

**Marine Accident Investigation Branch**

**Investigation of**

**The Capsizing of a Dinghy in**

**The Sound of Iona**

**With the Loss of Four Lives**

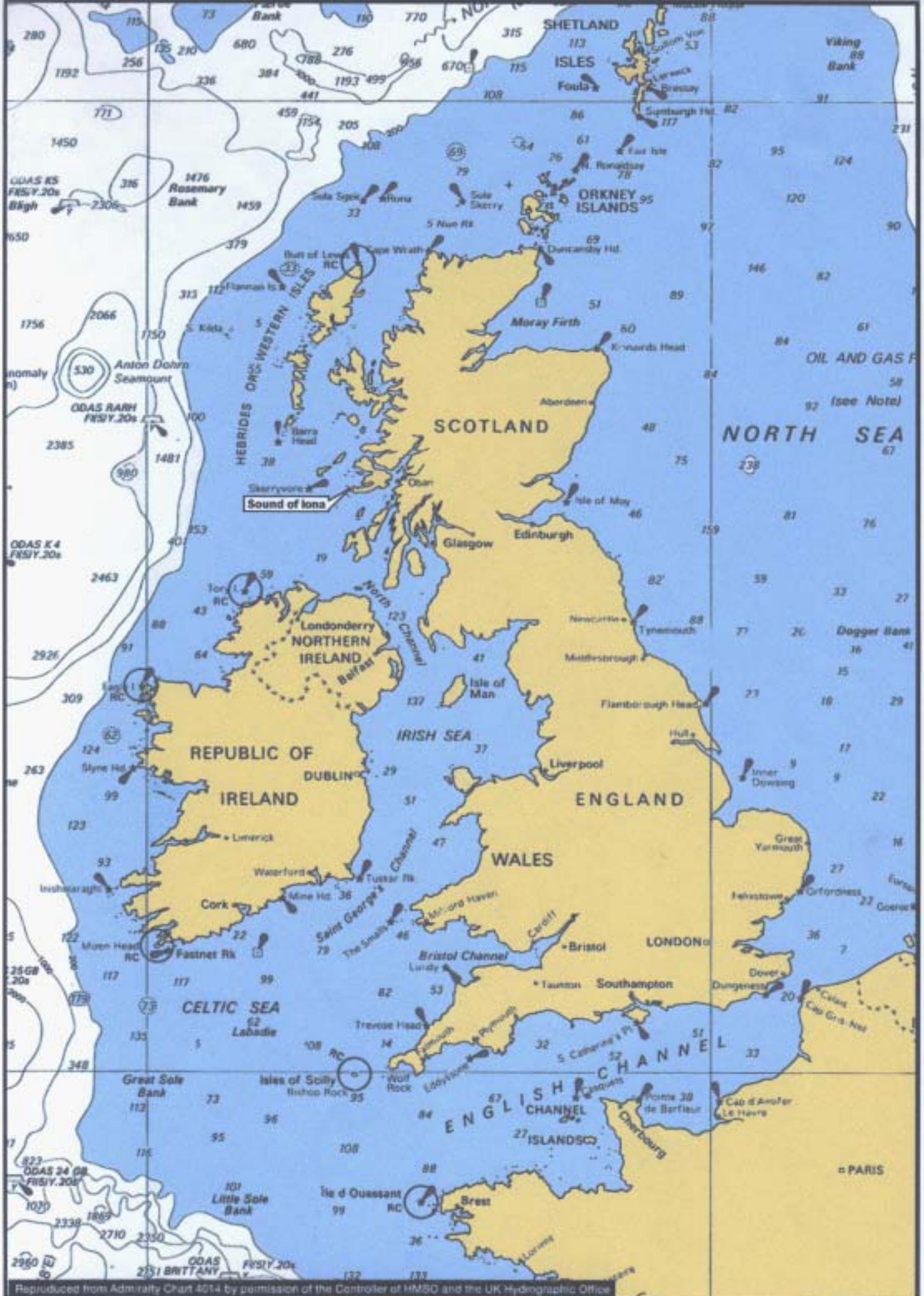
**13 December 1998**

**Extract from**  
**The Merchant Shipping**  
**(Accident Reporting and Investigation)**  
**Regulations 1994**

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

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## Synopsis

The accident was notified to the Marine Accident Investigation Branch (MAIB) at 0800 on Sunday 13 December 1998. The investigation was carried out by the Chief Inspector of Marine Accidents, Rear Admiral John Lang.

In the early hours of 13 December, five young men living on the Isle of Iona on the west coast of Scotland were returning to the island after attending a ceilidh at a hotel in Bunessan on the Ross of Mull. Their journey back involved crossing the 1.4 km wide Sound of Iona.

