

**REPORT OF THE
INVESTIGATION INTO
THE DROWNING INCIDENT
AT SHEEP HAVEN BAY,
CO. DONEGAL
ON 3RD MAY, 2004.**

The Marine Casualty Investigation Board was established on the 25th March, 2003 under The Merchant Shipping (Investigation of Marine Casualties) Act 2000

The copyright in the enclosed report remains with the Marine Casualty Investigation Board by virtue of section 35(5) of the Merchant Shipping (Investigation of Marine Casualties) Act, 2000. No person may produce, reproduce or transmit in any form or by any means this report or any part thereof without the express permission of the Marine Casualty Investigation Board. This report may be freely used for educational purposes.

Published by The Marine Casualty Investigation Board
18th April 2005



	PAGE
1. SYNOPSIS	4
2. FACTUAL INFORMATION	5
3. WEATHER INFORMATION ON 03rd MAY, 2004	6
4. EVENTS PRIOR TO THE INCIDENT	7
5. THE INCIDENT	8
6. EVENTS AFTER THE INCIDENT	9
7. CONCLUSIONS AND FINDINGS	10
8. DESCRIPTION OF BOAT	11
9. DESCRIPTION OF THE ANCHOR FITTED	12
10. DESCRIPTION OF ENGINE	25
11. PERSONAL CLOTHING WORN AND BOAT AND EQUIPMENT FOUND FOLLOWING INCIDENT	25
12. RECOMMENDATIONS	25
13. LIST OF APPENDICES	25
14. LIST OF CORRESPONDENCE RECEIVED	25

1. SYNOPSIS

(All times are local, one hour ahead of GMT, except where otherwise stated).

- 1.1 At 14.07 hours, on Monday 3rd May 2004, the Irish Coast Guard Marine Rescue Sub Centre at Malin Head were called by the passenger boat "Rosguill" reporting that a Jet Skier had found a body in the water, with lifejacket, at Sheep Haven Bay, Co. Donegal. A search and rescue operation was instigated.
- 1.2 At 15.13 hours the local Coast Guard from Mulroy Station reported locating a second body in the water of Sheep Haven Bay, also wearing a lifejacket.
- 1.3 At 15.16 hours the search helicopter reported locating an upturned boat in the water in Sheep Haven Bay.
- 1.4 The two recovered bodies were subsequently examined at the scene and pronounced dead by a local Doctor. The search operation continued until it was confirmed there were no other persons involved in the incident.
- 1.5 At 18.53 all search and rescue units were stood down.

2. FACTUAL INFORMATION

2.1 Names and Addresses of deceased:

Mr. Thomas Boyd, Derry, N. Ireland, D.O.B. 09.10.35

Mr. John January, Derry, N. Ireland. D.O.B. 24.01.60

2.2 Details Of craft involved in incident:

Fifteen-foot GRP open fibreglass boat with two fibreglass thwarts and built in buoyancy compartments forward and aft. The boat was equipped with an outboard engine, a pair of oars and an anchor and rope with chain. A full description of the boat and anchor follows in the report.

2.3 Details Of Engine recovered with craft:

5 Horse Power Yamaha 2-stroke outboard. A full description follows in the report.

2.4 Details Of Fishing Equipment, Personal Clothing and Life Saving Equipment carried:

Both men were wearing fishing waders, had several inner and outer layers of clothing and wore "Crewsaver" personal flotation devices (PFD'S) over their outer garments. A full list and description follows in the report.

2.5 Details of location and area of fishing trip.

Ard's Bay, the fishing area, is located at the southernmost part of Sheep Haven Bay, which lies between the Horn Head and Rosguill Peninsulas in Co. Donegal. The boat, which the men used for fishing, and several other boats were normally moored to buoys in the area known as Bath Point (See chart at Appendix 13.1). A road running round from Ards Friary gains access to the moorings. The moorings are in the shelter of the adjacent Ards Hill and surrounding trees of Ard's Forest Park in which the Friary is located. Access to Ard's Friary is from the road between Creeslough and Portnablagh. (Please see details of the area at Appendix 13.2)

Where the men would usually anchor to fish is off Yellow Rock, 3 cables, about 660 metres SSW of Bar Rock, which marks the entrance to the channel. Bar Rock is marked by a beacon sometimes known as the Green Man or Iron Man. Charted depths within the channel from Bath Point to the Yellow rock range from 0.9 to 8.2 metres. At the entrance to the channel from the seaward side between Bar Rock and Yellow Rock is a sandy bar with a least charted depth of 2.4 metres in the fairway. The channel within the bar is less than $\frac{1}{2}$ cable wide (less than 110 metres). Tidal streams run strongly through the narrow channel.

3. WEATHER INFORMATION FOR 3rd MAY 2004

- 3.1 The exact weather conditions locally at the moorings on the Monday morning at the time of the arrival of the two men are not known. One fisherman who arrived at the same spot at 10.00am stated that it was very blowy and the tide was running out fast. Conditions out in Sheep Haven Bay would be reflected in the sea area forecasts. The Irish Coast Pilot book states that Ards Bay is reported to provide the best shelter in the haven though the bar can be dangerous to small craft if there is a big sea running.
- 3.2 The Met Eireann sea area forecast issued at 06.00 hours on Sunday 2nd May, until 06.00 hours on 3rd May gave the following information: -
Gale warning: Nil
Small craft warning: Nil
Forecast for coasts from Erris Head to Malin Head to Carlingford Lough and the North Irish Sea: -
Wind: North to Northwest force 3 or 4 backing Northwest to West this morning and increasing force 4 or 5 by evening, then further increasing force 6 at times overnight.
- 3.3 The Met Eireann Sea Area Forecast, issued at 18.00 hours on Sunday until 18.00 hours on Monday 3rd May gave the following information: -
Gale warning: Nil
Small craft warning: In operation. Text of small craft warning: - Northwest winds will reach Force 6 later tonight and tomorrow on coasts from Valentia to Erris Head to Carlingford Lough.
- 3.4 A further Sea Area forecast issued at 23.30 on the 2nd gave winds Northwest 4 or 5 increasing 5 to 6 at times overnight.
Note: The on scene weather in Sheep Haven Bay recorded by the Coast Guard during the search operation was wind west force 4 - 5, sea moderate.
(See Met Eireann Weather report at Appendix 13.3)

4. EVENTS PRIOR TO THE INCIDENT

- 4.1 At 07.30 am on the early May Bank Holiday Monday 3rd May 2004 Mr. Thomas Boyd and his son-in-law John January set off from Mr. Boyd's home to go fishing in Ards Bay. They took with them their fishing rods and bags containing their fishing gear and packed lunch and other necessary items for the trip including their lifejackets, tools, spare shear pins and split pins for the engine and propeller. They left a note to say they would be home later in the day at 4.45 pm for their dinner.
- 4.2 The timing of the fishing trip was dictated by the times of the tides on the day. The local tide table for Fanad Head / Sheep Haven for 3rd May gave High Tide as 05.55 hours local, 3.7 metres. Low Tide was 12.13 hours local, 0.5 metres and High Tide 18.17 hours, 3.8 metres. Mr Boyd, not having the local tide table, used the Tide tables for River Foyle (Lisahally) and made time corrections to adjust for the local conditions at the fishing site. The plan for the trip as per the hand written notes on his tide table was to leave home 1 hour after high tide i.e. 07.22. Local time for low tide was obtained by deducting 1¹/₄ hours from the time shown on their table. They intended to come back to the landing area 1¹/₂ hours after low tide.
- 4.3 At various stages over the weekend Thomas Boyd and his son Malcolm were checking the weather forecasts on Teletext in anticipation of the fishing trip. The main thing they were checking was the wind strength. The last report they got was at bedtime on Sunday evening. The wind strength given on Ceefax was 12 knots projected for the Northern Ireland region for Monday morning.
- 4.4 On the previous Saturday, 1st May, Mr. Boyd's other sons, Derek and Alistair, drove to the Friary at Ards with their boat, without the engine, and left it down at the moorings when the tide was out. Thomas Boyd had reportedly run the engine on Saturday at his home and had commented that it was running like a clock.
- 4.5 Thomas Boyd had earlier in the week, Wednesday 28th April, taken the engine to a family friend who was familiar with these engines, as the engine wouldn't "turn over". It was pointed out to Mr. Boyd that the engine was overheating, which he was unaware of. Repairs were carried out to rectify this problem. The propeller was not removed from the engine during the repairs. The engine was fixed using new spares from the agent including a spark plug and thermostat. The cooling channels were also cleaned. The engine was tested and ran for approximately 1¹/₂ an hour in a test drum for cooling water until the friend was satisfied that everything was all right. Mr Boyd collected the engine on Friday evening at 6.30pm. The boat itself had been worked on over the winter and had been stripped, cleaned and painted. John January had assisted in helping to fit the replacement rubber fender around the edge on the gunwale of the boat. A new mounting for securing the engine on the stern was also made.

5. THE INCIDENT

- 5.1 There were no witnesses to the incident. The first indication that anything was amiss was when the Jet Skier discovered one body in the water and reported this to the passenger boat "Rosguill".

6. EVENTS AFTER THE INCIDENT

- 6.1 The alarm was raised to the Coast Guard at 14.07 by the owner/operator of the passenger boat "Rosguill".

The "Rosguill" was tasked to search the area.

