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**REPORT OF INVESTIGATION  
INTO THE SINKING OF THE  
FISHING VESSEL  
'LÉIM AN BHRADÁN'  
ON 30th OCTOBER 2010**

**REPORT No. MCIB/193  
(No.8 of 2011)**

Report MCIB/193 published by The Marine Casualty Investigation Board  
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	PAGE
1. SYNOPSIS	4
2. FACTUAL INFORMATION	5
3. EVENTS PRIOR TO THE INCIDENT	7
4. THE INCIDENT	8
5. EVENTS FOLLOWING THE INCIDENT	10
6. FINDINGS	12
7. CONCLUSIONS	13
8. RECOMMENDATIONS	14
9. APPENDICES	15
10. CORRESPONDENCE RECEIVED	42

## 1. SYNOPSIS

- 1.1 On the morning of Saturday 30th October 2010, the 33 m crabber '*Léim an Bhradán*' put to sea from Porturlin, Ballina, Co. Mayo, Ireland, on a routine fishing trip to lift, empty and reset crab and lobster pots approximately 12 to 15 miles north of Porturlin. A canister-type 4 man liferaft was stored in a cradle on top of the wheelhouse. The vessel was manned by Skipper, John O'Donnell and Crew, Nathan Flannery, both young men but with many years of fishing experience between them. Having successfully hauled and re-shot one tow of pots, a second tow, in the process of being hauled, was partially aboard being emptied and re-baited prior to shooting. The vessel was lying beam on to the breeze and large swell and listing slightly to starboard due to the pots being hauled over that side when a large wave broke over the starboard quarter and flooded the working deck. This caused the vessel to list further to starboard allowing more water over the side and causing the stacked pots and boxes to shift. The vessel continued to list further, throwing both men into the water before capsizing and sinking rapidly.
- 1.2 The liferaft canister, which was not secured to the vessel, floated to the surface. Messrs. O'Donnell and Flannery managed to inflate the raft although to do so they found it necessary to cut the canister securing straps with a key. Both men managed to climb aboard.
- 1.3 Several hours later, the alarm was raised ashore when the '*Léim an Bhradán*' had not returned to port. A rescue helicopter and lifeboat were tasked to the scene and the liferaft was located. Messrs. O'Donnell and Flannery were picked up and brought ashore by the lifeboat. There were no injuries or fatalities associated with this incident. All times are quoted as local time.

## 2. FACTUAL INFORMATION

### 2.1 Vessel particulars:

Vessel name:	<i>'Léim an Bhradán'</i>
Vessel description:	Motor Fishing Vessel, partial deck
Construction:	Timber, Carvel
Year built:	1975
Engine:	Single engine, 44hp Ruston
LOA:	34' 7"
Beam:	10' 9"
Draught:	Approx. 3'
Tonnage:	8.62 Gross, 7.66 Registered
Owner:	Mr. Caden O'Donnell, Ballina, Co. Mayo Purchased February 2010.
Skipper:	Mr. John O'Donnell, Ballina, Co. Mayo
Crew:	Mr. Nathan Flannery, Ballina, Co. Mayo



Photograph of similar vessel, however, "Leim an Bhradán" had a transom stern, not a canoe stern as shown in the photo.

## 2.2 Equipment on board:

In wheelhouse:	Sat Nav/GPS Plotter
	Echo Sounder
	Fish Finder
	Fixed VHF set x 2 equipped with GMDSS
	Handheld VHF set
	EPIRB (Emergency Position Indicating Radio Beacon)
On deck:	Life ring
	Radar reflector
	Fixed navigation lights
	Personal Flotation Devices (Lifejackets)
	4 man Sea-Safe liferaft, model KHY - 4, manufactured to ISO 9650.1, stored in cradle on top of wheelhouse

## 2.3 Code of Practice Declaration of Compliance

A Code of Practice Declaration of Compliance for MFV '*Léim an Bhradáin*' was carried out on 23rd April 2010 and was valid until 5th February 2014. The vessel was restricted to A1 area of operation within 5 miles NW of Mayo.

### 3. EVENTS PRIOR TO THE INCIDENT

- 3.1 At 07.30 hrs. on Saturday 30th October 2010, the '*Léim an Bhradáin*' departed Porturlin, Co. Mayo on her way to haul, empty and re-shoot 6 tows of crab/ lobster pots located approximately 12 to 13 nautical miles north of Porturlin. On board were Skipper John O'Donnell and Crew Nathan Flannery. It was also intended to move some of the tows of pots closer to shore for the winter months.
- 3.2 The wind at the time of departure was west-south-west, force 4 to 6, gusting 7, with isolated showers and good visibility. The sea state was slight inshore to rough offshore. The conditions were slowly improving; however the sea state remained rough offshore with wave heights in the region of 2.5 to 4 metres.
- 3.3 The boat was loaded with 8 or 10 boxes of bait and several empty fish boxes for the catch of crab.
- 3.4 The journey to the fishing grounds took 2 to 3 hours. As neither crew member was wearing a watch, exact times were not recorded. On arrival at the location of the pots, Messrs. O'Donnell and Flannery hauled the first tow of 50 pots and emptied them of crab before re-baiting the pots. This tow was then successfully shot. Approximately 5 to 6 boxes had been filled with crab, each box containing approximately 25 kg.
- 3.5 The '*Léim an Bhradáin*' then moved to the next tow of pots. The boat's engine was put into neutral and Mr. O'Donnell operated the pot hauler mounted on the starboard side abaft the wheelhouse. As the pots were brought aboard, the crabs were removed before they were re-baited by Mr. Flannery. The pots were laid out across the working deck and stacked up to 3 high as they were brought aboard.
- 3.6 The weather conditions had moderated significantly by this stage, however the sea state was still rough with a large swell running. Wave heights were still in the region of 2.5 to 4 metres reaching a maximum height of approximately 5 metres.