It was a dark night, the wind was south west 4-6 and visibility was good. The waters of the sound were turbulent but not unusually so. The five young men set out to cross the sound in an open 4.27m (14ft) dinghy propelled by an outboard engine. They were all, to varying degrees, capable and experienced seamen and had made this particular crossing many times previously. None of them were wearing lifejackets.

When about a quarter of the way across, the dinghy pitched into a wave and shipped sufficient water to partially fill it. With its stability destroyed, the dinghy capsized very shortly afterwards and threw all five occupants into the sea. All five managed to cling to floating objects or the upturned boat but one became separated from the others and eventually managed to swim ashore and raise the alarm.

Despite a comprehensive search being made, only the upturned dinghy and the body of one of the young men was found in the hours that followed the capsizing. The bodies of the remaining three were eventually recovered over the weekend of 9-10 January 1999.

The accident was caused by the failure of the well laden dinghy to rise to an oncoming wave that nobody onboard had seen in the dark. Sufficient water was shipped to destroy all residual buoyancy and the capsizing that followed was inevitable. The lack of lifejackets denied four young men an opportunity to survive. No accident is the result of a single action and this report comments on the chain of events that contributed to this tragic event.

The report makes a single recommendation to the Royal National Lifeboat Institute to examine the feasibility of establishing an inshore lifeboat station on the Ross of Mull to cover accidents in the Sound of Iona and adjacent waters. This recommendation is made as a result of a number of drowning accidents in the area in recent years.

The report also very strongly advises anyone crossing the Sound of Iona in an open boat to wear a lifejacket.

## SECTION 1

## Factual Account

### 1.1 BACKGROUND

Five young men living on the Island of Iona decided to attend a ceilidh in a hotel on nearby Mull on the evening of Saturday 12 December 1998.

Getting there involved crossing the three quarter of a mile wide stretch of water known as the Sound of Iona and then travelling by car to reach the 'Argyll Arms' Hotel at Bunessan five miles away. The normal means of crossing the Sound of Mull is by the Caledonian MacBrayne ferry *Loch Buie* but this only functions between 0615 and 1800 in winter. During the night it is secured in Bull Hole to the north of Fionnphort. When the ferry is not running, either on account of bad weather or at night, those wishing to cross the sound do so by small boat. The practice has been in place for many years without incident.

The young men decided to make the crossing in a wooden built 4.27m (14 ft) dinghy powered by a 4.5kW (6hp) outboard engine. They knew the waters well, were competent seamen and had made the crossing many times before. They set off for Mull shortly after 2100 and visited, first, the 'Keel Row' pub in Fionnphort where they had one round of drinks and then drove to the 'Argyll Arms' where they arrived at about 2200.

### 1.2 NARRATIVE

The ceilidh finished at around 0130 on Sunday 13 December but the five did not leave the hotel finally for about another 30 minutes while Mr Grant, who did not touch alcohol all evening, drove some other guests home. They then made their way back by road to Fionnphort and transferred to their dinghy for the final leg of their journey; the crossing of the Sound of Iona.

It was a dark night with virtually no moon, the tide was setting south west at the end of the ebb and the wind was force 4-6 from the south-west. Several heavy rain showers swept through the area during the night.

With the boat's owner, Mr Kirkpatrick, at the tiller they set off for what they confidently expected to be a straightforward crossing. The only abnormality that night was the absence of any lights on Fionnphort jetty. They had failed a week earlier. The planned crossing involved making a heading to the south of the direct track between Fionnphort and the Iona jetty, to avoid slightly steeper seas which occur in the vicinity of some sandbanks in mid-channel. The adopted track had the added advantage of ensuring that the south-westerly seas would, initially, be taken on the bow. On reaching the western side of the sound they could expect to encounter a more pronounced swell, but some shelter from the land as they turned to starboard and ran down sea for the Iona landing. It was a well established technique practised by all local seamen.

As soon as the dinghy had cleared the Fionnphort jetty, choppy seas were encountered which, since the construction of the ferry breakwater, was a recognised local feature. Once clear of this local turbulence, they began to experience heavy spray. Apart from Mr Kirkpatrick, who was facing forward, the others faced aft and had their backs to the weather.

About two to three minutes into their passage, and without any warning, the dinghy suddenly shipped a large wave which filled the boat to about three-quarters full. Mr Kirkpatrick slowed right down while those forward had just sufficient time to locate the bailer and pass it back to him to bail out. At that moment the starboard gunwale dipped below the surface and seawater flooded in. The dinghy capsized to starboard and threw all five occupants into the sea. The time was about 0225. No one was wearing a lifejacket.

All five were grouped together and looked for something on which to hold. In addition to the upturned dinghy which floated bow up, the only objects to hand were the fenders and the plastic fuel container. There was a certain amount of changing position as the stronger swimmers aided the weaker ones. There was no panic and, although cold, they were all talking to one another. They were all confident they could extract themselves from their predicament.