At 14.10 "Rosguill" confirmed a body in the water at position 55 10.7N, 007 49.8W, close to Tramore beach on the east side of Sheep Haven Bay.

- 6.2 At 14.14 Milford Gardai were requested to send a Garda car and ambulance to the area.

At 14.14 the local Mulroy Coast Guard station was tasked although they were already aware of the situation from the "Rosguill" reports to Malin Head having been overheard.

- 6.3 At 14.17 the first body, (later identified as that of Mr. John January) was brought ashore.

At 14.25 the Irish Air Corps search and rescue Helicopter was alerted and was at the scene at 15.00 hours.

At 15.13 The Mulroy Coast Guard confirmed locating a second body located in the water at position 55 10.30N, 007 50.12W

At 15.16 the rescue Helicopter reported locating an upturned boat at position 55 10.57N, 007 50.06W.

- 6.4 Enquiries were ongoing by the Gardai and Coast Guard to try and find out the identity of the casualties and how many persons may have been in the boat.

At 14.36 the identity of the first casualty was determined to be Mr John January.

At 16.00 the second casualty was brought ashore at Downings Pier by the Coast Guard and given into the custody of the Gardai. The second casualty was later identified as Mr. Thomas Boyd.

- 6.5 At 16.23 the Lough Swilley lifeboat was also tasked to assist with the search operation.

At 18.53, after extensive enquiries, the Gardai confirmed that there were only two persons involved in the incident. The search and rescue operation was therefore terminated and all units were stood down.

7. CONCLUSIONS AND FINDINGS

- 7.1 The boat, engine and gear belonging to the two fishermen were examined thoroughly in order to try and assess what had occurred. All the items washed ashore were also collected and examined.

The men launched their boat in the relatively sheltered and calm waters at the moorings. It is likely they were not aware of the rough sea conditions out in Sheep Haven Bay. In any case, their normal fishing area would not take them into Sheep Haven Bay.

It appears that very shortly after leaving the shelter of Bath Point and heading out into the channel for the fishing area, a problem occurred with the engine. Exactly what the problem was cannot be conclusively determined but the cover of the engine appears to have been removed by the men. This conclusion is arrived at by the fact that the cover was not on the engine and had been washed ashore. Tests confirmed that if the cover is correctly attached it cannot fall off or be pulled off. It was also discovered that the shearing pin in the propeller had in fact sheared. Again it cannot be determined conclusively when the pin sheared. Also, a fault discovered in the housing locating the pin would cause the pin to be subject to greater stress than normal and therefore it could break with less effort (See Report on propeller examination at Appendix 13.4).

- 7.2 The boat carried an anchor with a total of 8.2 metres of rope and chain. If this was deployed it did not hold the boat either because either the tide was too strong or the water depth was too great. The boat also carried a pair of oars. It is not known if the men attempted to use them but if they did it seems that the tide defeated any effort to make a safe landing.

The boat was then carried out on the strong tide into Sheep Haven Bay. Here the wind and waves combined to cause the boat to fill with water and it overturned. The men were wearing flotation devices. When the men were found these flotation devices did not appear to be fastened tightly around their bodies, and must have slipped upwards. They appeared to have inflated correctly (See report on crewsaver lifejacket at Appendix 13.5). They were heavily weighed down with gear including waders that would have restricted their movements if they were attempting to swim to safety. One of the men, Mr. Thomas Boyd could not swim. Waves would have been washing over them. The men and the boat would have continued to be carried out into the bay and then, with the tide turning they would have been brought back in towards Tramore beach where their bodies were eventually discovered. The men may have been in the water for four hours or more. The cause of death was drowning in the case of Mr. Boyd and in the case of Mr. January, drowning hastened by the effects of exposure.

- 7.3 The men did not, or were unable to, raise an alarm. No pyrotechnics or means of making sound signals were on board and they did not have mobile phones. The latter would not have picked up a signal in the area in any case.

8. DESCRIPTION OF BOAT

8.1 The boat and engine were examined at the premises of Bill McFadden of Ballyoghan, Carrigart, Co. Donegal in the presence of Bill McFadden, Garda Brendan O'Connor and Coast Guard volunteer Hugo Boyle.

8.2 The boat belonging to Thomas Boyd and used on the day of the incident is an open boat suitable for use in calm and sheltered waters. It has no fore or aft deck nor does it have a rise of bow.

There is no manufacturer's identity plate, or other data plate on the boat. From later witness statements it is known that it was bought new about 15 years ago.

8.3 The principal dimensions are as follows -

Length overall	15 feet	4.57 metres
Beam	4 feet 10 inches	1.48 metres
Depth to top of keel	1 foot 10 ¹ / ₂ inches	0.57 metres

8.4 The boat is manufactured from GRP (glass reinforced plastic), i.e. fibreglass, with hull thickness approximately 3mm.

It has a moulded "clinker" construction with six moulded chines on each side. The inside bottom of the boat is flat at 1.0 metre width. Two buoyancy compartments are moulded in at the bases of the bow and the stern. The bow buoyancy compartment is triangular, 0.67 metres long by 0.32 metres depth. The aft buoyancy compartment is rectangular, 0.4 metre width x 0.5 metre depth x 0.4 metres long.

There are two thwarts (seats) fixed in position. The forward edge of each thwart is positioned 1.68 metres and 2.6 metres aft from the bow respectively. Each seat is 0.22 metres in width from forward to aft and the front seat is 1.26 metres in length across from port to starboard and the aft seat is 1.3 metres in length across from port to starboard. The forward and aft seats are positioned at a height from the bottom of the boat to the underside of the seat of 0.33 metres and 0.28 metres forward and aft respectively. The moulded hull incorporates a short keel protrusion along the bottom whose depth increases linearly from 0.12 metres at the forward end to 0.19 metres at the aft end. The rowlocks, one at each side of the boat are positioned at 2.4 metres from the aft end. It was noted that various repairs had been carried out to the hull on both sides in the past using filler and all these repairs appeared sound. There were no obvious structural defects on the hull apart from one small crack propagating from the top edge of a previous repair to the starboard side where a patch 18cms x 15cms had been inserted in way of the gunwale 0.8 metres from forward.

The original rubbing strips (or fender), attached around the boat to the edge of the gunwale, had been replaced by a thick rubber hose like a rigid rubber fire hose. The hose had been cut longitudinally along its length on one side and

pushed and glued into position around the gunwale. This rubbing strip had become detached in places from the edge of the gunwale. This detachment may have occurred during the incident and/or during the recovery process of the upturned boat from the water. This rubbing strip would also serve to give some increased rigidity to the gunwale when intact and in place.

At the after part of the boat, in the channel formed by the keel moulding a stainless steel drain plug housing is fitted. The plughole diameter is 18mm and is threaded with square section threads. The drain plug housing was securely tight in the keel and the threads are in good condition. A mystery remains however as to what happened to the actual plug, which could not be located. The Coast Guard were requested to enquire from all those involved in the recovery if anyone had physically removed the plug, say to drain the water out when the boat was on dry land, but the response from those asked was 'No'. It was in fact the owner of the "Rosguill" who first noticed, about half an hour after the boat was recovered to the slip, that the plug was missing. It may have been removed by someone unknown or worked its way out during recovery handling but no further light could be shed on this aspect of the incident. The owner's son later mentioned that he had checked that the bung was in place and tight before the boat went on the fishing trip and that it was and had also been fitted with a new seal.

9. DESCRIPTION OF THE ANCHOR

9.1 The anchor make is "Systematched". It is a galvanised steel slip-ring fluke anchor.

The part number is 508116 and marked as a size # 13 for a 25 - 28 foot boat.

The anchor was still attached to the boat by means of a 6.1 metre length of 13mm diameter blue polypropylene rope tied to the "U" bolt attachment on the bow. This rope was in turn attached to 2.1 metres of 7mm diameter closed link anchor chain attached to the anchor. Total length therefore of 8.2 metres or about 27 feet available. The anchor was in good condition and appeared to be more than adequate for anchoring the boat on a sandy bottom in normal conditions. The length of the anchor rope however would not be adequate for a depth of water greater than say 20 to 25 feet.

9.2 After the examination of the boat on land it was taken to a sheltered area called "Isle Of Roy" to see it in the water. The drain plug was temporarily sealed.

Mr. Bill McFadden and the Coast Guard volunteer Mr. Hugo Boyle stepped into the boat at the slip. As they positioned themselves to sit down from the standing position the boat rocked considerably and did not appear to be very stable. This occurrence would probably be exacerbated by their unfamiliarity of the boat's behaviour in the water and may not be of concern to those familiar with it.

9.3 The freeboards were measured when the boat was alongside the slip in calm water i.e. the distance to the water from the top edge of the gunwale of the boat. The measurements were made first when the boat was empty and upright and secondly when the two men were sitting down on the boat seats in the centreline (boat upright).

Freeboard with boat empty

Forward	Middle	Aft
550mm	420mm	340mm

Freeboard with two men on board (no gear)

Forward	Middle	Aft
430mm	370mm	280mm

The boat was then returned to the care of Mr. McFadden on his premises.

