PART III SEARCH AND RECUE: EMERGENCY ARRANGEMENTS

12. INITIAL RESPONSE

12.1 The collision between the BOWBELLE and MARCHIONESS was witnessed by a number of people on board the HURLINGHAM, in particular by the Skipper who was at the helm. HURLINGHAM had passed through No 4 arch of Southwark Bridge and the other two vessels had just overtaken her. HURLINGHAM was, therefore, about 45-60 metres to the South West of the point of collision.

Her Skipper, in a message timed at 01.46.11 by Woolwich Radio, called Wapping Police Station on Channel 14 VHF and reported the accident. This message was overheard by the Duty Officer, Thames Navigation Service (TNS) Woolwich, who immediately confirmed that Wapping Police had heard and understood the message. The emergency services were alerted, and four police launches dispatched to the scene, two 24 knot craft from Wapping and two 17 knot craft from Waterloo. The passenger boat ROYAL PRINCESS was passing Waterloo Bridge outward bound and, after reporting to TNS Woolwich, continued at full speed to the area. After the collision BOWBELLE struck one of the piers of Cannon Street Railway Bridge and was stopped for a short while under the bridge. The Master reported the accident to TNS Woolwich at 0148 hrs. Due to his vessel's size and the tidal conditions, he decided to take BOWBELLE clear of the area in order not to interfere with rescue operations. The collision was witnessed by a number of people ashore, who also called the emergency services. In the early stages of the emergency, the location of the accident was variously reported as at Chelsea and Battersea, as well as the correct locations at Southwark Bridge and off Upper Thames Street. The erroneous reports were quickly discounted, and did not cause any delay in the response.

12.2 Following the collision, MARCHIONESS lay capsized to starboard with part of the port bow above water for a brief period, before sinking, probably within one minute. The recollections of the survivors are, understandably, confused, but of those who got clear of the sinking vessel, and whose position at the time of collision is known, about 30 were on the open foredeck, 19 in the bar located in the upper saloon, 20 on the dance deck, and six in the lower saloon (see Annex 7). Of the 26 in the dance deck and lower saloon nine can remember escaping through windows and three through the door from the dance deck to the fore-deck; the others do not recall how they got out. During the brief period the vessel remained afloat the Mate of the MARCHIONESS, who had been thrown into the water, managed to get back on board and hold open the door at the fore end on the port side of the dance deck, assisting some of those within to escape.

So far as those in the bar area are concerned it is probable that the saloon was torn off by the collision, allowing those inside to escape. When the wreck was raised later the same day, the upper saloon superstructure was found near to but completely detached from the remainder of the vessel.

12.3 As MARCHIONESS sank, the vessel's life-saving appliances consisting of 7 buoyant apparatus (referred to by some witnesses as 'life-rafts') capable of supporting 20 persons each, and 7 life-buoys, capable of supporting 2 persons each, came to the surface, together with many items of floating debris; seats, wood panels, beer kegs, etc. In addition, those

on board HURLINGHAM, which was close by, threw buoyant apparatus, life-buoys and other items to those in the water. Some 16 survivors remember clinging to buoyant apparatus, and 4 to life-buoys, but many either managed to hold on to pieces of debris, or do not recall exactly how they stayed afloat. An uncertain number managed to swim ashore.

12.4 With the tide flooding at about 3 knots those in the water were swept upstream under Southwark Bridge; the majority probably passing through No 2 arch and nearer the North Shore. Between Southwark and Blackfriars bridges, some people managed to reach driftwood barges moored near the North Bank, and a significant number were swept into, or were able to hold on to, the driftwood collection cages moored in the vicinity. The HURLINGHAM was manoeuvred stern first through Southwark Bridge and alongside these cages, and picked up the people clinging to them and from the barges.

By this time the police launches had arrived at the scene and were rescuing people from the water, working upstream with the tide. ROYAL PRINCESS approached the area from Blackfriars Bridge, her crew throwing life-buoys to the people in the water, and using a spotlight to help locate survivors for the police launches. At 0154 hrs survivors and debris were reported passing Blackfriars and by 0202 hrs, some 15 minutes after the collision, passing the old Chrysanthemum berth at Temple Stairs, over half a mile from the point where the collision occurred. All craft were instructed to land survivors at Waterloo Police Pier, where ambulances had been ordered.