Mr Grant initially supported himself by hanging onto the fuel container which was still tethered to the upturned dinghy. The others meanwhile, were trying to maintain a hold on the dinghy but were finding it difficult to do so, as it rolled whenever any weight was applied to it. Mr Grant then located one of the bottom boards that had broken free, and transferred his hold to it. This left the fuel container for one of the others to use. Being no longer connected to the dinghy Mr Grant began to drift slowly away in the dark. As he did so he could still hear his colleagues calling to each other.

After a while he became aware that he was moving slowly past a rocky outcrop and, by then without his sea boots on, abandoned his board and swam ashore. He reached the shore and managed to climb rocks in bare feet before he eventually gained dry land.

By now bitterly cold, he climbed a rise and joined a track which led back to Fionnphort, just under a mile away. Despite his injuries to face and hands, he managed to make his way back to the village and the house of some friends, who woke to his cries. Despite being in an advanced state of hypothermia Mr Grant managed to convey enough of what had happened to enable his host and hostess to raise the alarm. They dialled 999 on the telephone at 0415 and spoke to the Maritime Rescue Sub-Centre (MRSC) at Oban. The rescue services were activated immediately.

### **1.3 SEARCH AND RESCUE**

As soon as what had happened became clear to Mr Grant's friends at Fionnphort, they took immediate action to do two things; restore his body heat and initiate a search for the missing men. While his wife looked after Mr Grant, his friend wasted no time in preparing his fishing boat, an open dory, for a search. By 0430, in the company of a colleague, he was underway in the sound and searching in the area where the capsized was thought to have occurred.

At about 0500 they discovered the upturned hull of the dinghy 300 metres from Fionnphort jetty. There was no sign of either survivors or bodies. About 40 minutes later they found one body lying by the shoreline and took him back to Fionnphort. There was no sign of anyone else. Other local fishing vessels had, by then, joined the search but all they found were articles of clothing thought to belong to the victims.

The first search and rescue unit to arrive on the scene was a Royal Navy helicopter, equipped with night vision aids at 0604. It was followed at 0611 by the Oban all weather lifeboat which had been launched at 0430. They, in turn, were followed by the Islay lifeboat at 0645 and the Coastguard helicopter with its infra-red heat seeking equipment at 0822. There were no signs of any survivors. Auxiliary Coastguards, the police and some of the local community had, meanwhile, started to search the shorelines of the Ross of Mull and Iona. The nearest Coastguard rigid inflatable boat (RIB), kept at Tobermory, was trailed to Fionnphort by road taking 1½ hours.

Although not giving up any hope of finding anybody alive, the arrival of daylight saw the start of a very comprehensive search along many miles of coastline. For the rest of the week that followed at least 100 people assisted with the search each day. About 200 people were involved on Tuesday 15 December. Apart from finding some shoes belonging to the victims, the search revealed nothing further.

Those interviewed during the investigation had nothing but praise for the way the Coastguard and emergency services responded to the call for assistance.

#### **1.4 IONA**

The Isle of Iona is a small island 3 miles long and 1½ miles wide lying just off the larger island of Mull and is where Christianity first established a foothold in Scotland. It is now a centre of pilgrimage and veneration, with Iona Abbey forming the centre piece of the community. The economy is dependent on tourists and pilgrims in summer but in winter it reverts to fishing and farming. Less than 90 people live on the island.

There is very little evening entertainment in winter and the only way the community can enjoy anything, other than events in private homes, is to cross the sound to Mull: there are pubs in Fionnphort and Bunessan.

Iona is separated from the Isle of Mull by a sound 1.4 km wide at the main point of crossing. The normal means of crossing it is by a ferry that operates during the day. For generations however, the local community has crossed the sound in small boats when the ferry is not running. Those engaged in fishing have also used dinghies to transfer between the shore and their moored fishing vessels. Such crossings and transfers have been incident free.

The sound offers a degree of shelter but is exposed to south-westerly winds. A swell begins to build in these conditions and can be significant. A sand bar extends between the main community on Iona and Fionnphort with a least charted depth of 0.1m. Both ferry and local boats tend to keep well clear of it, usually by keeping to the south. The maximum tidal stream is predicted to run at 2½ knots, but some local fishermen claim it exceeds this by at least a knot. A choppy sea, described locally as

‘pretty jabbly’, sets up when a south-westerly wind opposes the south running ebb tide.

This accident has had a devastating effect on the community.

Since mid-1996 seven deaths from drowning in the waters of Iona and its sound have occurred.

Although some local boatmen and fishermen own lifejackets, there is no culture of wearing them. This reflects an attitude seen in many other parts of the country.