DESCRIPTION OF THE ENGINE

10. DESCRIPTION OF THE ENGINE

10.1 The boat engine is a 5 H.P. 2-stroke outboard

Manufacturer	Yamaha Motor Co. Japan
Serial number	6E3 410131

10.2 The exterior appearance of the engine was clean. There were no obvious external signs of physical damage caused by, for example, impact. There were signs however of corrosion on various parts of the exterior aluminium body of the engine. The zinc sacrificial anode, fitted as a corrosion prevention measure was also well eaten away and ideally should have been renewed at the last service. The surface of the metal of the cylinder where the spark plug fits was also slightly discoloured which may indicate that overheating had occurred in the past (See section 4.5 of the report). The engine cover was located on the beach where it had been washed up. As part of the inspection the cover was re-fitted to the engine to check the securing arrangements of the cover to the engine block. The cover is attached by fitting the front part of the cover, tilted at an angle, over a protruding metal spigot on the engine housing and then pressing the cover down into place. The cover is then secured in place by turning a metal locking handle, located at the back of the engine up through 90° to the horizontal position. This engages on another spigot and makes for a very positive and secure attachment.

10.3 To test the security of the cover, the Coast Guard volunteer present, Mr Boyle, tried and could not remove the cover using physical force unless the locking lever was moved vertically and the cover tilted forward off the spigot and lifted clear in the correct manner. In other words there is a method to it and it is most unlikely if not impossible for the cover to come off accidentally, even if the engine was turned upside down, unless the locking arrangements were damaged which was not the case.

During examination of the engine it was noted that the propeller was spinning freely even when the gear was engaged. The split pin was removed in order to unscrew the plastic nut that holds the propeller in place. The propeller was then removed. A brass shear pin fits inside a hole in the drive shaft and the two protruding parts of the pin engage into a slot in a brass fitting that in turn is secured within the propeller housing. The drive shaft in normal operation drives the propeller round by means of this centrally located shear pin. The shear pin is a protective device to protect the engine and gear box from damage if the engine was to hit an obstacle in the water, or get fouled on weed or fishing net or rope, or in a grounding incident etc. (It is also possible that a weakened pin could break if say the gear was engaged with too big a throttle opening).

10.4 When the propeller was removed it was found that the shear pin had broken into two pieces. One part (about two-thirds of the length) of the shear pin fell out of the propeller housing in one piece. The remaining one-third part of the shear pin was lodged tightly in the propeller drive shaft bore. The broken ends

of both parts were smooth. It is not known when the shear pin broke. There is the possibility that it may have been broken during the recovery process of the boat after the incident but the smooth broken ends might suggest that the propeller shaft had been spinning without the propeller being engaged at least for a short period.

The spare shear pin was fitted during the examination and found to be fairly loose in the propeller shaft bore. When the pin was fitted into the brass carrier within the propeller hub it could move freely from side to side. It was also noted, however, that when the new pin was fitted in the brass carrier it could slide right across to the left or right in the propeller housing, rather than be centrally retained in the propeller hub within the brass fitting. This could have the effect that only one half of the pin might be driving the propeller round rather than the correct operation whereby the pin is centrally located and both sides of the pin drive the propeller. The shear pin would obviously be subjected to greater stress if only one part was engaged and driving the propeller. There appeared to be a fault therefore in the position of the bronze insert that holds the pin within the propeller housing. This insert appeared to be positioned somewhat proud within the propeller thus enabling the pin to move too far along the locating slot.

It was noted that there were spaces for two spare shear pins held in a rubber holder attached to the engine under the cover. Both of these spares were intact and still in place in the holder.

11. PERSONAL CLOTHING WORN AND BOAT AND FISHING EQUIPMENT FOUND FOLLOWING THE INCIDENT

11.1 The following list was compiled on the day after the incident i.e. 4th May 2004.

Items found on the casualties were as follows -

On Mr. Tom Boyd

1 x set of fishing waders (up to thighs)

1x light PVC type jacket

1x inner fleece lined jacket

Braces and belt

1x XXL "Blue sea" lumberjack shirt (100% cotton)

1x "Flexothane" XL overtrousers

1x pair jeans

Undergarments and socks (Thermal)

Lifejacket (Personal Flotation Device - PFD) = 1x Crewsaver, inflated.

35pounds (15.87kg) buoyancy.

Serial number- ?2609

Auto gas inflation model with 33gms CO2 cylinder. Manual activation by pulling on a red toggle. Fastened at the front by a quick release snap-in connection and adjusted at the right side through a buckle. Manual inflation nozzle tested and functioned correctly. Whistle attached by cord for attracting attention. Service label blank.

On Mr. John January

One set full length waders

1x "Ron Thompson" large size fisherman's waxed cotton jacket (PVC coated)

1x pair ditto waxed cotton trousers

1x 40" cotton T-shirt

1x Large jumper 100% wool

1 pair thick woollen socks

Lifejacket (Personal Flotation Device - PFD) = 1x Crewsaver, inflated.

35 pounds (15.87kg) buoyancy.

Serial number- 53840

Manufactured by Crewsaver Ltd, Mumby Road, Gosport PQ 12 14Q

Auto gas inflation model with 33gms CO2 cylinder. Manual activation by pulling red toggle. Fitted with manual nozzle that can be blown into to inflate or top up the chambers if necessary. Manual nozzle tested and found to function correctly.

A whistle for blowing for attention is attached to the PFD by a cord.

This PFD was fastened by a buckle into a buckle at the front on a woven strap that goes around the torso and tightened at the right hand side through another buckle. A vertical strap at the back is attached to the circumferential strap at the base of the back.

Service label blank.

11.2 Other Equipment: (found on beach)

2x "Lifeguard" lifejackets (used for sitting on)

1x pair wooden oars 2.4m long

1x cover for Yamaha "5" engine (also washed ashore)

1x fishing rod, various lines and floats, small bottle insect repellent

1x Small 1st aid kit containing 1x thermal blanket, wipes, bandages, safety pins

1x Tin WD40 (lubricant) partially used

1x 12-litre capacity Italian make plastic fuel tank "Hulk". This tank appeared to be an approved type with the following data inscribed on it:

Serbatoio Carburante Omologato.

Per Nautica Da Diporto

Dichiarazione R.I. Na No DIP/41/93

Fabbricato Da Nuova Rade Spa

Casella Scriva Genova Italy.

(With gasoline reserve line marked near the base of the tank)

1x Fisherman's canvas bag containing:

-Gloves

-Emergency foil blanket

-2 boxes of fishing flies

-Hooks

-Nylon fishing line

-Swivels, lures

-One plastic container of milk

-One plastic sandwich box containing 4 scones, two chocolate biscuit bars and tea bags wrapped in cling film. (All items untouched).

-One additional wide rimmed flask containing fresh/frozen bait

2nd Bag containing:

- Gloves

- 1 plastic rubbish bag (for fish?)

- Spectacles case

- Milk for tea

- Sun Lotion

- Filleting knife

- Box of lures

Note: No Radios or Mobile Phones or Pyrotechnics were among the items found. (Mobile phones would not, in any case, have reception at the fishing location).

Note: The fishing bags were examined again the following day, 5th May, and no tools whatever were found inside them. Nor were any tools subsequently found. It was noted that the kit taken on the fishing trip included a white canvas pouch type bag containing tools, some spare parts and WD 40 lubricant. This latter item only was found.

12. RECOMMENDATIONS

- 12.1** Local weather conditions should always be observed for the particular locality where a boating trip is to be taken. General forecasts obtained from Ceefax are related more to inland weather conditions and are general in nature not necessarily reflecting the particular sea area conditions. For all Irish coastal waters, sea area forecasts can be obtained by visiting the website www.met.ie or telephoning, from the Republic of Ireland, weather dial sea area forecasts on 1550 123 855.
- 12.2** Always carry a means of alerting others in the event of getting into difficulties. Ideally, rocket or hand flares or orange smoke floats kept in a watertight container should be on board. Also a hand held VHF radio transmitter in a waterproof pouch will alert the coastguard or other boat users in the vicinity. Other aids such as a horn for sound signalling and/or a bright orange flag are also advisable.
- 12.3** Always wear appropriate clothing for use in a boat and not necessarily just for fishing e.g. wet or dry suits.
- 12.4** The length of anchor cable and rope should be appropriate and ideally five times the maximum depth of water likely to be encountered but not less than three times the depth.
- 12.5** Personal flotation devices should carry the CE mark and fitting straps should be made tight with preferably a crotch strap to help keep it in place. It is important that an approved dealer regularly services these. A minimum buoyancy of 150 Newtons is recommended for offshore use.
- 12.6** Any engine used for propulsion should be regularly checked and serviced by an authorised and accredited engine supplier.
- 12.7** Locations with strong currents, where there is a danger of being carried out into open waters, should be avoided unless the craft is specifically designed for use in such waters.
- 12.8** From 15th June 1998 recreational craft manufacturers are required to comply with the European recreational Craft Directive and boats marketed from that date must carry the manufacturer's stamp and CE marking and sea category for which it has been designed. Boats offered for sale or hire from this date should be checked to ensure they meet the requirements of the regulations.