Of the final total of 80 survivors, more than half were rescued from the water by the four police launches, some were able to swim ashore unaided, and the remainder were picked up by the HURLINGHAM, most of this last group from the driftwood barges and collection cages upstream of Blackfriars Bridge.

13 FOLLOW-UP ACTION

- 13.1 As soon as it became apparent that there had been a very serious accident, the Duty Officer at the 'Thames' Division Wapping Police Station started the Metropolitan Police Major Incident Procedure. He assumed the role of Incident Officer and set up a forward control and rendezvous point on the Victoria Embankment near to the Waterloo Pier Police Station. Victoria Embankment was closed to all but emergency traffic. The London Ambulance Service and London Fire Brigade set up control points adjacent to the Police forward control. In all the services, senior officers were called out to assume control of the rapidly escalating response. Within a short time a co-ordinating committee of senior officers from the Police, PLA and Civil Emergency Services was set up at New Scotland Yard to conduct overall strategy. Searches of both banks of the river upstream from the accident were started and continued all day, involving officers from Thames Division, City of London Police, Southwark and Charing Cross Division; together with officers from Battersea, Chelsea and Fulham.
- 13.2 The Duty Officer of the PLA TNS Woolwich broadcast calls on Channel 14 VHF at 0150 hrs and 0156 hrs for all available craft to proceed to the accident area, and called out the crews of the PLA craft RAVENSBOURNE and RODING to man their craft and proceed to the area. He also notified senior officers in the PLA. At 0155 hrs the London Fire Brigade (LFB) was informed. The LFB, as none of their specialist rescue equipment was needed, were deployed to the bridges to act as lookouts, and by 0240 hrs had an appliance at every bridge from Southwark to Hammersmith. They also provided lighting equipment, some of which was used at bridges and some taken on board the launches. The LFB fire fighting craft LONDON PHOENIX joined the search at 0218 hrs and recovered the first body at 0242 hrs between Lambeth and Vauxhall Bridges.
- 13.3 The London Ambulance Service (LAS) Central Ambulance Control, (CAC) received a number of calls to the incident, the first at 0151 hrs; the first ambulance was despatched at 0153 hrs and was on scence at 0156 hrs. Between 0153 hrs and 0233 hrs a total of 14 ambulances and the Emergency Control Vehicles were mobilised. St Thomas' Hospital, as the designated hospital, was put on "Yellow Alert" at 0205 hrs, and "Major Accident Declared" at 0210 hrs. Westminster Hospital and Guys Hospital were designated first and second support hospitals respectively. During the course of the emergency, the LAS conveyed 54 survivors to St Thomas' Hospital four to Westminster Hospital, and 13 to Guys Hospital, a total of 71. The remaining nine were conveyed by police vehicles or taxi. After medical examination, uninjured survivors were transferred to the Savoy Hotel and Howard Hotel. St Thomas' Hospital provided a medical team, and CAC mobilised four doctors to the incident. Surrey Ambulance Service sent five ambulances to the scene, and a further four into the GLC area to provide cover. The Essex Ambulance Service despatch four ambulances to the Tower Bridge area. By 0248 hrs the majority of the survivors had been dealt with, and the Emergency Control Vehicle reported 13 ambulances in attendance, and no further vehicles required.
- 13.4 It appears that those who survived either managed to get ashore or were rescued in the first 30 minutes after the collision. After landing the survivors she had picked up, together with her passengers, at Waterloo Pier, the HURLINGHAM boarded units of the Police, Fire and Ambulance services, and took on board generators and lights for searching, as did the ROYAL PRINCESS after landing her passengers at Westminster Pier. Both boats then joined the police launches which were searching up river with the tide, following the debris from the wreck, which was reported in the vicinity of Vauxhall Bridge at 0231 hrs, Nine Elms Reach at 0248 hrs, Wandsworth at 0358 hrs and opposite Fulham Football

Ground at 0423 hrs. The craft involved in the rescue from the beginning were soon joined by more police launches, the PLA patrol launches RAVENSBOURNE, RODING, GUNFLEET and other vessels.