## **1.5 FIONNPHORT**

Fionnphort is the Mull terminal for the Iona ferry. It is a small community with several guesthouses, a pub, post office, landing slip and an auxiliary coastguard station. It lies about 37 miles from Craignure and just over 5 miles from Bunessan.

During their time on Mull, the five young men had secured their dinghy alongside the jetty used during the day by the Caledonian MacBrayne ferry, *Loch Buie*. When they came to retrieve it shortly before 0215, two of them climbed down into the dinghy from the jetty and moved it a few metres further inshore to the landing slip where the remaining three embarked.

During the six days preceding the accident the jetty lights had not been working. The defect had been reported to the Argyll and Bute District Council on 7 December and a local electrician had attended to the matter. Due to an unidentified fault in the slipway lights the circuit kept tripping and in an effort to resolve the problem on 9 December the electrician disconnected the pier lights and reset the circuit. This action re-established the adjacent road lighting network but not those on the slipway. The last road light, which is effectively at the head of the slipway, was working.

## **1.6 THE DINGHY**

The 4.27m (14 ft) long clinker built dinghy, thought to have been made in the early 1970s, was a conventional craft with a small 0.9m (3ft) long covered deck section in the bows. It had no in-built or additional buoyancy. It was normally used as a tender for a fishing vessel which was moored off the beach at Bail Mar, Iona, during the summer and in the Bull Hole on the Mull side of the sound in winter. It was used almost every day, sometimes with a heavy load, and had safely crossed the sound on many hundreds of occasions. It had a reputation as a good seaboat and had often been used in weather conditions that had been too rough for the ferry. Those using it had every confidence in it.

Its beam was 1.68m (5ft 6ins) and its lightweight freeboard was about 380mm (1ft 3ins).

The dinghy was propelled by a relatively new Evinrude 4.5kW (6.0hp) outboard engine clamped firmly to the centre line of the transom. Its fuel was supplied from a portable plastic fuel container.

There were three thwarts<sup>1</sup>. The forward one was just abaft the small shelter foredeck and about 1.22m (4ft) from the stem. The centre one is about 2.13m (7ft) from the stem and the aft one is just forward of the transom. For the crossing two men were seated on both the forward and centre thwarts and the fifth man, the helmsman, sat aft. Although it was not possible to measure the laden freeboard, or determine its trim with five people embarked, a reasonable assessment of the trim can be made. She would have floated bow heavy.

Wooden bottom boards, four sets of fenders alongside the port side, a pair of pliers and a plastic bailer adapted from a canister, were on board. There was no lifesaving equipment and no distress flares were carried.

## **1.7 ENVIRONMENTAL DATA**

The weather on the morning of 13 December was south-west force 4 to 6. It was overcast with occasional breaks in the cloud and heavy rain squalls passing through the area at intervals.

The sea water temperature was between 9° and 10°C.

On 13 December high water at Oban was at 0158, and 0148 at Iona. The tidal stream was predicted to have been setting 206° (ebbing) at 0.3 knots at the time of the accident and would have continued to set south-west against the wind until about 0630. Neap tides occurred on the day preceding the accident.

The new moon was on 18 December, its age on 13 December was day 24 and its phase 25%.

It was a very dark night with occasional breaks in the cloud. After the capsize, Mr Grant said he had seen the stars and the 'sickle' moon. There was just sufficient light to make out the silhouette of the shoreline.

## **1.8 THE FIVE YOUNG MEN**

The five men in the dinghy on its fateful last trip were aged between 19 and 33. They were great friends and lived life to the full. Two worked with local tourist boats, two were fishermen, and the fifth a farm worker with much small boat experience. At least two of them were known to be weak swimmers but they were all reasonably fit.

Many of those living on Iona have an intimate knowledge of the sea and small boats. The four victims and the one survivor were no exception. Recent victims of accidents in the area have all been visitors, not the local population.

<sup>1</sup> Thwarts - the seat in a small boat.

On the day preceding the accident, the four who subsequently died decided to attend the ceilidh in Bunessan and planned to use David Kirkpatrick's dinghy to cross the sound both before and after the event. The conditions were good and there was nothing out of the ordinary with either their intentions or the chosen method of transport.

Later in the day, Mr Grant returned to the Island following a visit to Glasgow and, on hearing about the ceilidh, decided to attend. He contacted his friends and learned of their intentions. They agreed to go together. The addition of one to the party meant the number in the dinghy had to be increased from four to five people. The view adopted at the time was that had there been a sixth person, two dinghies would have been used. They set off shortly before 2100.

They enjoyed the evening. Four of the five drank alcohol, with individual consumption estimated at between 3 and 6 pints of beer. There is no evidence to suggest they were either drunk or behaving irresponsibly. They were described as 'happy'.