13. LIST OF APPENDICES

13.1 Scene of Incident.

13.2 Extract from Irish Coast Pilot.

13.3 Met Eireann Weather Report.

13.4 Report on Propeller Examination.

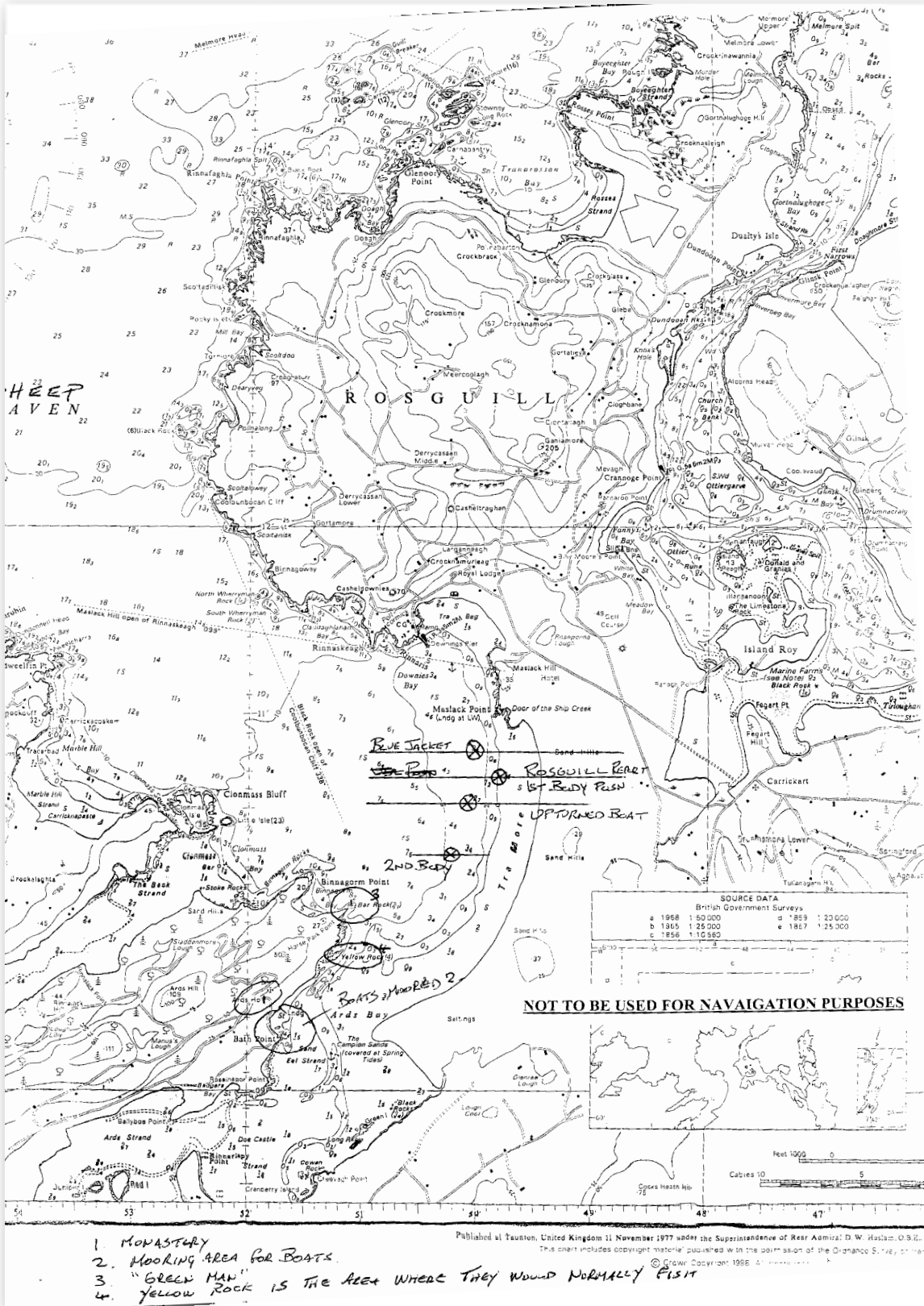
13.5 Report on crewsaver Lifejacket.

13.6 Graph of Survival Time against temperature.

APPENDIX 13.1

Appendix 13.1

13.1 Scene of Incident.



Appendix 13.2

Extract from Irish Coast Pilot.

CHAPTER 12

N of Magheranguna Point (3½ cables farther E), thence:

N of Fanad Head (55°17'N, 8°38'W) (13.23). The coast, between Pollacheeny Point and Fanad Head, is fringed by rocky ledges to a distance of 1½ cables offshore, in places, and should be given a wide berth.

5 **Clearing marks:** The alignment (243°) of Croaghnamaddy (55°12'5N, 7°57'3W), the highest part of the Horn Head Peninsula and the N extremity of Melmore Head, passes N of Carrickcannon.

6 The line of bearing 090° of the summit of Dunaff Head (55°17'N, 7°31'W), open N of Magheranguna Point, passes N of Currin Spit.

(Directions for coastal passage farther E continue at 13.71 and to Rathmullan Roadstead at 13.24)

Anchorage West of Horn Head

Chart 2752

Ballyness Harbour

12.343

1 **Small craft** can find shelter in Ballyness Harbour, entered close E of Peninsula Point (55°10'N, 8°09'W). This sandy inlet, which nearly all dries, is fronted by a shifting bar which also dries at times. In 1979 it was reported that the harbour was too shallow for most yachts and could be entered only in settled conditions.

2 **Entrance.** The entrance can be identified by the remarkable sandy peninsula S of Peninsula Point, and by a sandy beach, backed by sand hills, which extends 2 miles E from Drumnatinny Point, the E entrance point.

3 **Leading marks.** The line of bearing 173° of the sharp valley on the E side of Mount Errigal (55°02'N, 8°07'W) (12.282) (Chart 2725), at its foot, seen between Killult Church and school (2 miles SSE of Peninsula Point), leads over the bar.

4 **Leading lights** (the front; white post, black band: the rear; black post, white band), in line bearing 119½°, stands 4 cables SE of Drumnatinny Point.

5 **Ballyness Pier** (4 cables S of Drumnatinny Point) on the E shore has a depth of 5.5 m at HW alongside its timber extension; in 1979 it was reported to be in ruins and seldom used, but small craft can anchor off it.

Tramore Bay and vicinity

12.344

1 **Tramore Bay**, entered between Dooros Point (55°10'5N, 8°02'4W) and Marfagh Point (1 mile NE), affords an anchorage with offshore winds in any convenient depth clear of Marfagh Rock (3 cables W of Marfagh Point) which dries.

2 **McSwyne's Gun** is a fissure in the cliffs 2 cables N of Marfagh Point. The sea is sometimes forced into this blowhole producing a report loud enough to be heard up to 8 miles off. The noise resembles a thunder clap rather than the sound of a gun.

3 **Landing, in calm conditions** can be effected in: Dooros Port, a small inlet between Dooros Point and Rinbooy Point (2 cables W).

Pigeon's Cove, on the N side of Pollaguill Bay, a small inlet immediately S of Rough Point (7½ cables N of Marfagh Point, formerly Pollaguill Point).

Scoltnavan

12.345

1 **Scoltnavan** (55°13'1N, 7°59'6W) is a small inlet close S of Nose of Scoltnavan, 81 m high; it is accessible at HW in favourable weather.

Sheep Haven

Chart 2699

General information

12.346

1 **Sheep Haven**, entered between Horn Head (55°14'N, 7°59'W) (12.339) and Rinnafaghla Point (4 miles E) is easily accessible by day; it has regular depths over a bottom of fine grey sand, but is exposed to N and NE winds and affords no safe anchorage, except for small craft.

2 The Atlantic swell breaks on Breaghy Head (55°11'5N, 7°54'8W) with great force and expends itself on the broad strand of Tra More, which borders the SE shore of the haven, and covers the mouth of Ards Bay (12.356) at its S end.

3 Small vessels, provided the swell is not too great, can find a temporary anchorage on either side of the haven where there are piers alongside which a vessel may berth at HW. In Ards Bay (3 miles SE of Breaghy Head) there is a quay regularly used for the export of sand for glass manufacture.

Tidal streams

12.347

1 **Entrance to Sheep Haven.** The tidal streams in the entrance to Sheep Haven are imperceptible but increase gradually inwards to the narrow channel at the entrance to Ards Bay.

2 **Ards Bay.** The streams in the entrance (55°10'N, 7°51'W) of Ards Bay are reported to run strongly. They begin at about the following times:

Interval from HW *Direction*

<i>Galway</i>	<i>Dover</i>	
-0500	+0120	In-going.
+0105	-0500	Out-going.

Principal marks

12.348

1 **Landmarks:**
Horn Head (55°14'N, 7°49'W) (12.339).
Melmore Tower (55°15'3N, 7°47'2W) (12.370).

Directions

12.349

1 The entrance to Sheep Haven is approached from N, passing (with positions relative to Breaghy Head (55°11'5N, 7°54'7W)):

2 W of Rinnafaghla Point (2¾ miles NE), which is low with rocky ledges which dry, and is foul to a distance of 3 cables N, thence:

E of Duncap Isle (1¼ miles NW), thence:

E of Cowan Head (1¼ miles NW), thence:

E of Horn Head Little (1-15 miles WNW), thence:

3 SE across the entrance of Dunfanaghy Bay (12.351) between Horn Head Little and Breaghy Head, thence:

SW of Black Rock (1½ miles NE), thence:

NE of Mweelfin Point (6½ cables ESE), the NE extremity of the peninsula which separates Dunfanaghy and Marble Hill Bays, thence:

SW of North and South Wherryman Rocks (1½ miles E).

Appendix 13.2

Extract from Irish Coast Pilot.