- 13.5 As the search progressed, ambulances were deployed to every bridge from Southwark to Hammersmith, and three piers, Waterloo, Cadogan and Battersea Heliport had ambulances designated. When the tidal flow changed at about 0600 hrs, ambulances were re-deployed to every other bridge from Hammersmith to Tower, plus Tower Pier and Wapping Police Station, which was designated as the mortuary.
- 13.6 At 0156 hrs the Police requested helicopter assistance from the Rescue Co-ordination Centre, Plymouth, to supplement their own helicopter. At 0200 hrs RAF helicopter R166 was scrambled from Manston, arriving on scene at 0245 hrs, followed about 30 minutes later by R168. These two were later joined by the Coastguard helicopter R174 from Lee-on-Solent. At 0410 hrs R166 reported that they had searched up stream, and R168 down stream, without success. At the request of the Police, the helicopters carried out a further search at first light, again without result. Another search was made by helicopter R125 (RAF Coltishall) of both banks of the river at low tide. At 1158 hrs, the Police decided that no further helicopter assistance was required. During the helicopter operations, Coastguard Officers were posted to Wapping Police Station and TNS Gravesend to assist with communications. At about 0900 hrs the Police requested the assistance of Royal Navy Divers, and a diving team was flown to London by helicopter from RN Culdrose. The team remained on stand-by.
- 13.7 At 0221 hrs the No. 2 arches of Cannon Street and Southwark Bridges were closed to navigation due to the presence of the wreckage of the MARCHIONESS. At 0230 hrs the PLA commenced mobilising salvage craft and crews. At 0648 hrs the river between London and Westminster Bridges was closed to navigation and at 0915 hrs the Thames Barrier was closed to assist the diving and salvage operations. Between 0950 hrs and 1030 hrs PLA salvage craft moored between Southwark and Cannon Street Bridges and at 1120 hrs divers found the MARCHIONESS. Preparations for salvaging the wreck continued throughout the afternoon, and at 1715 hrs the salvage craft HOOKNESS and BROADNESS began lifting, bringing the MARCHIONESS to the surface at 1724 hrs. Between 1800 hrs and 2300 hrs the wreck was pumped out, and a specially trained Police team, assisted by the London Fire Brigade, recovered 24 bodies. Ambulances provided cover for the salvage and recovery teams. One Police officer was slightly injured during the operation. At 0130 hrs on 21 August 1989, the Thames Barrier was re-opened, and at 0600 hrs the MARCHIONESS was beached alongside the wall on the North shore below Southwark Bridge, (see Annex 13). On the 23 August 1989, the vessel was refloated and taken to dry dock in Greenwich.
- 13.8 As it became obvious that the searches were unlikely to find survivors in large numbers, the hospitals were stood down from "Major Accident" alert, the last being Charing Cross at 0620 hrs on the 20 August. No further survivors or bodies were found on the 20th, and the massive commitment of craft, vehicles and manpower was gradually scaled down throughout the day. Following the recovery of the bodies from the MARCHIONESS, most of the support services were stood down between 0000 hrs and 0100 hrs on 21 August, and control of the incident devolved to Thames Division of the Metropolitan Police. Extensive searches of the river and foreshore continued, and the remaining bodies were recovered from various places on the Thames, over the next week. Initially, the exact number of people on board the MARCHIONESS was not known, but on 4 September 1989 it was confirmed that all on board had been accounted for. Of the 131 people on board, 51 lost their lives.

