Coastguard Agency as and when the need arises, contain advice for shipowners, operators, masters, skippers, deck officers and crews of all UK ships anywhere, and other ships operating in UK waters.

Marine Guidance Note *MGN 46 (M+F)*, entitled *Navigation in Fog*, highlights three accidents involving poor seamanship, the lack of prudent navigation in bad visibility, the need to proceed at a safe speed, the importance of recognising the limitations of navigation equipment, and the need to comply with the Collision Regulations. It stresses that the ships involved were all well-equipped vessels in the charge of men with sound qualifications; it was not skill or experience that was lacking, but the proper seamanlike approach to the situation. It also stresses the responsibilities of owners to take all reasonable steps to ensure that the ship is operated in a safe manner.

Marine Guidance Note *MGN 72(M+F)* entitled *Navigation Safety* draws attention to the need for systematic planning of all stages of the voyage. It also recommends masters, skippers and watchkeepers to take the following precautions:

- a) *ensure that all the vessel's navigation is planned in adequate detail with contingency plans where appropriate.*
- b) *ensure that there is a systematic bridge organisation that provides for:*
  - (i) *comprehensive briefing of all concerned with the navigation of the vessel;*
  - (ii) *close and continuous monitoring of the vessel's position, ensuring as far as possible that different methods of determining the position are used to check against error in any one system;*
  - (iii) *cross checking of individual human decisions so that errors can be detected and corrected as early as possible;*
  - (iv) *information available from plots of other traffic is used carefully to ensure against over-confidence, bearing in mind that other vessels may alter course or speed;*
- c) *ensure that optimum and systematic use is made of all appropriate information that becomes available to the navigational staff; and*
- d) *ensuring that the intentions of a pilot are fully understood and are acceptable to the vessel's navigational staff.*

### **1.13 DOCUMENTED PROCEDURES**

Although not a legal requirement, neither *Nordsee* nor *Poole Scene* had in place any form of specific documented procedures for operating in conditions of restricted visibility.

## **SECTION 2 - ANALYSIS**

### **2.1 AIM**

The purpose of the analysis is to determine the contributory causes and circumstances of the accident as a basis for making recommendations to prevent similar accidents from occurring in the future.

### **2.2 GENERAL**

Fortunately, the majority of the passengers' injuries on board *Poole Scene* were minor. Had the vessels collided at a greater speed or at a different point of impact, the damage to *Poole Scene* could have been far more extensive, and resulted in more serious injuries and casualties in the water.

Had this been the case, given the restricted visibility, the emergency services would have had great difficulty in locating and retrieving casualties from the water. With the temperatures experienced that day, some people would probably have died.

### **2.3 DECISION TO SAIL (*POOLE SCENE*)**

One significant factor which contributed to this collision, was the skipper of *Poole Scene*'s decision to sail in such restricted visibility, especially when he had been informed of *Nordsee*'s approach and been asked by Estuary Control whether he would prefer to wait alongside until *Nordsee* was past and clear.

It would have taken about 10 minutes for *Nordsee* to pass, leaving *Poole Scene* a clear channel for departure.

The skipper's decision to sail was made in the knowledge that the vessel was already 30 minutes behind schedule; a further 10 minutes delay would have made little difference to a cruise which was due to last most of the day. The passengers would probably have accepted a simple explanation about the reason for the delay.

The skipper was unwise to sail in such circumstances. Had he waited until *Nordsee* was past and clear, the accident would have been avoided.

The decision to sail was made in the absence of any prohibition or cautionary input from the owner, either in the form of specific documented procedures or by direct intervention on the day.

## 2.4 NAVIGATION (RESTRICTED VISIBILITY)

When *Poole Scene* sailed, her skipper decided not to use the outward bound channel, but to navigate close to land.

This decision resulted in the vessel navigating extremely close to the inward bound channel, placing her in a vulnerable position, especially since another vessel was navigating inbound in conditions of severely restricted visibility.

Even so, both the master and pilot on board *Nordsee* and the skipper on *Poole Scene* clearly identified each other's echo by radar in ample time to take adequate avoiding action.

All concerned were content with a CPA of approximately 0.1 mile and the speed their vessels were making. No attempt was made to carry out a radar plot, or to reduce speed.

As both vessels approached each other it was presumed that each vessel would pass clear on their respective starboard sides. However, as the distance closed, the pilot and master of *Nordsee* lost the echo of *Poole Scene* in the "sunspot" of the radar screen, and *Poole Scene's* skipper lost the echo of *Nordsee* when it merged with that of Whiteforeland buoy. This resulted in both vessels navigating blindly. Attempts were made to take the way off each vessel but, because of their close proximity, it was too late to avoid a collision. If the pilot or master of *Nordsee* had used astern propulsion, in accordance with Rule 8 of the collision regulations, sufficient way may have been taken off the vessel to avoid the collision.

*Poole Scene's* skipper was unwise to navigate so close to the inward bound channel in such circumstances. The use, or the intended use, of the outward bound channel would have ensured that the distance between both vessels was sufficient to pass clear of one another. It is probable a steady course was not being steered and the vessel entered the channel inadvertently; alternatively, the skipper was attempting to cross the stern of *Nordsee* and turned too early. In any event, when the echo of *Nordsee* merged with that of Whiteforeland Buoy he should have interpreted that the closest edge of the echo was *Nordsee* and taken avoiding action.