## 4. THE INCIDENT

- 4.1 The '*Léim an Bhradán*' was lying beam on to the wind and sea and listing somewhat to starboard due to the effect of the pot hauler pulling the heavy pots in over the side.
- 4.2 At approximately 13.00 to 13.45 hrs., a large wave (up to 5 metres in height) broke over the starboard quarter of the vessel and quickly flooded the working deck. This contributed to the vessel listing further and caused the pots and boxes to slide to the starboard side increasing the angle of list. The '*Léim an Bhradán*' continued to list heavily to starboard, so much so that Messrs. O'Donnell and Flannery were thrown over the side into the sea. It is likely that the engine room and hold filled rapidly and negated any buoyancy in the vessel. She capsized and sank within approximately 5 minutes of taking on water from the wave, watched by Messrs. O'Donnell and Flannery from the water. There was no time to retrieve the EPIRB or handheld VHF set from the wheelhouse, or any of their other belongings (including mobile phones) or to activate the GMDSS.
- 4.3 The '*Léim an Bhradán*' sank approximately 12 nautical miles north of Porturlin, Co. Mayo.
- 4.4 Mr. O'Donnell and Mr. Flannery were both wearing lifejackets when they entered the water.
- 4.5 As the '*Léim an Bhradán*' sank below the waves, the liferaft canister, that had been stored in a cradle on top of the wheelhouse, floated to the surface along with a life ring.
- 4.6 Messrs. O'Donnell and Flannery swam to the liferaft canister and began attempts to deploy it. In order to inflate a liferaft, it is necessary to pull the inflate cord/painter sharply, which releases CO<sub>2</sub> gas stored in a pressurised cylinder into the raft, thus forcing open the canister and inflating the raft.
- 4.7 Mr. O'Donnell and Mr. Flannery each took it in turns to hold the canister whilst the other pulled on the painter in an attempt to operate the gas release mechanism. However, because there was nothing to brace against, the one pulling the painter was effectively 'towing' the liferaft canister and his companion through the water. After approximately 5 minutes, they finally succeeded in pulling the painter sufficiently to partially operate the gas release mechanism, which relies on the painter triggering a pin which opens the top of the CO<sub>2</sub> gas cylinder allowing the gas to escape into the raft. Unfortunately on this occasion, because Messrs. O'Donnell and Flannery could not give the painter the required sharp tug, the release mechanism only partially operated in that the pin opened the valve but did not withdraw as it is designed to do and effectively partially blocked the passage of the gas such that it seeped into the liferaft slowly instead of the usual rapid gush. This resulted in the slow inflation of the



raft which was insufficient to cause the canister securing strap clips to fail as they are designed to do.

- 4.8 As the liferaft slowly inflated, the canister began to swell. Fearing that the securing straps on the canister would prevent the raft from fully inflating, Mr. Flannery found a key in his pocket and used it to cut through the thin nylon straps. This allowed the canister to fall away and the liferaft inflated fully, albeit more slowly than it was designed to due to the partially blocked valve. As soon as the liferaft was fully inflated, Messrs. O'Donnell and Flannery climbed aboard. They estimated the time to be approximately 14.00 hrs.

### 5. EVENTS FOLLOWING THE INCIDENT

- 5.1 Once they had taken stock of their surroundings, Messrs. O'Donnell and Flannery opened the SOLAS B equipment pack stowed in the liferaft and set off a red parachute flare. Approximately 20 minutes later, they set off a second red parachute flare. Unfortunately, there were no other vessels in the area to see the flares. They estimated that they were drifting slowly in a north-easterly direction and could see the North Mayo coast.
- 5.2 The weather was improving and the sea state was moderating during the afternoon.
- 5.3 At approximately 15.00 hrs., Messrs. O'Donnell and Flannery spotted a Coast Guard helicopter on the landward side of their raft. They found an orange smoke signal in the SOLAS B equipment pack which they released; however, it was not spotted by the helicopter. It later transpired that the helicopter was the Sligo based Coast Guard helicopter on a training exercise.
- 5.4 In order to stay warm and active, Messrs. O'Donnell and Flannery assembled the paddles also included in the SOLAS B equipment pack and paddled the raft for a while in the general direction of the shore.
- 5.5 Darkness began to fall at approximately 17.30 hrs. Messrs. O'Donnell and Flannery donned the thermal protective aids (plastic suits -included in the equipment pack) to protect themselves from the cold. Between the two of them, Messrs. O'Donnell and Flannery kept a regular lookout through the door of the liferaft canopy; however, they saw no other vessel either close by or in the distance. They were still confident that when they did not return to port by approximately 23.00 hrs., the alarm would be raised and someone would start to look for them.
- 5.6 As the night wore on, they were joined by a pod of dolphins. They were glad of the company but unconcerned by their presence as they were no threat to them.
- 5.7 From approximately 18.00 hrs., Mr. Caden O'Donnell and other local fishermen ashore attempted to make contact with the '*Léim an Bhradán*' by VHF radio and by mobile phone without success.
- 5.8 At approximately 23.00 hrs., a volunteer member of the Ballyglass lifeboat met Mr. Caden O'Donnell and they agreed that the '*Léim an Bhradán*' was now well overdue.
- 5.9 At 23.35 hrs., MRSC Malin Coast Guard received a report that the '*Léim an Bhradán*' was overdue and not contactable.

- 5.10 At 23.47 hrs., MRSC Malin tasked Ballyglass lifeboat and at 23.54 hrs. tasked R118 rescue helicopter to search for the missing vessel.
- 5.11 At 01.36 hrs., R118 located the liferaft approximately 12 nautical miles north north east of Porturlin, Co. Mayo and guided the Ballyglass lifeboat to its location.
- 5.12 At 01.55 hrs., the Ballyglass lifeboat arrived at the liferaft and Messrs. O'Donnell and Flannery were transferred safely to the lifeboat. R118 returned to base.
- 5.13 At 03.15 hrs., the Ballyglass lifeboat returned to Ballyglass and put Mr. O'Donnell and Mr. Flannery ashore at the pier where they were met by Mr. Caden O'Donnell and members of their families from where they returned home. Neither Mr. O'Donnell nor Mr. Flannery were injured or required to be hospitalised.