CHAPTER 12

4. **Clearing marks for Wherryman Rocks:**

The line of bearing 338° of Black Rock, its own breadth open of Coolbunbocan Cliff (4½ cables SSE of the rock), passes W of Wherryman Rocks. The line of bearing 099° of Maslack Hill (55°11'2N, 7°49'8W), open of Rinnaskeagh (7 cables W), passes S of them.

The alignment (300°) of the extremities of Horn Head (55°14'N, 7°59'W) and Duncap Isle (1¼ miles ESE) passes SW of them.

12.350

- 1 Thence the track continues across the entrance to Marble Hill Bay (12.353), passing (with positions relative to Rinnaskeagh Point (55°11'3N, 7°50'9W)):

SW of Rinnaskeagh Point, thence:

NE of Clonmass Bluff (1.1 mile SW), the NE extremity of Clonmass Isle, thence:

NE of Binnagorm Point (1¼ miles SSW).

- 2 Thence course can be set as required for entering Ards Bay (1½ miles S of Rinnaskeagh Point) (12.356).

Berths and anchorages**12.351**

- 1 **Dunfanaghy Bay**, entered between Horn Head Little (55°11'8N, 7°56'6W) and Breaghy Head (a little over 1 mile ESE), affords a temporary anchorage for coasters and small craft in the summer.

- 2 The recommended berth is on the alignment (238°) of Catherine's Isle (7 cables SW of Horn Head Little), and the old Union Workhouse (8 cables farther SW) with Horn Head Little bearing 004°, in depths of 7 m. A vessel should not remain here in onshore winds. Care must be taken to avoid Dunfanaghy Shoal, a patch of foul rocky bottom 5 cables SSE of Horn Head Little, on which anchors have frequently been lost. As shown on the chart there is extensive foul ground in its vicinity.

- 3 **Dunfanaghy Harbour**, to the W of the bay, dries for 7 cables seaward of the village where there is a small quay. The bay is exposed to a dangerous swell but vessels drawing less than 2.4 m can lie alongside, aground, although this is not recommended.

12.352

- 1 **Portnablahy Bay** (55°11'N, 7°56'W), between Rinnaraw Point and Curragh House Point, is foul with rocks on all sides and is much exposed to a swell which can be dangerous. It affords only a temporary anchorage in fine weather.

Pier. A pier on the S side of Curragh House Point provides little shelter.

- 2 **Leading lights** (front, black concrete column, white band, 2 m in height; rear, white concrete column black band, 2 m in height) are exhibited from the SE corner of the bay. The alignment (125¼°) of these lights leads SW of the pierhead to which a depth of 4 m can be carried at HW.

12.353

- 1 **Marble Hill Bay** (1¼ miles E of Portnablahy Bay), though much exposed to a swell, affords an anchorage to small craft in offshore winds and in the absence of a swell. It has been reported that the best berth is towards the NW end in 3 or 4 m. Landing can be made on the beach.

12.354

- 1 **Downies Bay**, lying between Rinnaris and Maslack Point (7 cables SE), affords partial shelter to coasters and small craft with a draught of less than 3 m. The holding ground is good but a severe strain on cables is caused by the under-tow.

Four seasonal moorings for visiting yachts are situated 1 cable SE of Downies Pier.

- 2 **Downies Pier**, on the W side of the bay will accommodate small vessels and afford shelter to others which can lie aground; it is reported to dry alongside for two-thirds of its length on the E side.

At the head of the pier there is a berth with a depth alongside of 3.7 m, sand, which is reported to be unsafe, even for fishing vessels, in unsettled weather.

There is a small light (red post) at the head of the pier.

12.355

- 1 **Pollcormick Inlet**, immediately W of Downies Bay, affords an excellent sheltered anchorage for small craft in depths of 3 m, sand. Local boats remain here all the year round.

Ards Bay**12.356**

- 1 Ards Bay, at the head of Sheep Haven, is entered close SE of Horse Park Point, formerly Ards Point, (55°10'N, 7°51'W). It is reported to provide the best shelter in the haven though the bar (12.357) can be dangerous to small craft if there is a big sea running.

- 2 The greater part of the bay dries and the tidal streams run so strongly through the narrow channel that vessels lying there are subject to great inconvenience and danger during every tide; great care is necessary to prevent swinging on to the rocks and steep sandbanks.

- 3 **Caution.** No vessel should attempt to enter Ards Bay without local knowledge and even then if the weather is bad it is better to take shelter in Downies Bay (1½ miles N) (12.354); there is such a heavy sea in the vicinity of Horse Park Point, with onshore gales, which often renders a small vessel quite unmanageable.

Pilotage. Local fishermen act as pilots.

12.357

- 1 **Entrance and channel.** Bar Rock (¾ cable NE of Horse Park Point), which dries, lies on the W side of the approach to the entrance; it is marked by a beacon.

- 2 The entrance is obstructed by a sandy bar over which there is a least charted depth of 2.4 m in the fairway. The channel within the bar is less than ½ cable wide with charted depths from 0.9 to 8.2 m, and it is reported that its NW side is marked by three perches:

- 3 On Yellow Rock (3 cables SSW of Bar Rock).

On a rock (1½ cables farther SW), the alignment of these two beacons is 220°.

On a rock close N of Bath Point (7 cables SSW of Horse Park Point).

- 4 **Directions.** The following directions for entering Ards Bay have been recommended. Approaching the bar on a S course pass ½ cable E of Bar Rock Beacon. When the second perch is just open E of Yellow Rock Perch, alter course SW to pass close SE of both these perches.

12.358

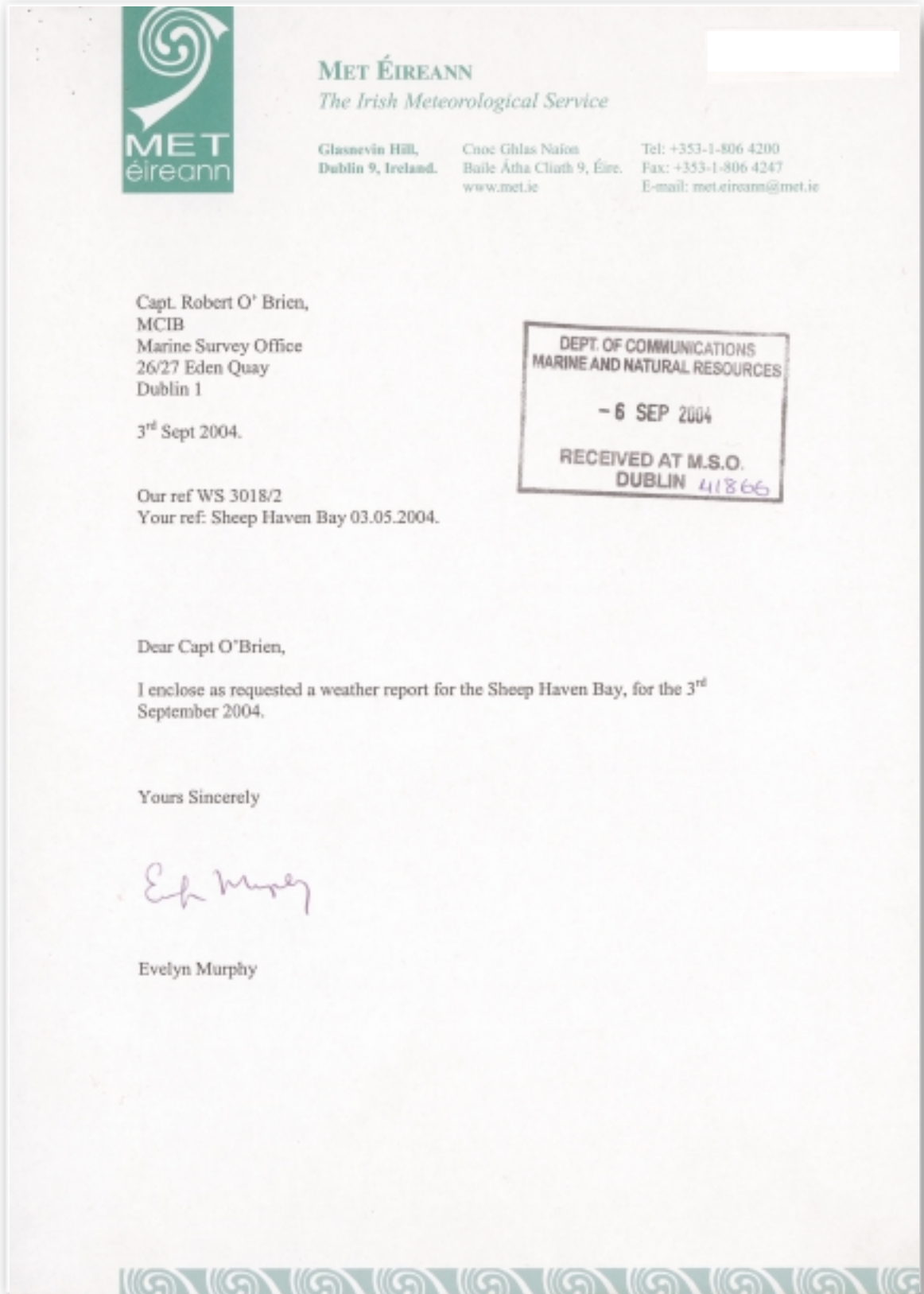
- 1 **Bath Point Quay.** There is a concrete quay on the S side of Bath Point which just dries at low water. It is used for the export of sand for glass manufacture which is quarried from Mount Muckish (55°06'N, 8°00'W) (Chart 2725) (12.282).