In accordance with *MGN 72 (M&F)* close and continuous monitoring, including a radar plot, on both vessels could have provided advanced warning of the impending danger of a collision and allowed avoiding action to be taken, in accordance with Rule 19 of the collision regulations. The use of the secondary radar, as a back-up, on board *Nordsee* would have prevented her navigating blindly. The secondary radar on board *Poole Scene* was not normally used; the radar in use did not incorporate an integrated plotting facility.

Had a greater CPA and a reduction in speed been adopted in accordance with Rules 6a (i), (ii), b (i) and 8 (e), more time to fully assess the situation and to take avoiding action would have been available.

The navigational decisions taken by both the skipper of *Poole Scene* and the master and pilot of *Nordsee* were not conducive to the safe operation of their vessels. A proper seamanlike approach to the situation had not been taken in accordance with the advice given in *MGN 46 (M&F)* and *MGN 72 (M+F)*.

## **2.5 SOUND SIGNALS**

It is a requirement of the Collision Regulations, Rule 35, that all vessels sound a signal in restricted visibility. There are no exceptions.

Both *Nordsee* and *Poole Scene* should have been sounding a signal of one prolonged blast at intervals not exceeding 2 minutes. The purpose of these sound signals is to give advance warning to other approaching vessels. In restricted visibility it is an effective means of avoiding collisions.

Neither *Nordsee* nor *Poole Scene* was sounding any signal at all. Had they done so, each vessel's awareness of the close proximity of the other would have been enhanced. Consequently, the use of a sound signal might well have prevented the collision.

## **2.6 LOOKOUT**

The need for a lookout is paramount, especially in restricted visibility. The MAIB has investigated a number accidents which could have been avoided had a dedicated lookout been employed.

In restricted visibility, on all but the smallest vessels, it is prudent to have a lookout stationed forward; especially when navigating in confined waters. He/she is then more likely to give advance warning of any impending danger, not being distracted from the procedures on the bridge or in the wheelhouse.

A lookout stationed forward on *Nordsee*, in direct communication with the bridge, could have provided advanced warning to the master and pilot, and prompted them to take further avoiding action.

The employment of a dedicated lookout on *Nordsee* in accordance with Rule 5 of the collision regulations could have prevented this accident.

## **2.7 DOCUMENTED PROCEDURES**

Neither vessel had any specific documented procedures in place provided by the owner for operation in conditions of restricted visibility.

Had the crews adopted a specific documented procedure, which took into account necessary measures for the safe operation of each vessel, this accident could have been prevented.

## SECTION 3 - CONCLUSIONS

### 3.1 FINDINGS

1. The potential for a more severe accident, resulting in serious injury, including fatalities existed. [2.2]
2. *Poole Scene's* skipper was unwise to sail in such circumstances. [2.3]
3. Had he delayed sailing until *Nordsee* was passed and clear, the accident would have been avoided. [2.3]
4. *Poole Scene's* skipper was unwise to navigate his vessel so close to the inward bound channel. [ 2.4]
5. The CPA between both vessels was inadequate. [2.4]
6. The use of the outward bound channel by *Poole Scene* would have ensured that the distance between both vessels was sufficient, so as to pass clear of one another. [2.4]
7. The use of astern propulsion on *Nordsee* might have prevented the collision. [2.4]
8. A radar plot, conducted on both vessels, could have provided advanced warning of the collision. However, the radar in use on board *Poole Scene* did not incorporate an integrated plotting facility. [2.4]
9. The use of the secondary radar on board *Nordsee* would have prevented her from navigating blindly. [2.4]
10. A reduction in speed by both vessels would have created a greater CPA and allowed more time to assess the situation, thereby avoiding the collision. [2.4]
11. Navigational decisions taken by the skipper of *Poole Scene* and the master and pilot of *Nordsee*, were not conducive to the safe operation of their vessels. [2.4]
12. Both vessels failed to sound a fog signal. Had they done so, the collision might well have been prevented. [2.5]
13. The employment of a dedicated lookout on board *Nordsee* might well have prevented the collision. [2.6]
14. Had the crews adopted a specific documented procedure provided by the owner for safe operation in restricted visibility, this accident could have been prevented. [2.7]

### 3.2 CAUSES

The following factors are considered to have led to the collision between *Nordsee* and *Poole Scene*:

1. The decision of *Poole Scene*'s skipper to sail in such circumstances.
2. *Poole Scene* being 30 minutes behind schedule.
3. The decision of *Poole Scene*'s skipper to navigate so close to the inward bound channel.
4. The restricted visibility.
5. The lack of a passage plan on *Poole Scene*.
6. The lack of track monitoring on *Poole Scene*.
7. The failure to reduce speed on both vessels.
8. The failure of *Nordsee* to use astern propulsion.
9. The lack of any radar plotting.
10. The inadequate CPA between both vessels.
11. *Nordsee*'s defective radar.
12. Failing to use secondary radar as a back-up on board *Nordsee*.
13. Both vessels failing to sound a fog signal.
14. The absence of a dedicated lookout on board *Nordsee*.
15. *Poole Scene* deviating into the inward bound channel, inadvertently or intentionally.

## **SECTION 4 - RECOMMENDATIONS**

**Jess Schiffahrts Schacht-Audorf, Germany**, is recommended to:

1. Provide a specific documented procedure, for adoption by its crews, for the safe operation of its vessels in restricted visibility.
2. Replace the defective radar on board *Nordsee*.

**Clyde Marine Motoring Co Ltd**, is recommended to:

3. Provide a specific documented procedure, for adoption by the crew, for the safe operation of its vessels in restricted visibility.
4. Review the adequacy of the radar equipment fitted on board *Poole Scene* for safe operation in restricted visibility.

**Marine Accident Investigation Branch  
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