## 6. FINDINGS

- 6.1 The '*Léim an Bhradán*' took on a large amount of water when the wave broke over the starboard quarter. Due to the relatively large open space of the working deck, even a small depth of water on the deck can have a significant effect on stability due to the free surface effect. There were two or three freeing ports along either side of the deck which may have been totally or partially blocked by the pots already on board or by the boxes containing crab already removed from the pots, thus restricting the flow of water off the deck.
- 6.2 When '*Léim an Bhradán*' became swamped and listed heavily, the pots, stacked 3 high and the boxes of crab (containing approximately 150 kg in total), slid to the starboard side, further increasing the list and affecting stability.
- 6.3 The combination of the free surface effect of the water on deck, the shifting cargo and the list created by hauling the pots was sufficient to overcome the righting moment of the vessel and cause her to capsize.
- 6.4 Once she had capsized, '*Léim an Bhradán*' sank very quickly as there was no inherent buoyancy.
- 6.5 The liferaft had been fully serviced on 13th September 2010 - 6 weeks prior to this incident - by Swan Net-Gundry Ltd, Castletownbere, Co. Cork; approved liferaft service station for SOLAS and MED inflatable liferafts (as noted in Marine Notice No. 19 of 2010 issued by the Department of Transport). It was equipped with a SOLAS B equipment pack and had been placed aboard the '*Léim an Bhradán*' on 15th September 2010.
- 6.6 The liferaft was not secured to the vessel, nor was the painter.
- 6.7 Had the liferaft been secured to the vessel or had Messrs. O'Donnell and Flannery been in a position to pull the painter with sufficient force, the liferaft inflation valve would have operated correctly and the raft would have inflated immediately and fully as it was designed to do.
- 6.8 Once on board the liferaft, Messrs. O'Donnell and Flannery acted correctly in the situation, however, the red parachute flares they released were effectively wasted as there were no other vessels in the vicinity to see them.
- 6.9 No formal arrangements existed whereby the crew of '*Léim an Bhradán*' were expected to 'check in' with anyone ashore on a regular basis nor was a latest ETA for return to port set after which, had the vessel not made contact, the alarm would have been raised.
- 6.10 The vessel was equipped with an EPIRB, registered to the vessel; however, it was stored inside the wheelhouse. Thus when '*Léim an Bhradán*' sank, it remained in the wheelhouse and provided no assistance as it failed to deploy.

## 7. CONCLUSIONS

- 7.1 The '*Léim an Bhradáin*' sank due to the combined effect of a large free surface of water on the deck and shifting cargo causing her to list heavily to starboard and capsize.
- 7.2 Had the liferaft been secured to the top of the wheelhouse with an approved hydrostatic release unit fitted with a weak link tether for the painter, it would have floated to the surface and automatically inflated allowing Messrs. O'Donnell and Flannery to board it immediately.
- 7.3 If the EPIRB had been mounted in a 'float free' bracket on the outside of the wheelhouse, it too would have floated to the surface and automatically activated when the vessel sank, thus alerting the Coast Guard to the incident and allowing them to pinpoint the location of the vessel immediately.
- 7.4 The '*Léim an Bhradáin*' was equipped with 2 fixed VHF sets in the wheelhouse - one as backup in case of failure of the first one - and a handheld VHF set for use around the boat, away from the wheelhouse. This was normally kept in its charging cradle in the wheelhouse when not in use, as was the case during this incident. Had either Mr. O'Donnell or Mr. Flannery kept this about their person whilst working on deck, they would have been in a position to call for help and to communicate with other vessels in the vicinity and with the rescue services.
- 7.5 Although the weather conditions were generally moderating throughout the day and night of this incident, the sea state remained rough with significant wave heights of 2.5 to 4 metres, reaching a maximum of approximately 5 metres.

## 8. RECOMMENDATIONS

The Board recommends that the Minister reviews the requirements of the Code of Practice for Fishing Vessels under 15m, with a view to establishing revised appropriate stability criteria, imposing an obligation to carry an appropriate liferaft at all times, and the installation of a float free, self - activating EPIRB.

9. LIST OF APPENDICES		PAGE
9.1	Weather and Sea Conditions Report	16
9.2	Liferaft Inspection Certificate	31
9.3	Liferaft Inspection Check List	32
9.4	Liferaft Declaration of Conformity	33
9.5	Liferaft Pressure Test Certificate	34
9.6	Liferaft Service Log	35
9.7	Liferaft Gas Cylinder Hydraulic Test Certificate	36
9.8	Approved Liferaft Service Stations (Marine Notice No. 19 of 2010)	37
9.9	SOLAS B Equipment Pack List	38
9.10	Liferaft after deflation	39
9.11	Liferaft as picked up by Ballyglass Lifeboat	40
9.12	Location chart	41

## Appendix 9.1 Weather and Sea Conditions Report.



**MET ÉIREANN**  
*The Irish Meteorological Service*

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2/11/2010

**Our Ref:** WS 3018/2C\_13863  
**Your Ref:** MCIB/193

**Estimate of weather conditions in the sea area off the north Mayo Coast,  
between 0 hours on the 30<sup>th</sup> October to 2 hours on the 31<sup>st</sup> October 2010.**

**30/10/2010**

**00 to 06 hours**

Winds: west-south-west Force 4 to 6, gusting Force 7  
Weather: isolated showers  
Visibility: good  
Waves: Slight near-shore to Rough off-shore

**06 to 12 hours**

Winds: south-west Force 3 to 5, gusting Force 7  
Weather: frequent showers  
Visibility: good  
Waves: Slight near-shore to Rough off-shore

**12 – 18 hours**

Winds: variable, mainly south-west at first Force 1 to 4, with a few stronger gusts  
Weather: frequent showers  
Visibility: good  
Waves: Slight near-shore to Rough off-shore

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Appendix 9.1 Weather and Sea Conditions Report.