They were wearing everyday indoor clothing and, when outside, windproof jackets to keep out the cold. It was known that at least two of the victims were wearing heavy shoes. Before returning to Iona, Mr Grant changed his clothing and wore a padded boiler suit and yellow sea boots; normal wear for local fishermen and boatmen. Ironically Mr Grant owned a lifejacket for use at sea, but had not taken it with him. Throughout the events that were to follow, his lifejacket remained on the front seat of his van parked at Fionnphort.

At the helm for the short transit between Fionnphort and Iona was the boat's owner, Mr Kirkpatrick, who had received extensive theoretical and practical training in seamanship and fishing. He was described as a particularly careful and capable seaman. According to Mr Grant he knew exactly how to handle the dinghy in choppy sea conditions and was meticulous about slowing down or reacting to an approaching wave. Furthermore, he could be relied upon to give an appropriate warning of anything untoward, including confrontation with a larger wave than normal. He gave no such warning on this occasion nor did he slow down.

Once the dinghy had capsized, all five people concentrated on finding something to hang on to, and for the weak swimmers this became an overriding imperative. There was little available, but the bow section of the upturned hull, the fenders and the floating fuel container provided something. Each of them managed to cling to something and expressed confidence they would survive. They were last heard calling each other by name.

After the event, Mr Grant's overriding memory was of the cold. He stated he had never previously given any credence to reports of hypothermia but this experience has made him change his mind.

Mr Robert Hay's body was found within two and a half hours of the capsize and the remaining bodies were recovered over the weekend of 9-10 January 1999. The cause of death for all four has been established as drowning.

## **1.9 MR GRANT**

Following the capsizing, Mr Grant, like the others, found himself unexpectedly submerged in the cold water of the sound. He reported the very urgent need of the weak swimmers to find something to hang onto and his own efforts to ensure that this could be done. He also stated how difficult it was to hang onto the dinghy which was almost completely submerged. Its tendency to roll when weight was applied was not helpful.

By clinging to a bottom board he slowly drifted away from the others, but was able to kick off his yellow boots and able to provide some form of propulsion. He could just make out the Ross of Mull shoreline to the east of him as he drifted south with the ebb tide. When he estimated he was only about 50 metres off he decided to swim ashore despite suffering from cramp. The precise point where he landed was about three-quarters of a mile south of Fionnphort. He sustained some injuries to feet and face while scrambling ashore over rocks, but his greatest problem was the cold once subjected to the wind chill factor. He had been in the water for about 45 minutes. He eschewed any thought of trying to get warm at that stage and realised the importance of getting help. Once he had located the track he had little comprehension of where he was or even which way to go. He turned left towards Fionnphort.

On reaching the sanctuary of a guesthouse owned by friends he was described as very shaken, upset, disorientated and extremely cold.

Later that same morning Mr Grant was taken by road to hospital.

## **1.10 SURVIVAL EQUIPMENT**

Lifejackets were neither worn nor carried. Although lifejackets are carried in many local boats it would have been very unusual for them to be carried in an open dinghy being used on a daily basis as a tender to a larger craft.

There was no liferaft in the dinghy.

No flares were carried.

Nobody was wearing any form of clothing which might have provided some insulation from the cold of the sea. Mr Grant was the only one wearing clothing other than everyday apparel.

## **SECTION 2      Analysis**

The Investigation set out to answer two basic questions:

1. Why did a sturdily built boat manned by five competent seamen capsize in waters with which they were all familiar, and
2. Why did only one of the five survive?

### **2.1          TIME**

As in many accidents, the accurate reconstruction of certain events is heavily dependent on people's ability to recall time accurately. Before the emergency services were called at 0415, many of the times given are approximate but this has not materially affected the findings or conclusions drawn.

By all accounts the capsize must have occurred shortly before 0230.

Times after 0415 have been taken from the MRSC at Oban where an accurate log of events was maintained.

### **2.2          GENERAL**

Accidents rarely occur as a result of a single action. Typically they arise when several unconnected events take place which, in isolation, may only have a minor impact. But place them altogether and the chances of an accident happening increase. This accident was just such an event.

### **2.3          THE DINGHY**

The 4.27m (14ft) dinghy had been in the same family for about 24 years and had a reputation as a good solid craft that been used in many weathers on a regular basis. It had carried various loads up to about one tonne and had previously carried five people.

Without seeing the dinghy laden with five people during the investigation, it was not possible to make any accurate assessment as to whether it was overloaded. Nearly everybody interviewed wavered when asked for their opinion, but even the most experienced felt that, although five people was acceptable, it was, nonetheless, the absolute maximum. The one survivor commented that had there been six in the party they would not have hesitated to use a second boat. Such a craft was readily available.

One very experienced local boatman believed it was loaded to the limit. He added that in his opinion any additional weight, including water, would have reduced the freeboard to a dangerous level.