14. COMMENT

- 14.1 From the point of view of emergency services used to dealing with accidents on land, this disaster was almost unique, in that most major incidents are confined to a relatively small area. In this case the accident occurred near Cannon Street Bridge, most of the survivors were landed at Waterloo Pier, and provision had to be made to find and deal with further survivors along both banks of a six or seven mile length of the river. All the services coped admirably with these problems. The setting up of Forward Control Points alongside Waterloo Police Station by the Police, Ambulance Service and Fire Brigade, with their respective Incident Officers liaising closely, allowed a flexible response to a unique and changing situation, whilst the co-ordinating committee set up at New Scotland Yard was able to give directions on overall strategy. All the organisations involved reacted to the emergency with great speed and skill. Large numbers of Police vehicles, ambulances, fire appliances and river craft of all types were committed to the operation, together with the helicopters. The total number of personnel involved is a matter of conjecture, but must have been several hundred.
- 14.2 As might be expected in such a large scale, prolonged operation, some difficulties occurred which, whilst not affecting the outcome, merit further consideration by the organisations concerned. Only one of the helicopters involved in the search was fitted with heat detection equipment, an item which could prove very useful when searching the type of terrain involved in this area, ie in the vicinity of bridges, wharves, moored barges etc, where a visual search is difficult. It is recommended that such equipment should be provided generally for military helicopters designated for Search and Rescue work.

The undoubted advantage of the use of helicopters, ie the ability to search a large area quickly, was somewhat offset by the unavoidable delay in reaching the area from their bases. It was reported that on occasion, the downdraught and noise of the helicopters caused some difficulty to the small craft searching on the surface. These are unavoidable side effects when using helicopters. In the more usual marine emergencies in the open sea, a well established pattern of radio communications is used, between helicopters, Coastguard, ships etc. In this operation, communication was carried out between the helicopters, TNS radio at Woolwich and the surface craft on rather an ad hoc basis. Whilst this appears to have had no adverse effect on the search, it is felt that the organisations involved could usefully study this aspect with a view to producing an agreed routine for communications between helicopters and ground emergency services when engaged on an 'inland' search operation. It would be sensible to provide mutually compatible VHF channels to assist in this.

- 14.3 Some further weaknesses in communication and liaison came to light. With the exception of the mis-information as to the location of the casualty, referred to in Section 12.1 which was quickly rectified all relate to the later stages of the incident and so had no bearing on the loss of life, and therefore they have not been examined in great detail. At least in part, they stem from the hybrid nature of the incident, with its mixture of inland and maritime characteristics. The Port of London Emergency Plan POLACAP was thought by some of the organisations involved in the operation to have only limited application to accidents such as this. This Plan is at present under revision, and it is recommended that in discussion and promulgation of the revised version its application is made absolutely clear.
- 14.4 A number of survivors and rescuers commented on the difficulty of getting people out of

the water into the rescue craft. This is a widely recognised problem, and many solutions have been proposed and items of equipment (ladders, slings, netsetc) devised to overcome it.

Although a number of launches are equipped with simple means to assist in recovering a person from the water, commercial passenger craft on the river should also be provided with such equipment. This would clearly be valuable not only in a major disaster but also in much less serious accidents, such as when a passenger from a pleasure launch goes overboard.

- 14.5 The suddenness of the disaster, and the fact that the MARCHIONESS was literally pushed under by the BOWBELLE, gave no time to evacuate the vessel in any resemblance of order, or allow all those below decks to escape. All the buoyant apparatus (BA) and lifebuoys appear to have floated off the MARCHIONESS, and more were thrown from the HURLINGHAM, but relatively few survivors (about 20) recall reaching this equipment. The most probable reasons for this are:-
 - .1 Most people were not aware of the existence of BA on board, or that it would float off.
 - .2 In the darkness and confusion the BA could not be seen, or if seen, was too far away to be reached, except by strong swimmers.
 - .3 The BA and survivors surfaced at different rates and were swept apart by the tide.