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.....continued

18 to 24 hours  
Winds: variable in direction, Force 1 to 3  
Weather: mostly dry  
Visibility: good  
Waves: Slight near-shore to Rough off-shore

00hours to 2 hours **31/10/1020**  
Winds: variable, mainly north-easterly, Force 2 to 3  
Weather: cloudy but dry  
Visibility: good  
Waves: Slight near-shore to Rough off-shore

A handwritten signature in black ink, appearing to read 'Evelyn Murphy'.

**Evelyn Murphy B.Sc. M.Sc. Meteorologist**  
Research & Applications Division  
Met Éireann

Appendix 9.1 Weather and Sea Conditions Report.



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M4 Buoy observations – (station number 62093)

year	month	day	hour	latitude	longitude	Direction (degrees from North)	Wind speed (knots)	Highest gust (knots)	Air Temperature (°C)	Sea Temp (°C)
2010	10	30	0	55	-10	260	20	28	11.5	12.4
2010	10	30	1	55	-10	250	17	24	11.5	12.5
2010	10	30	2	55	-10	250	19	28	11.5	12.5
2010	10	30	3	55	-10	240	17	24	11.6	12.4
2010	10	30	4	55	-10	240	18	24	11.7	12.4
2010	10	30	5	55	-10	230	15	26	11.5	12.4
2010	10	30	6	55	-10	230	17	25	11.5	12.4
2010	10	30	7	55	-10	250	17	25	11.2	12.4
2010	10	30	8	55	-10	260	13	27	10.3	12.4
2010	10	30	9	55	-10	240	10	20	10.8	12.5
2010	10	30	10	55	-10	220	12	18	11	12.5
2010	10	30	11	55	-10	220	15	20	11.5	12.5
2010	10	30	12	55	-10	220	13	18	11.3	12.5
2010	10	30	13	55	-10	290	13	20	10.3	12.5
2010	10	30	14	55	-10	240	10	18	11.1	12.6
2010	10	30	15	55	-10	250	10	15	11.2	12.7
2010	10	30	16	55	-10	250	8	15	11.5	12.7
2010	10	30	17	55	-10	310	9	13	11.2	12.7
2010	10	30	18	55	-10	280	7	11	11.4	12.7
2010	10	30	19	55	-10	330	9	12	11.3	12.7
2010	10	30	20	55	-10	320	6	11	11.3	12.7
2010	10	30	21	55	-10	320	6	10	11.4	12.7
2010	10	30	22	55	-10	20	6	11	11.4	12.6
2010	10	30	23	55	-10	360	7	10	11.5	12.6
2010	10	31	0	55	-10	340	7	12	11.5	12.6
2010	10	31	1	55	-10	350	8	12	11.4	12.7
2010	10	31	2	55	-10	10	9	15	11.3	12.6
2010	10	31	3	55	-10	40	9	18	11	12.6

Appendix 9.1 Weather and Sea Conditions Report.

	<p>WeatherDial Fax Product Code 0021  <b>General Forecasting Division</b>                  Fax : 1570 131 838  <b>Sea Area Forecast</b></p>	
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**Sea Area Forecast until 1800 Saturday 30 October 2010  
 Issued at 1800 Friday 29 October 2010**

**1. Gale warning: NIL**  
**Small craft warning: NIL**

**2. Meteorological situation at 1500:** A wave depression in the Irish Sea is moving away northeastwards. An unstable southwest airflow is developing over Ireland. A frontal trough will approach southern coasts during Saturday evening.

**3. Forecast for coasts from: Wicklow Head to Roches Point to Loop Head**

**Wind:** Southwest force 4 to 5. Gradually backing south force 3 or 4 during tonight. Further backing easterly tomorrow and increasing force 5 to 7 by evening.

**Weather:** Occasional showers. More persistent rain later tomorrow

**Visibility:** Moderate locally poor in rain or showers, otherwise good

**Forecast for coasts from: Loop Head to Erris Head to Fair Head**

**Wind:** Southwest or west force 4 or 5. Gradually decreasing force 2 to 4 and becoming variable Saturday afternoon

**Weather:** Occasional showers

**Visibility:** Good apart from showers

**Forecast for coasts from: Fair Head to Carlingford Lough to Wicklow Head and the Irish Sea**

**Wind:** Southwest or west force 4 or 5, but up to force 7 at first in the Irish Sea. Gradually decreasing overnight force 3 or 4 and backing southwest to south towards morning. Further backing southeast during Saturday and increasing force 4 to 5 by evening.

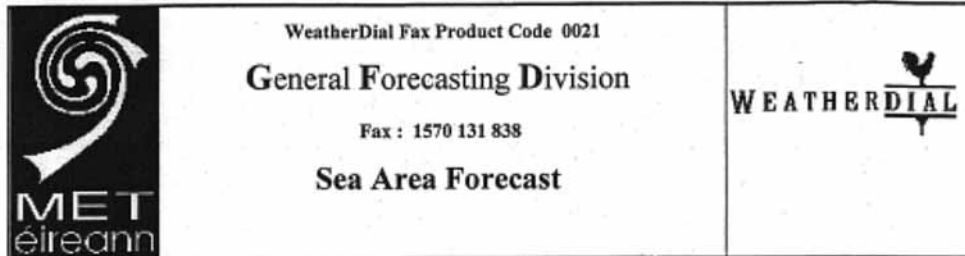
**Weather:** Rain clearing eastwards this evening. Scattered showers following from west

**Visibility:** Moderate in rain, otherwise good.

**3a. Warning of heavy swell: Nil**

**4. Outlook for a further 24 hours until 1800 Sunday 31 October 2010:** Fresh to strong winds for a time, southeast in direction on the Leinster coasts and northeast to north on the Munster and Connacht coasts. Mostly light variable winds on the Ulster coasts. Light to moderate north or northeast winds will later become established on all coasts. Unsettled with rain or showers.