- 2 There is only one berth at the quay, 34 m long, where there is ample room for a vessel to overlap bow and stern and also sufficient sea room to swing round; it can be used by vessels of 3.7 m draught. It is reported that the berth is dangerous with a N swell running.

In 1985 it was reported that the berth was closed to commercial traffic.


Appendix 13.3

Met Eireann weather report.



Appendix 13.3

Met Éireann weather report.



MET ÉIREANN
The Irish Meteorological Service

Glasnevin Hill, Cnoc Ghlas Naíon Tel: +353-1-806 4200
Dublin 9, Ireland. Baile Átha Cliath 9, Éire. Fax: +353-1-806 4247
www.met.ie E-mail: met.eireann@met.ie

Weather Report for Sheep Haven Bay
3rd May 2004
6 hours to 16 hours Local Time

General Situation

A Low pressure area NE of Scotland and a High Pressure area in the Atlantic gave a north-westerly airflow over the Bay initially. Another deep Low pressure area approached the west coast of Ireland later in the day.

Details:

Winds: north-west backed west-north-west Force 4 to 6 and gusty in showers in the morning. (gusts of 29 to 33 knots were reported at other locations in Donegal in showers) winds backed westerly in the afternoon with similar wind strength.

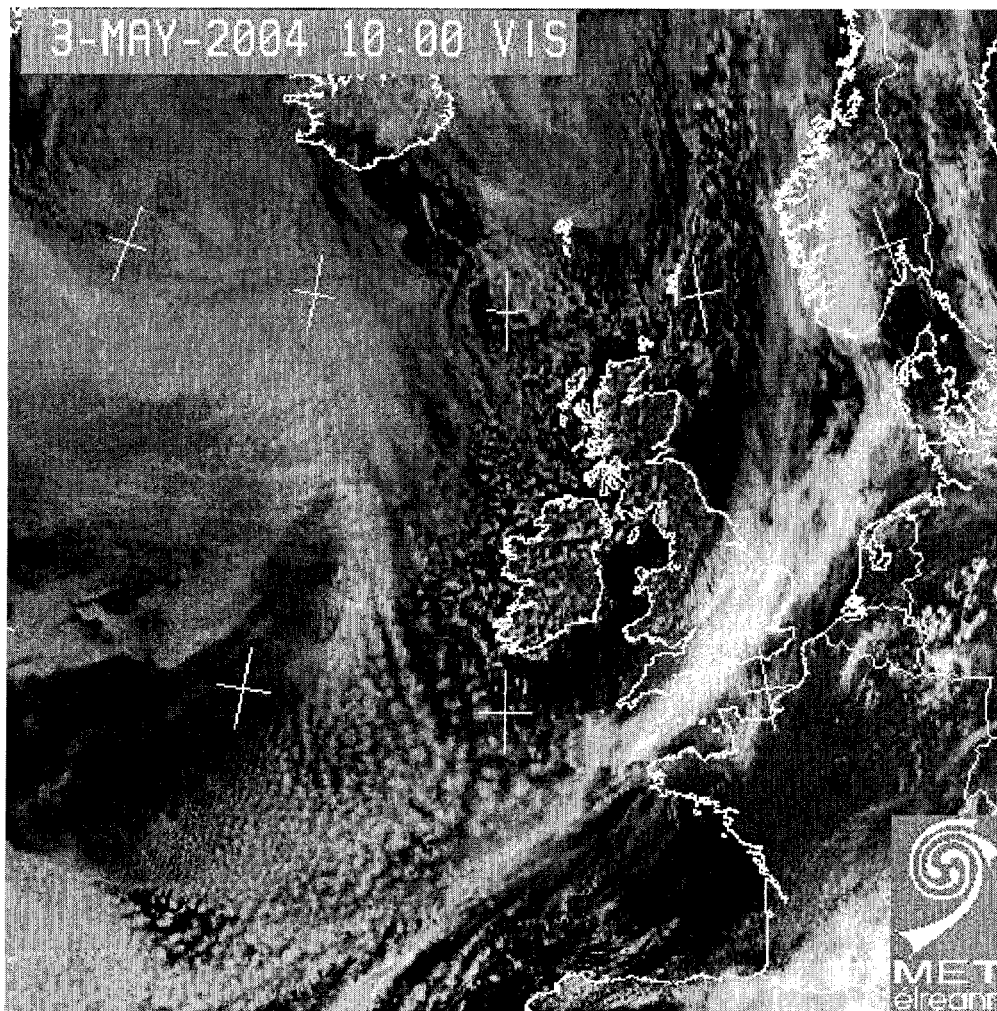
Areas in the Bay sheltered from the north-west direction would have reduced winds – local knowledge would be useful here.

Weather: frequent blustery showers

Seastate: Buoy reports well off-shore observed wave heights in the order of 3.7 to 4.3 metres significant wave height. Computer model forecasts indicate that waves of this order of magnitude were also entering the Bay – however they would have been considerably modified as they progressed into the Bay.

Appendix 13.3

Met Eireann weather report.

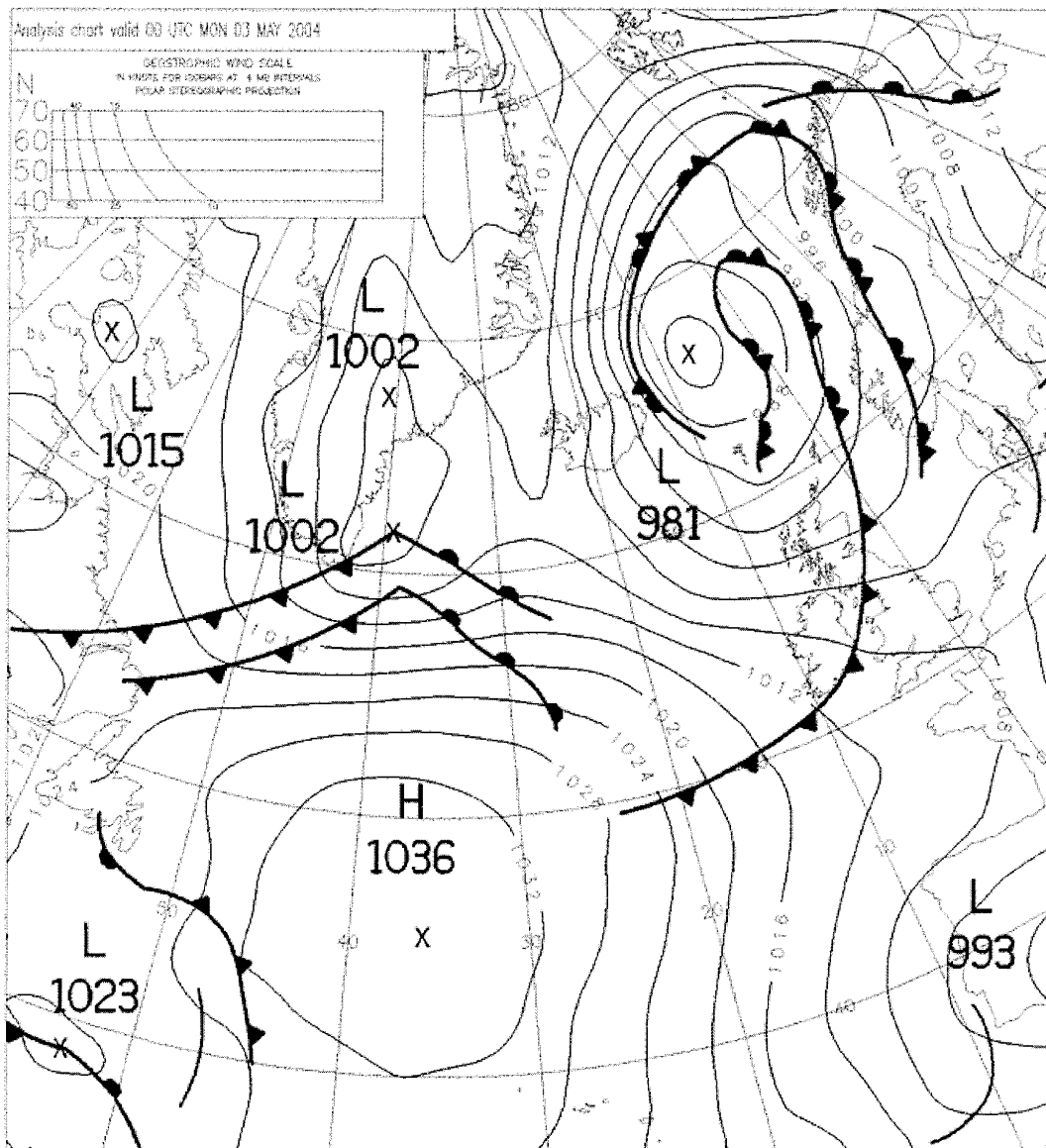


Appendix 13.3

Met Eireann weather report.

Archiv der 00 UTC UKMO-Bracknell-Bodenanalysen (ab 27.01.1998)

2004 ▾ Mai ▾ 3 ▾ Zeigen



<http://www.wetterzentrale.de/topkarten/tkfaxbraar.htm>

03/09/2004

Appendix 13.3

Met Eireann weather report.