At the time of the accident, the way the dinghy was loaded trimmed it by the head, with the lowest freeboard being forward of the mid point.

## **2.4 THE PEOPLE**

There is no evidence to suggest that any of those who embarked for the crossing in the early hours of 13 December were incompetent, careless, drunk or irresponsible. By all accounts they were careful and conscientious and some, at least, were reputed to be good seamen.

But four of them had been drinking. Alcohol, even in modest quantities, can impair judgement. It will never be known what effect drink played in this accident but it might have made some of them less cautious than normal. One man, the sole survivor, did not touch alcohol that evening and saw no reason to question any of the decisions taken. The consumption of alcohol in the quantities reported to have been consumed was a contributory factor.

There is no evidence to suggest tiredness affected judgement on this occasion but two, and perhaps more, of those involved had had a long working day on the Saturday and had been up for about 20 hours. There is nothing inherently wrong with such a long day, but it is an established fact that judgement is impaired when tired and the trough in the circadian rhythm occurs during the night and most especially between the hours of 0100 and 0600. There is no evidence to suspect that tiredness affected anybody's judgement on this occasion but the prospect of a night's sleep after a long day, together with the natural slowing down of the body's rhythm may, again, have contributed to a reduction in natural caution.

## **2.5 THE ENVIRONMENTAL CONDITIONS**

The conditions were marginal but by no means beyond the capability of the dinghy. The south-west wind blowing against the ebb tide created some turbulence but Mr Kirkpatrick and the others were well able to handle it.

The Fionnphort jetty lights were not functioning at the time the five re-embarked for the return crossing. Although it is impossible to say whether working lights would have made any difference, they might have provided sufficient illumination for an appraisal to be made of the prevailing conditions before setting off.

Had the crossing been made in daylight, the sea, swell and wave characteristics could have been seen. Larger waves in a force 5, especially when wind is against tide, are commonplace in the sound. An experienced boatman would have reacted instinctively to their presence, would have alerted his passengers, and would almost certainly have slowed down to ensure the dinghy had time to rise to an oncoming wave.

Despite the good visibility prevailing at the time, it was significant that Mr Kirkpatrick gave no warning of the approach of anything that might have concerned him, such as a larger wave than normal. There are two reasons for this; he was either ducking to avoid the spray or he was unable to see anything in the dark. In either event he gave no warning, did not slow down or alter course. It is concluded he never saw the wave that enveloped them and was therefore unable to take any corrective action.

It is assessed the dinghy was being propelled at its maximum speed at the time it shipped water and, with its weight distribution forward, failed to rise to the wave. Instead it nosed right into it. The water poured in to destroy any residual buoyancy.

## **2.6 SURVIVAL TIME**

With a water temperature of between 9° and 10°C the average person can expect to survive in the sea without any form of protective clothing for about 45 minutes. Between 45 minutes and somewhere between 3 and 3½ hours, water chill is likely to lead to death. The dinghy capsized at about 0230. The first rescue craft was on scene within 2 hours. It is impossible to say whether anyone remained alive at that time but the failure to find anyone clinging to the upturned hull when it was discovered at 0500 suggests the rescue craft was just too late on scene to prevent death by hypothermia.

Had any of the victims been wearing a wet suit, survival time would have been in the order of at least 4½ hours. A dry suit would have extended the time to over 6 hours.

None of the victims was wearing any form of survival clothing which meant they had nothing to keep them warm or aid buoyancy. At least two of the victims were wearing heavy shoes. These would have inhibited swimming and would have added to the difficulties of keeping afloat freely until they were kicked off. Without any form of buoyancy to help keep their heads above water, swimming would have been extremely tiring and probably beyond the capabilities of the weaker swimmers.

The postmortems on the bodies recovered showed that all four had died from drowning.

The one man who survived, Mr Grant, was suffering from extreme cold when he reached the sanctuary of a warm house. Had he not done so it is probable he would have become unconscious due to the wind chill factor affecting him after he had pulled himself from the sea. It is not possible to say whether Mr Grant's clothing played any part in his survival. It might have.

Had any of the victims been wearing lifejackets when the dinghy capsized the additional buoyancy would have increased the victims chances of survival. It will never be known whether wearing lifejackets would have saved their lives but the first rescue boat was on the scene within two hours of the accident and might, just, have been in time to save anyone who had not already succumbed to hypothermia. Had lifejackets been worn it is highly likely the bodies would have been located. In the event, three people are still missing at the time this report was being drafted.