## Appendix 9.1 Weather and Sea Conditions Report.



**Sea Area Forecast until 2400 Saturday 30 October 2010**  
**Issued at 2400 Friday 29 October 2010**

1. Gale warning: In operation  
 Small craft warning: In operation
2. Meteorological situation at 2100: An unstable, westerly airflow covers Ireland. It will gradually back southerly overnight and on Saturday as a depression approaches from the southwest
3. Forecast for coasts from Slyne Head to Malin Head to Howth Head and for the north Irish Sea:  
**Wind:** Southwest force 4 or 5 and reaching force 6 on the Irish Sea at first, backing south to southwest force 3 or 4 overnight, gradually backing south to southeast force 2 or 3 in the evening becoming southeast to east in the early night  
**Forecast for coasts from Howth Head to Roches Pt to Slyne Head and for the south Irish Sea:**  
**Wind:** southwest force 4 or 5 and, backing southerly overnight, backing south to southeast by noon and backing east to southeast force 4 to 6 by evening, then increasing easterly force 6 to gale force 8.  
**Weather for all sea areas:** Scattered showers on west and north coasts overnight. Fair on Saturday. Rain spreading northwards on Saturday night  
**Visibility for all sea areas:** Mostly good, decreasing moderate or poor as rain spreads northwards on Saturday night
- 3a. Warning of heavy swell: Nil
4. Outlook for a further 24 hours until 2400 Sunday 31 October 2010: Fresh to strong east to northeast winds gradually decreasing light to moderate northerly. Rain in all areas, gradually clearing on Sunday evening



Appendix 9.1 Weather and Sea Conditions Report.

**Warning of heavy Atlantic swell: NIL**

**Text of Gale Warning**

Easterly winds will occasionally reach gale force on Saturday evening and early on Saturday night on coasts from Carnsore Pt to Roches Pt to Valentia

**Text of Small Craft Warning**

East to southeast winds, becoming east to northeast will reach force 6 or higher on Saturday evening on coasts from Wicklow Head to Roches Pt to Slyne Head.

Also See Gale Warning

Coastal Reports	at 11 PM Friday 29 October 2010
Malin Head Automatic	West, 16 Knots, Gust 27 Knots, RAIN SHOWER, 7 Miles, 983, Rising
Buoy M5	West-Southwest, 22 Knots, The visibility at Tuskar Lighthouse is Greater than 10 Miles, 991, Rising slowly
Roches Pt (Automatic)	West-Southwest, 14 Knots, Fair, Greater than 10 Miles, 990, Rising slowly
Valentia	South, 05 Knots, Cloudy, 13 Miles, 990, Rising slowly
Belmullet	West, 09 Knots, Fine, 12 Miles, 986, Rising slowly
Dublin Airport	Southwest, 11 Knots, Fair, 16 Miles, 988, Rising slowly
Buoy M1 53° 8'N, 11° 12'W	NOT AVAILABLE,
Buoy M2 53° 29'N, 5° 26'W	West-Southwest, 19 Knots, WAVE HT 2 m, 988, Rising slowly
Buoy M3 51° 13'N, 10° 33'W	West-Southwest, 21 Knots, Gust 33 Knots, WAVE HT 04.1 m, 991, Steady
Buoy M4 55° 0'N 10° 0'W	West, 19 Knots, WAVE HT NOT AVAILABLE m, 984, Rising slowly
Buoy M5 51° 41'N 6° 42'W	West-Southwest, 22 Knots, WAVE HT 03.7 m, 991, Rising slowly
Buoy M6 53° 4'N 15° 56'W	West, NOT AVAILABLE Knots, WAVE HT 02.9 m, 987, Falling slowly

Disclaimer: buoy locations are approximate and are not for navigational purposes

Sea Crossings	State of sea until 2400 Sunday 31 October 2010
Dublin - Holyhead	Rough decreasing slight to moderate
Rosslare - South Wales	Rough decreasing to moderate
Cork - South Wales	Moderate or rough
Rosslare - France	Mostly rough
Cork - France	Mostly rough

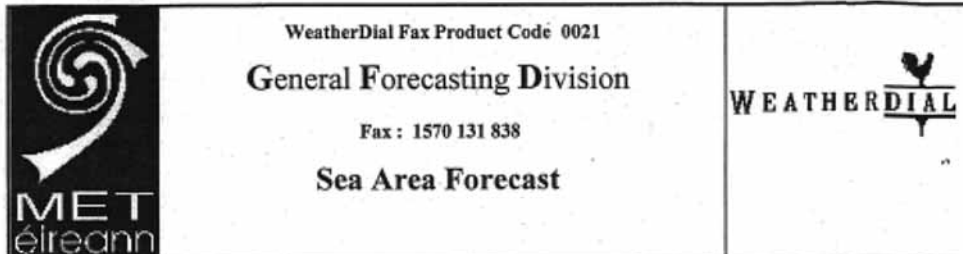
Next update before 0700 Saturday 30 October 2010

A detailed forecast may be obtained by dialling *Weatherdial* on 1550 123 855.

Calls cost € 0.95 per minute (Incl. VAT).

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## Appendix 9.1 Weather and Sea Conditions Report.