BEAUFORT SCALE OF WIND

BEAUFORT NUMBER	DESCRIPTIVE TERM	VELOCITY EQUIVALENT AT A STANDARD HEIGHT OF 10 METRES ABOVE OPEN FLAT GROUND				SPECIFICATIONS			Probable wave height* in metres	Probable wave height* in feet
		Mean velocity in knots	m s ⁻¹	km h ⁻¹	m.p.h.	Land	Sea	Coast		
0	Calm	< 1	0-0.2	< 1	< 1	Calm; smoke rises vertically	Sea like a mirror	Calm	—	—
1	Light air	1-3	0.3-1.5	1-5	1-3	Direction of wind shown by smoke drift but not by wind vanes	Ripples with the appearance of scales are formed, but without foam crests	Fishing smack just has steerage way	0.1 (0.1)	¼ (¼)
2	Light breeze	4-6	1.5-3.3	6-11	4-7	Wind felt on face; leaves rustle; ordinary vanes moved by wind	Small wavelets, still short but more pronounced; crests have a glassy appearance and do not break	Wind fills the sails of smacks which then travel at about 1-2 knots	0.2 (0.3)	½ (1)
3	Gentle breeze	7-10	3.4-5.4	12-19	8-12	Leaves and small twigs in constant motion; wind extends light flag	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses	Smacks begin to careen and travel about 3-4 knots	0.6 (1)	2 (3)
4	Moderate breeze	11-16	5.5-7.9	20-28	13-18	Raises dust and loose paper; small branches are moved	Small waves, becoming longer; fairly frequent white horses	Good working breeze, smacks carry all canvas with good list	1 (1.5)	3½ (5)
5	Fresh breeze	17-21	8.0-10.7	29-38	19-24	Small trees in leaf begin to sway; crested wavelets form on inland waters	Moderate waves, taking a more pronounced long form; many white horses are formed (chance of some spray)	Smacks shorten sail	2 (2.5)	6 (8½)
6	Strong breeze	22-27	10.8-13.8	39-49	25-31	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty	Large waves begin to form; the white foam crests are more extensive everywhere (probably some spray)	Smacks have double reef in main-sail; care required when fishing	3 (4)	9½ (13)
7	Near gale	28-33	13.9-17.1	50-61	32-38	Whole trees in motion; inconvenience felt when walking against wind	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind	Smacks remain in harbour and those at sea lie to	4 (5.5)	13½ (19)
8	Gale	34-40	17.2-20.7	62-74	39-46	Breaks twigs off trees; generally impedes progress	Moderately high waves of greater length; edges of crests begin to break into the spindrift; the foam is blown in well-marked streaks along the direction of the wind	All smacks make for harbour, if near	5.5 (7.5)	18 (25)
9	Strong gale	41-47	20.3-24.4	75-88	47-54	Slight structural damage occurs (chimney pots and slates removed)	High waves; dense streaks of foam along the direction of the wind; crests of waves begin to topple, tumble and roll over; spray may affect visibility	—	7 (10)	23 (32)
10	Storm	48-55	24.5-28.4	89-102	55-63	Seldom experienced inland; trees uprooted; considerable structural damage occurs	Very high waves with long overhanging crests; the resulting foam, in great patches, is blown in dense white streaks along the direction of the wind; on the whole, the surface of the sea takes on a white appearance; the tumbling of the sea becomes heavy and shock-like; visibility affected	—	9 (12.5)	29 (41)
11	Violent storm	56-63	28.5-32.6	103-117	64-72	Very rarely experienced; accompanied by widespread damage	Exceptionally high waves (small and medium-sized ships might be for a time lost to view behind the waves); the sea is completely covered with long white patches of foam lying along the direction of the wind; everywhere the edges of the wave crests are blown into froth; visibility affected	—	11.5 (16)	37 (52)
12	Hurricane	64 and over	32.7 and over	118 and over	73 and over	—	The air is filled with foam and spray; sea completely white with driving spray; visibility very seriously affected	—	14 (—)	45 (—)

* This table is only intended as a guide to show roughly what may be expected in the open sea, remote from land. It should never be used in the reverse way, i.e. for logging or reporting the state of the sea. In enclosed waters, or when near land, with an off-shore wind, wave heights will be smaller and the waves steeper. Figures in brackets indicate the probable maximum height of waves.



Appendix 13.3

Met Eireann weather report.

Wave Heights:

The wave height is the vertical distance between the crest and the preceding or following trough. The table below gives a description of the wave systems associated with a range of significant wave heights. The significant height is defined as the average height of the highest one-third of the waves. It is very close to the value of wave height given by an experienced seaman when making visual observations of wave height.


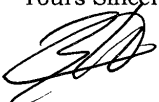
Individual waves in the wave train will have heights in excess of the significant height. The highest wave of all will have a height about twice the significant height.

STATE OF SEA

Descriptive terms	Height* in metres
Calm	0 - 0.1
Wavelets	0.1 - 0.5
Slight	0.5 - 1.25
Moderate	1.25 - 2.5
Rough	2.5 - 4
Very rough	4 - 6
High	6 - 9
Very high	9 - 14
Phenomenal	Over 14

Appendix 13.4

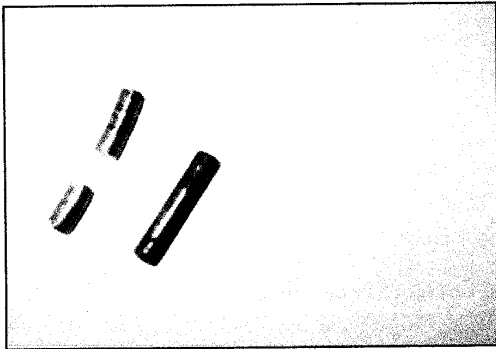
Report on Propeller Examination.

	<p>Tel: 028 7035 6422 Mob: 078 6669 0436 Fax: 028 7034 2361 Website: tonysmarineservice.co.uk</p>	<p>10 Ballindreen Road, Coleraine, Co. L.Derry, N.Ireland, BT52 2JU 31/08/04</p>
<p>FAO Mr. R. O'Brian Marine Survey Office.</p>		<p>Ref: TMS 30804</p>
<p>Dear Sir,</p> <p>As requested I have carried out an inspection on the propeller you provided details are as follows.</p> <ol style="list-style-type: none"> 1 As per photograph 01 annex A you will notice that the shear pin is broken only on one quarter of the pin this is due to the bushing not being fully recessed in the propeller see photo, 03 annex A. 2 The bushing should be fully pressed into the propeller leaving it flush with the lip of the center hub see photo 04 annex A this holds the shear pin in its center position allowing max strength over the pin if the pin is sheared it should break in three places all of equal size. As this pin has been broken only on one third of its over all length points that the pin has dislodged from from its center position, this would leave the pin in a weak position that can break with less pressure than in normal circumstances. 3 The propeller has polished tips this is normally caused by touching the bottom of the river/ sea bed and can cause the pin to snap. Also with the pin in a dislodged position the changing from reverse to neutral to forward gear can place excess pressure on the dislodged pin causing it to snap. And most obviously hitting a object floating or submerged can cause the pin to snap. 4 This propeller would have been useable although the points I have made above suggest that the weakness caused by the movement of the bushing allowing the shear pin to move inside the hub points to me that the propeller should be refurbished or replaced. <p>I hope this report is of assistance.</p> <p>Yours Sincerely</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  <p>AT Hodges Proprietor.</p> </div> <div style="border: 2px solid black; padding: 5px; text-align: center;"> <p>DEPT OF COMMUNICATIONS MARINE AND NATURAL RESOURCES</p> <p>- 3 SEP 2004</p> <p>RECEIVED AT M.S.O. DUBLIN 41844</p> </div> </div>		

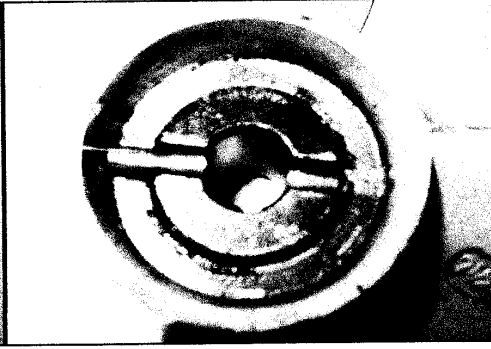
Appendix 13.4

Report on Propeller Examination.

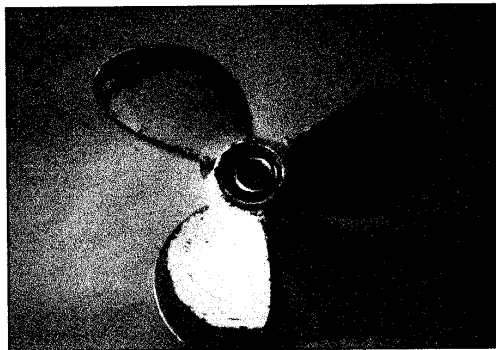
Annex A



Photograph 00



Photograph 01



Photograph 02

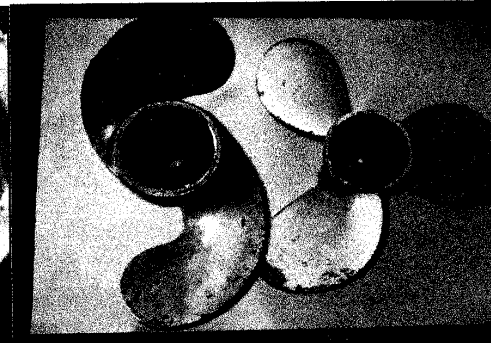


Photograph 03.