## **2.7 LIFEJACKETS**

Lifejackets were neither carried nor worn. This is not uncommon. There is great reluctance to wear them in many situations and among many communities, either because they are too expensive, are clumsy, cumbersome to carry around or, more realistically, because it is easier to do without. Even had there been a local accident in

recent years, where the failure to wear lifejackets might have been a contributory factor to the loss of life, it is possible the lessons would have been ignored or already forgotten. There have been no such accidents in the Sound of Iona. This record of safe operations probably led to a sense that lifejackets were unnecessary.

One of the major difficulties associated with wearing lifejackets is that, unlike car seat belts, they are rarely immediately ready for use. They have to be carried or extracted from a locker and because they are not readily available, it is far easier to do without. In the fullness of time this becomes the accepted practice. Sooner or later a community is cruelly reminded that a tragedy can happen at any time. The requirement to wear them is for life, not just in the aftermath of a fatal accident.

## **SECTION 3      Conclusions**

### **3.1          FINDINGS**

- (i)      The dinghy was sturdily built with a reputation for safe, robust use.
- (ii)     The five men were fit and had, between them, extensive experience of small boats and the sea.
- (iii)    The five men had an intimate knowledge of the Sound of Iona and had crossed it in small boats on many previous occasions including during bad weather.
- (iv)    At least two of the five, Messrs Grant and Kirkpatrick, had been up all day. Mr Kirkpatrick had spent the day fishing and had finished shortly after 1830.
- (v)    During the course of the evening four of the five had been drinking alcohol. Their consumption has been assessed as being between 3 and 6 pints of beer each, and they were described as ‘merry’.
- (vi)    Mr Grant did not consume alcohol all evening.
- (vii)   The five left the pub at approximately 0145 to drive to Fionnphort.
- (viii)  The dinghy left the landing at Fionnphort at about 0215 to cross to Iona.
- (ix)    The weather at about 0200 was south-west force 5. There were heavy rain squalls but these had no bearing on events. Visibility was good and the ebb was running against the wind to cause short steep seas. There was a moderate swell running. The moon was occasionally visible through broken cloud.
- (x)    The Fionnphort jetty lights were not working.
- (xi)    About three minutes into the crossing, the dinghy shipped a large quantity of water over the bows which filled her to between two-thirds and three-quarters full. The dinghy became unstable at that moment.
- (xii)   A few seconds after shipping water the gunwale dipped below the surface and was followed immediately by a capsize to starboard.
- (xiii)  The accident occurred at about 0225
- (xiv)   All five occupants survived the capsize and sought some means of buoyancy on which to hold.
- (xv)    No one was wearing lifejackets.
- (xvi)   The dinghy had no in-built, or additional, buoyancy.

7. At least two of those involved had been up and about for nearly 20 hours that day.
8. The failure by anyone on board to wear a lifejacket.
9. The lack of any in-built or added buoyancy to a boat being used in marginal conditions in exposed conditions on a dark night.
10. The sea conditions generated by a south-westerly wind between force 4 and 6 blowing against the south setting ebb tide.
11. The seawater temperature of between 9° and 10°C and its water chill factor on body temperature.
12. The use of clothing and footwear that provided no protection once immersed in seawater and, almost certainly, inhibited swimming.
13. The inability of those in the water to raise the alarm.
14. The inability of any rescue services to be on the scene within two and a half hours of the accident.

- (xvii) No flares or other means of attracting attention were carried on board the dinghy.
- (xviii) No one panicked; all were confident of surviving.
- (xix) The upturned dinghy was very unstable. When additional weight was applied, it rotated.
- (xx) The dinghy remained afloat by air trapped under the bow deck. The fenders may also have provided additional buoyancy.
- (xxi) By clinging to deck boarding, Mr Grant became separated from his colleagues who continued to hold onto either the upturned dinghy or items attached to it.
- (xxii) Mr Grant spent anything up to 45 minutes in the water. He could see the silhouette of the shoreline and swam ashore having kicked off his sea boots.
- (xxiii) The first rescue craft, a local fishing dory, was afloat and at the scene of the accident within about 2 hours of the capsizing.
- (xxiv) The first outside rescue unit arrived on scene about 2 hours after the alarm had been raised. This was almost certainly too late to find any survivors.

## **3.2 CAUSES**

### **The Immediate Cause**

The accident was caused by the dinghy failing to rise to an oncoming wave in the dark at about 0225 on 13 December and shipping sufficient water to destroy residual buoyancy. The dinghy capsized almost immediately afterwards and the five occupants were thrown into the sea.

### **Contributory Factors and Underlying Causes**

1. The previous accident-free record of any crossing of the Sound of Iona by an open boat had generated a sense of security whereby little thought of anything going wrong had been considered.
2. Loading the dinghy with five people at night in marginal conditions.
3. The distribution of weight in the dinghy which reduced the freeboard forward.
4. The decision to cross the sound in complete darkness.
5. The inability of the helmsman to observe the sea state ahead of him.
6. The amount of alcohol consumed by four of the five embarked had reduced their awareness of the effect of the prevailing weather and sea conditions.