**Sea Area Forecast until 0600 Sunday 31 October 2010**  
**Issued at 0600 Saturday 30 October 2010**

**1. Gale warning:** In operation  
**Small craft warning:** In operation

**2. Meteorological situation at 0300:** An unstable southwesterly airflow covers Ireland. A depression of 980 hPa west southwest of Ireland approaches and will be positioned to the south of the country tonight

**3. Forecast for coasts from Wicklow Head to Roches Pt to Loop Head:**

**Wind:** Southwest force 3 or 4, gradually backing south to southeast today, backing east to southeast force 5 to 7 this evening and increasing east to northeast force 6 to gale force 8 early tonight, becoming northeast force 5 to 7 overnight

**Forecast for coasts from Loop Head to Erris Head to Malin Head:**

**Wind:** Southwest force 3 or 4, becoming south to southwest today, becoming north to northwest early tonight and becoming north to northeast overnight

**Forecast for coasts from Malin Head to Carlingford Lough to Wicklow Head and for the Irish Sea:**

**Wind:** Southwest force 3 or 4, gradually backing south to southeast today, backing east to southeast force 3 to 5 this evening, becoming east to northeast force 3 or 4 overnight

**Weather for all sea areas:** Scattered showers on south, west and north coasts today, rain spreading from the south tonight

**Visibility for all sea areas:** Mostly good, but moderate in showers and decreasing moderate to poor in rain tonight

**3a. Warning of heavy swell:** Nil

**4. Outlook for a further 24 hours until 0600 Monday 01 November 2010:** Fresh to strong east to northeast winds gradually decreasing light to moderate northerly and later backing south to southwest on western coasts. Rain in all areas, gradually clearing on Sunday evening

Appendix 9.1 Weather and Sea Conditions Report.

**Warning of heavy Atlantic swell: NIL**

**Text of Gale Warning**

East to northeast winds will occasionally reach gale force for a time tonight on coasts from Hook Head to Roches Pt to Valentia

**Text of Small Craft Warning**

East to southeast winds, later becoming east to northeast will reach force 6 or higher tonight on coasts from Wicklow Head to Roches Pt to Loop Head.

Also See Gale Warning

Coastal Reports	at 5 AM Saturday 30 October 2010
Malin Head Automatic	South-Southwest, 15 Knots, Fair, 10 Miles, 985, Rising slowly
Buoy M5	Southwest, 15 Knots, Gust 26 Knots, The visibility at Tuskar Lighthouse is Greater than 10 Miles, 992, Steady
Roches Pt (Automatic)	West-Southwest, 07 Knots, Fair, Greater than 10 Miles, 991, Steady
Valentia	South, 05 Knots, Fair, 13 Miles, 989, Falling slowly
Belmullet	Southwest, 05 Knots, Fine, 12 Miles, 987, Steady
Dublin Airport	South-Southwest, 06 Knots, Fine, 16 Miles, 990, Rising slowly
Buoy M1 53° 8'N, 11° 12'W	NOT AVAILABLE,
Buoy M2 53° 29'N, 5° 26'W	West-Southwest, 13 Knots, WAVE HT 1.6 m, 990, NOT AVAILABLE
Buoy M3 51° 13'N, 10° 33'W	Southwest, 12 Knots, WAVE HT 03.7 m, 990, Falling slowly
Buoy M4 55° 0'N 10° 0'W	West-Southwest, 18 Knots, WAVE HT NOT AVAILABLE m, 985, Steady
Buoy M5 51° 41'N 6° 42'W	Southwest, 15 Knots, Gust 26 Knots, WAVE HT 03.3 m, 992, Steady
Buoy M6 53° 4'N 15° 56'W	West-Southwest, NOT AVAILABLE Knots, WAVE HT 03.3 m, 985, Falling slowly

Disclaimer: buoy locations are approximate and are not for navigational purposes

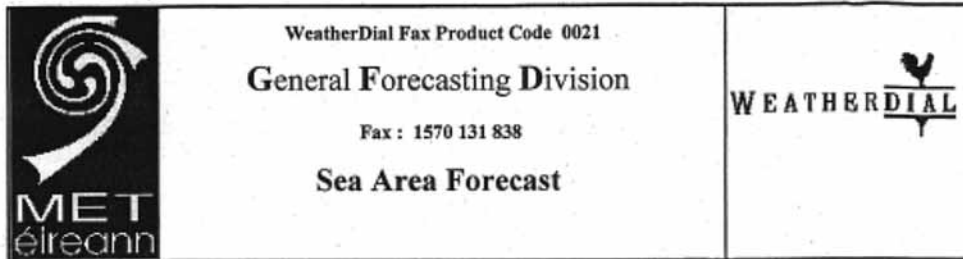
Sea Crossings	State of sea until 0600 Monday 01 November 2010
Dublin - Holyhead	Rough decreasing slight to moderate
Rosslare - South Wales	Rough decreasing to moderate
Cork - South Wales	Moderate or rough
Rosslare - France	Mostly rough
Cork - France	Mostly rough

Next update before 1300 Saturday, 30 October 2010

A detailed forecast may be obtained by dialling *Weatherdial* on 1550 123 855.  
Calls cost € 0.95 per minute (Incl. VAT).

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## Appendix 9.1 Weather and Sea Conditions Report.



**Sea Area Forecast until 1200 Sunday 31 October 2010**  
**Issued at 1200 Saturday 30 October 2010**

**1. Gale warning: NIL**

Small craft warning: In operation

**2. Meteorological situation at 0900:** An unstable southwesterly airflow covers Ireland. A depression of 980 hPa southwest of Ireland approaches and will track south of the country tonight.

**3. Forecast for coasts from Wicklow Head to Roches Point to Valentia:**

**Wind:** South to southeast force 4 to 5, backing east to northeast force 5 or 6, occasionally 7 overnight. Becoming northerly force 5 to 7 tomorrow morning.

**Forecast for coasts from Valentia to Erris Head to Malin Head:**

**Wind:** South to southwest force 3 to 5, becoming northerly overnight.

**Forecast for coasts from Malin Head to Carlingford Lough to Wicklow Head and for the Irish Sea:**

**Wind:** Southerly force 3 to 5, backing east to southeast overnight, becoming east to northeast tomorrow morning.

**Weather for all sea areas:** Scattered, rain spreading from the south tonight.

**Visibility for all sea areas:** Mostly good, but moderate in showers and decreasing moderate to poor in rain tonight.

**3a. Warning of heavy swell: Nil**

**4. Outlook for a further 24 hours until 1200 Monday 01 November 2010:** Fresh to strong north to northeast winds decreasing moderate north to northwest. Backing south to southwest on western coasts and increasing fresh to strong later. Rain on south and east coasts clearing. Rain along the west coast later.



Appendix 9.1 Weather and Sea Conditions Report.