A number of opinions on the correct stowage and deployment of buoyant apparatus have been put forward, for example, that each individual unit of BA should be loosely tied to another so that they float as a group when they reach the surface. (It is reported that four of the seven units on board MARCHIONESS were tied together, although floating separately.) Another proposal is for the BA to be fastened by painters to the vessel, so that in the event of sinking, it will remain on the surface above the sunken vessel. These proposals, have been considered but, whilst there are some advantages, the serious disadvantage of the first is in the likelihood of one unit of BA getting foul of the sinking vessel and holding down the rest, while in the second, it is plain that had the BA been tethered to the MARCHIONESS, the survivors would have been quickly swept away from it by the tide. Therefore, it is proposed that BA should not be secured in any way. In this connection, it has been common practice in many vessels (though fortunately not MARCHIONESS) for BA to be fastened down on the top decks of passenger craft to prevent them being blown overboard in strong winds. These lashings are secured by slip knots for quick release in an emergency. The MARCHIONESS tragedy demonstrates beyond all doubt that even the short time required to release slip knots cannot be relied upon. It should be a relatively simple matter to devise a method of stowage which allows the BA to float off freely, whilst preventing them from blowing overboard in normal service. It is recommended that the Department and passenger vessel operators co-operate to solve this problem.

Consideration should also be given to making BA more easily recognisable amongst other debris etc. It should be of a highly visible colour, with reflective tape, and life-buoy type lights could be attached.

14.6 The BA and life-buoys proved their worth in the accident, even though only a quarter of the survivors are known to have made use of them. The apparatus floated free correctly,

and it is considered that more sophisticated equipment, such as inflatable life-rafts, would at best have been no more effective and indeed probably less so, for with no time to cut their painters, life-rafts would not have drifted with the tide. It is considered that buoyant apparatus and life-buoys should continue to provide the main life-saving appliance requirement for Class V vessels. It has been suggested that such vessels should have lifejackets for all on board, but it is doubtful if such a requirement can be justified. Certainly there would have been no time for life- jackets to be of any use in this accident. However, it is possible to envisage an accident leading to less precipitate abandonment, and there is a case for the provision of simple personal buoyancy aids (rather than life-jackets) in sufficient number to cater for the likely proportion of non-swimmers, young children and elderly passengers.

- 14.7 Another point raised by survivors is that no emergency lighting came on when the vessel capsized. Immediate and complete darkness must have added still further to the terrifying conditions within the boat, and while the maintenance of full lighting in an accident such as this is not practicable some illumination, even if only "exit" signs, would have helped and could be provided.
- 14.8 A review of life-saving appliances on small passenger vessels was being undertaken by the Department prior to the collision of MARCHIONESS and BOWBELLE but submission of new regulations has been withheld awaiting completion of this investigation and its findings. It follows from the preceding paragraphs that, while there are no grounds for substantial criticism of the life-saving appliances now provided for Class V vessels, some improvement is called for. It is recommended that this is taken into account before any draft regulations are submitted for consultation. This review should be associated with that of constructional requirements proposed in Section 11.9; and as suggested in Section 11.7, a distinction should be drawn between vessels working only in very restricted waterways and those operating in more open waters.
- 14.9 Of those who lost their lives, 27 bodies were recovered from the River, not from the wreck. This seems to imply that of all who escaped from the vessel, about a quarter died despite the rescue operation. The whereabouts of passengers at the time of the collision is relevant to this. As recorded above, 30 survivors recall being on the open fore-deck and, given the small area of that deck, it is difficult to believe that many more people were there. In other words, nearly all those who escaped but nonetheless drowned had been within the accommodation, and it is strongly suspected that the effort of escaping had so exhausted them that they perished very soon after entering the water.
- 14.10 A very small number of adverse comments on the rescue have been received. One in particular argues that the response of the Ambulance Service was inadequate. The evidence has been carefully considered and the argument rejected. The Ambulance response, as summarized in Section 13.3, seems to have been both appropriate and efficient. The only exception relates (again) to communications; weaknesses in this field were identified by the Kings Cross Inquiry and action to remedy them is well advanced. Therefore no further recommendations are made on this subject.

More generally, one witness and one (anonymous) correspondent refer to lack of organisation. No doubt there were moments of confusion, but any appearance of lack of order was largely due to the mobile nature of the accident. Based on the large bulk of the evidence, it is repeated that the rescue operation was well conducted. Those responsible for its direction, especially in the vital early stages, showed most commendable initiative and deserve great credit.