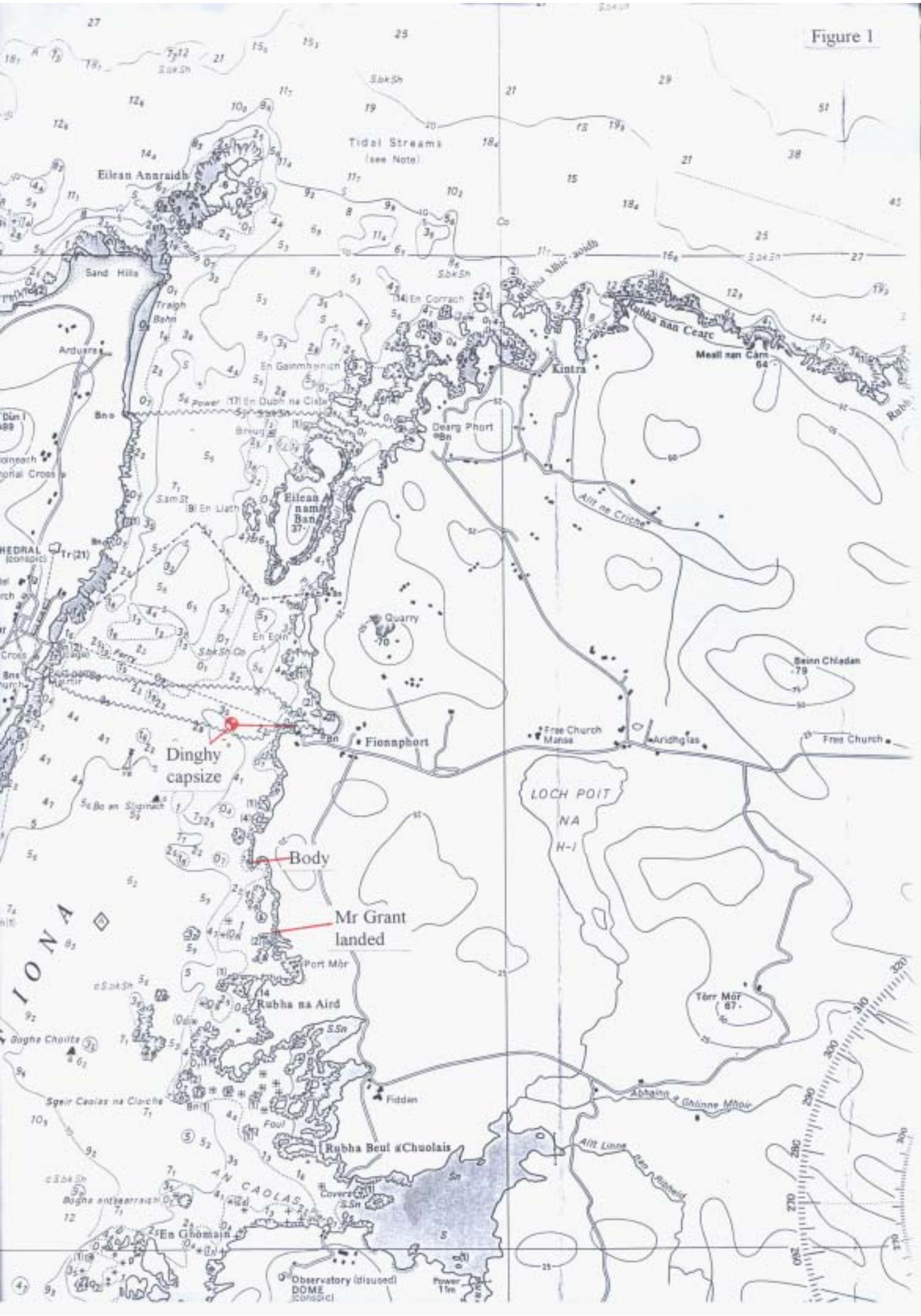
## **SECTION 4      Recommendations and Advice**

It is recommended that the Royal National Lifeboat Institution carries out an investigation to determine the feasibility of establishing an inshore lifeboat stationed on the Ross of Mull to cover accidents in the Sound of Iona and its immediate vicinity.

No recommendation is made for a statutory requirement to wear lifejackets but anybody crossing the Sound in an open boat is very strongly advised to wear a lifejacket.

The MAIB also strongly advises that any open boat used for transporting people across the Sound of Iona has some form of additional buoyancy on board and also a means of attracting attention in the event of it getting into difficulty.

Figure 1







External view of the recovered dinghy



Inside the recovered dinghy looking forward



Sound of Iona. Ross of Mull shoreline looking south



Sound of Iona from Iona



The jetty at Fionnphort