Warning of heavy Atlantic swell: NIL

Text of Gale Warning

NIL

Text of Small Craft Warning

1. East to northeast winds will reach force 6 or occasionally force 7 tonight on coasts from Carnsore Point to Roaches Point to Valentia.  
And
2. Northerly winds will reach force 6 or occasionally force 7 tomorrow morning from Hook Head to Roaches Point to Valentia.

Coastal Reports	at 12 Noon Saturday 30 October 2010
Malin Head Automatic	South-Southwest, 15 Knots, Fair, 11 Miles, 988, Rising slowly
Buoy M5	South, 16 Knots, The visibility at Tuskar Lighthouse is Greater than 10 Miles, 992, Steady
Roche's Pt (Automatic)	South-Southeast, 14 Knots, Fair, Greater than 10 Miles, 990, Falling slowly
Valentia	Southeast, 7 Knots, Cloudy, 18 Miles, 989, Steady
Belmullet	South, 8 Knots, Recent rain shower, 16 Miles, 988, Rising slowly
Dublin Airport	Southwest, 10 Knots, Cloudy, 37 Miles, 991, Rising slowly
Buoy M1 53° 8'N, 11° 12'W	NOT AVAILABLE
Buoy M2 53° 29'N, 5° 26'W	South-Southwest, 11 Knots, WAVE HT 1.1 m, 992, Rising slowly
Buoy M3 51° 13'N, 10° 33'W	South-Southeast, 15 Knots, WAVE HT 2.8 m, 987, Falling slowly
Buoy M4 55° 0'N 10° 0'W	Southwest, 15 Knots, WAVE HT NOT AVAILABLE m, 987, Rising slowly
Buoy M5 51° 41'N 6° 42'W	South, 16 Knots, WAVE HT 2.3 m, 992, Steady
Buoy M6 53° 4'N 15° 56'W	Northeast, NOT AVAILABLE Knots, WAVE HT 2.6 m, 986, Rising slowly

Disclaimer: buoy locations are approximate and are not for navigational purposes

Sea Crossings	State of sea until 1200 Monday 01 November 2010
Dublin - Holyhead	Moderate, decreasing slight
Rosslare - South Wales	Moderate.
Cork - South Wales	Moderate to rough
Rosslare - France	Mostly rough
Cork - France	Mostly rough

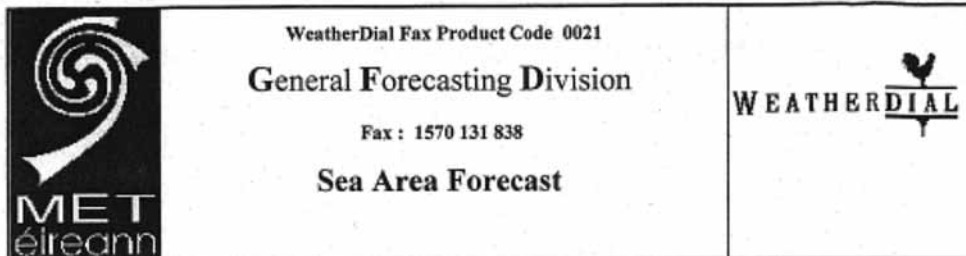
Next update before 1900 Saturday, 30 October 2010

A detailed forecast may be obtained by dialling *Weatherdial* on 1550 123 855.

Calls cost € 0.95 per minute (Incl. VAT).

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## Appendix 9.1 Weather and Sea Conditions Report.



**Sea Area Forecast until 1800 Sunday 31 October 2010**  
**Issued at 1700 Saturday 30 October 2010**

**1. Gale warning: NIL**  
**Small craft warning: In operation**

**2. Meteorological situation at 1500:** An active frontal trough is approaching from the south and will become slow moving over Munster and Leinster later tonight and for much of tomorrow.

**3. Forecast for coasts from Wicklow Head to Roches Point to Loop Head:**

**Wind:** Southeast to east force 4 to 5. Backing east to northeast force 5 to 7 tonight and gradually backing northeast to north tomorrow.

**Weather:** Persistent and occasionally heavy rain spreading from south this evening. Risk of isolated thunderstorms

**Visibility** Becoming moderate to poor.

**Forecast for coasts from Loop Head to Erris Head to Malin Head:**

**Wind:** Variable force 2 to 4 becoming northerly force 3 or 4.

**Weather:** A few scattered showers

**Visibility** Mostly good

**Forecast for coasts from Malin Head to Carlingford Lough to Wicklow Head and for the Irish Sea:**

**Wind:** Southerly force 3 or 4, backing southeast to east overnight, force 3 to 5 and gradually backing northeast to north during tomorrow.

**Weather:** Scattered thundery showers in Irish Sea. More persistent rain spreading from south this evening.

**Visibility** Becoming moderate occasionally poor.

**3a. Warning of heavy swell: Nil**

**4. Outlook for a further 24 hours until 1800 Monday 01 November 2010:** Winds decreasing light or moderate variable for a time before becoming strong to gale southwest to south. Becoming fair for a time, but rain, mist and fog spreading later from the west.

Appendix 9.1 Weather and Sea Conditions Report.

Warning of heavy Atlantic swell: NIL

Text of Gale Warning

NIL

Text of Small Craft Warning

East to northeast winds will reach force 6 or 7 tonight on coasts from Wicklow Head to Roches Point to Valentia.