Photograph 04

Example of bushing flush with hub.




Photograph 05

Appendix 13.5

Report on crewsaver Lifejacket.

31/08 '04 TUE 20:02 FAX 00353749122606 COMM L/KENNY

Galway Maritime
Galway Maritime
Laurence House
Merchants Road
Galway
Tel: 091 566 568
Fax: 091 564 456
Email: info@galwaymaritime.com

 **CREWSAVER**
Lifejackets & Buoyancy Aids

7th JULY 2004
REPORT ON LIFEJACKETS
SENT BY GARDA SIOCHANA, DONEGAL

Crewfit 150N Standard Automatic Lifejacket Number 53840.
The jacket was manufactured in 1992 and was therefore about 12 years old. In view of the age of the jacket it would be essential that it should be tested regularly to ensure that it would function properly when used. There is no evidence that this was done.
It was evident that this jacket had been activated. The CO₂ cylinder had been pierced and the activation capsule had been used.
The general condition of this jacket was reasonable. The activating mechanism was functioning properly. However the oral inflation tube was leaking and would cause the jacket to deflate.
The jacket failed the inflation test and would have been condemned if we were to have carried out a service.

08 2004 16:43 FAX 091564456 27/08 '04 16:45 GALWAY MARITIME TX/RX NO. 1624 P01 2/002

Appendix 13.5

Report on crewsaver Lifejacket.



Laurence House
Merchants Road
Galway
Tel: 091 566 568
Fax: 091 564 456
Email: info@galwaymaritime.com

7th JULY 2004
REPORT ON LIFEJACKETS
SENT BY GARDA SIOCHANA, DONEGAL

Crewfit 150N Standard Automatic Lifejacket.

The Lifejacket did not have any manufacturers number.

The jacket was manufactured in 1991 and was therefore about 13 years old. The previous comments regarding regular inspection and test would also apply to this jacket. Again there was no evidence that this was done.

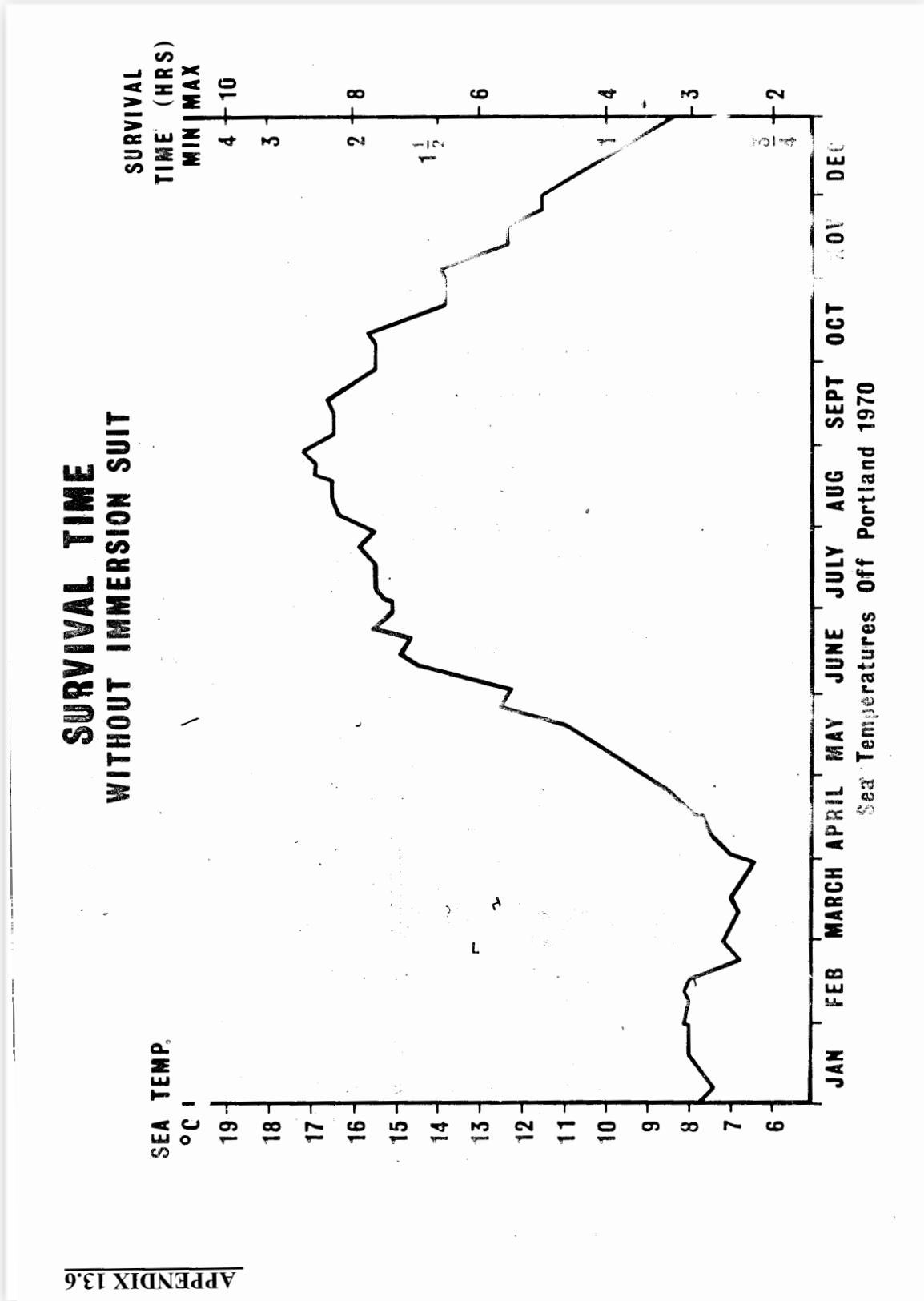
The jacket had been activated. The CO₂ cylinder was pierced and the auto capsule had been used.

The general condition of this jacket was poor. The cover was ripped. The activating mechanism was functioning properly. The weld on the oral inflation tube was coming apart probably due to age.

The jacket passed the inflation test, but would have failed service due to the aforementioned faults and general condition.

Appendix 13.6

Graph of Survival Time against temperature.



APPENDIX 13.6

14. LIST OF CORRESPONDENCE RECEIVED

Correspondent	Page No.
Mr. Bill McFadden	35
MCIB Response	35
Mr. Stephen Martin	36
MCIB Response	36
Sgt. James Trearty	37
MCIB Response	37
Mr. Robin Hamilton	38
MCIB Response	38



Ballyaghan
Carrigart
Co. Down
19-11-04

Dear Mr Heron
I read your Report you
sent me. I agree with
sections 9.2. and 9.3. If
I can be of any further
assistance I will be gladly
help

Yours Sincerely
Bill Mc Jeddson

MCIB RESPONSE

The MCIB notes the contents of this letter.



MR STEPHEN MARTIN,
12 CHESTNUT GROVE,
Convey Bullew Rd.
Lifford,
Co DONEGAL,
5th Nov 2004

RE. DRAFT REPORT INVESTIGATION ON DROWNING
AT SHEEP HAVEN BAY - Co. DONEGAL
ON 03rd MAY 2004

I STEPHEN MARTIN do NOT WISH TO
ADD ANY COMMENTS OR OBSERVATIONS
TO DRAFT REPORT.

Yours Sincerely

Signed:-

A handwritten signature in black ink, appearing to be "S. Martin".

MCIB RESPONSE

The MCIB notes the contents of this letter.

An Garda Síochána



Fax Message



An Garda Síochána
Carrigart
Co. Donegal
Tel/Teileafon: (074) 9155104
Fax/Facs: (074) 9155112

To: MCIB
Suis

5/11/04

Ref MCIB 94
Number of Pages including this one 1

Please Tick one

Urgent

Reply

For your attention

Report has been read by me
Quite extensive and
well presented with
meticulous attention to detail.
Nothing to add.

Signed Donna Trearty Sgt/Cpl
Donna Trearty

MCIB RESPONSE

The MCIB notes the contents of this letter.



5 Enagh Crescent
Maydown
Londonderry
Northern Ireland
BT47 6UG
Tel : 028 71860 300

15TH November 2004

Your Ref number: MC1B94

Dear Sir

I have received and read you draft report into the drowning incident at Sheep Haven Bay Co. Donegal on the 3rd of May 2004.

I wish to say that I am in agreement with the report, but there are a couple of comments I would like to make, they are as follows:

SECTION 10.2 PAGE 11 - ENGINE OVERHEATING

After Mr Boyd brought the engine to me to get it started I pointed out to him that the engine was overheating, which he was unaware of and I carried out the repairs necessary to cure this problem.

SECTION 10.3 & 4 - PROPELLER

At no time did I have the propeller off the engine, but listening to Mr Boyd's conversation regarding the engine he seemed to be very much aware of the function of the shear pin or "shatter pin" as he described it.

During Mr Robert O'Brien's visit to me we discussed the shear pin and in order to fully understand the position of the shear pin in the propeller I removed a propeller from my own engine so as to compare it and we came to the conclusion that the shear pins were too short thus not making contact with both sides of the propeller.

I must also add that I did not have any contact with this engine for a number of years.

Yours,

R. Hamilton
Robin Hamilton

MCIB RESPONSE

The MCIB notes the contents of this letter.