Coastal Reports	at 4 PM Saturday 30 October 2010
Malin Head Automatic	South-Southwest, 12 Knots, Fair, 18 Miles, 989, Steady
Buoy M5	South, 15 Knots, The visibility at Tuskar Lighthouse is Greater than 10 Miles, 991, Falling slowly
Roche's Pt (Automatic)	Southeast, 11 Knots, Cloudy, Greater than 10 Miles, 989, Falling slowly
Valentia	East-Southeast, 05 Knots, Cloudy, 21 Miles, 987, Falling slowly
Belmullet	Southwest, 06 Knots, Recent rain shower, 26 Miles, 989, Rising slowly
Dublin Airport	Southwest, 05 Knots, Cloudy, 37 Miles, 991, Steady
Buoy M1 53° 8'N, 11° 12'W	NOT AVAILABLE,
Buoy M2 53° 29'N, 5° 26'W	South-Southwest, 13 Knots, WAVE HT 1.3 m, 992, Steady
Buoy M3 51° 13'N, 10° 33'W	East-Southeast, 15 Knots, WAVE HT 03.0 m, 986, Falling slowly
Buoy M4 55° 0'N 10° 0'W	West-Southwest, 10 Knots, WAVE HT NOT AVAILABLE m, 989, Rising slowly
Buoy M5 51° 41'N 6° 42'W	South, 15 Knots, WAVE HT 02.1 m, 991, Falling slowly
Buoy M6 53° 4'N 15° 56'W	North-Northeast, NOT AVAILABLE Knots, WAVE HT 03.1 m, 989, Rising slowly

Disclaimer: buoy locations are approximate and are not for navigational purposes

Sea Crossings	State of sea until 1800 Monday 01 November 2010
Dublin - Holyhead	Slight locally moderate
Rosslare - South Wales	Moderate.
Cork - South Wales	Moderate to rough
Rosslare - France	Mostly rough
Cork - France	Mostly rough

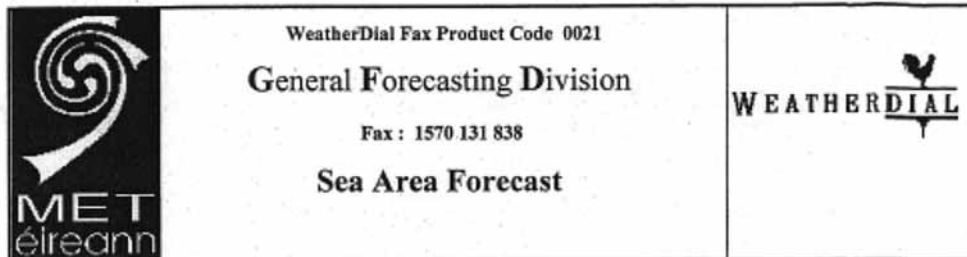
Next update before 0100 Sunday, 31 October 2010

A detailed forecast may be obtained by dialling *Weatherdial* on 1550 123 855.

Calls cost € 0.95 per minute (Incl. VAT).

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## Appendix 9.1 Weather and Sea Conditions Report.



**Sea Area Forecast until 2400 Sunday 31 October 2010**  
**Issued at 2400 Saturday 30 October 2010**

**1. Gale warning:** Nil.

**Small craft warning:** in operation; issued 2300/30-10-2010.

**2. Meteorological situation at 2100:** A depression of 980 hPa, centred 200 miles south of Mizzen Head, is drifting towards northwest France; frontal troughs associated with the depression are moving in to southern and eastern areas of Ireland where they will become slow-moving during Sunday.

**3. Forecast for coasts from Howth Head to Roche's Point to Slyne Head and the Irish Sea south of Anglesey :-**

**Wind:** East to northeast force 4 to 6, strongest in the south; increasing force 7 at times between Wicklow Head and Valentia Sunday forenoon; later backing northeast to north force 4 to 6.

**Weather:** Rain becoming widespread tonight and turning heavy locally in the south and east, with fog patches there also; rain dying out later Sunday.

**Visibility:** Good, becoming moderate to poor in rain and fog.

**Forecast for coasts from Slyne Head to Malin Head to Howth Head and the Irish Sea north of Anglesey :-**

**Wind:** Variable force 3 or less; becoming northeast force 2 to 4 Sunday forenoon and later backing north.

**Weather:** Showers or longer spells of rain in the Irish Sea and later on eastern coasts; elsewhere mainly fair.

**Visibility:** Good, occasionally moderate in showers or rain.

**3a. Warning of heavy swell:** Nil.

**4. Outlook for a further 24 hours until 2400 Monday 01 November 2010:** Light to moderate, northerly winds soon backing south and increasing strong to gale force later Monday; becoming generally fair for a time but rain will spread from the Atlantic during Monday.



Appendix 9.1 Weather and Sea Conditions Report.

Appendix

Beaufort Scale of Wind					
Force	Description	Speed*		Specification -sea	Wave height** (metres)
		knots	km/hr		
0	Calm	<1	<1	Sea like mirror	
1	Light air	1-3	1-5	Ripples	0.1 (0.1)
2	Light breeze	4-6	6-11	Small wavelets	0.2 (0.3)
3	Gentle breeze	7-10	12-19	Large wavelets, crests begin to break	0.6 (1)
4	Moderate breeze	11-16	20-28	Small waves becoming longer, frequent white horses	1 (1.5)
5	Fresh breeze	17-21	29-38	Moderate waves, many white horses, chance of spray	2 (2.5)
6	Strong breeze	22-27	39-49	Large waves, white foam crests, probably some spray	3 (4)
7	Near gale	28-33	50-61	Sea heaps up, streaks of white foam	4 (5.5)
8	Gale	34-40	62-74	Moderately high waves of greater length	5.5 (7.5)
9	Strong gale	41-47	75-88	High waves, dense streaks of foam, spray may reduce visibility	7 (10)
10	Storm	48-55	89-102	Very high waves, long overhanging crests, visibility affected	9 (12.5)
11	Violent storm	56-63	103-117	Exceptionally high waves, long white foam patches cover sea	11.5 (16)
12	Hurricane	64+	117 & over	Air filled with foam and spray, sea completely white	14 (-)

\*Speed = mean speed at a standard height of 10 metres.  
 \*\*Wave height is only intended as a guide to what may be expected in the open sea.  
 Bracketed figures indicate the probable maximum wave height.

Wave Heights / State of Sea

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 system associated with a range of significant wave heights.

Sea State (Descriptive)	Significant Wave height in meters
Calm	0 – 0.1
Smooth(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

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.

Visibility

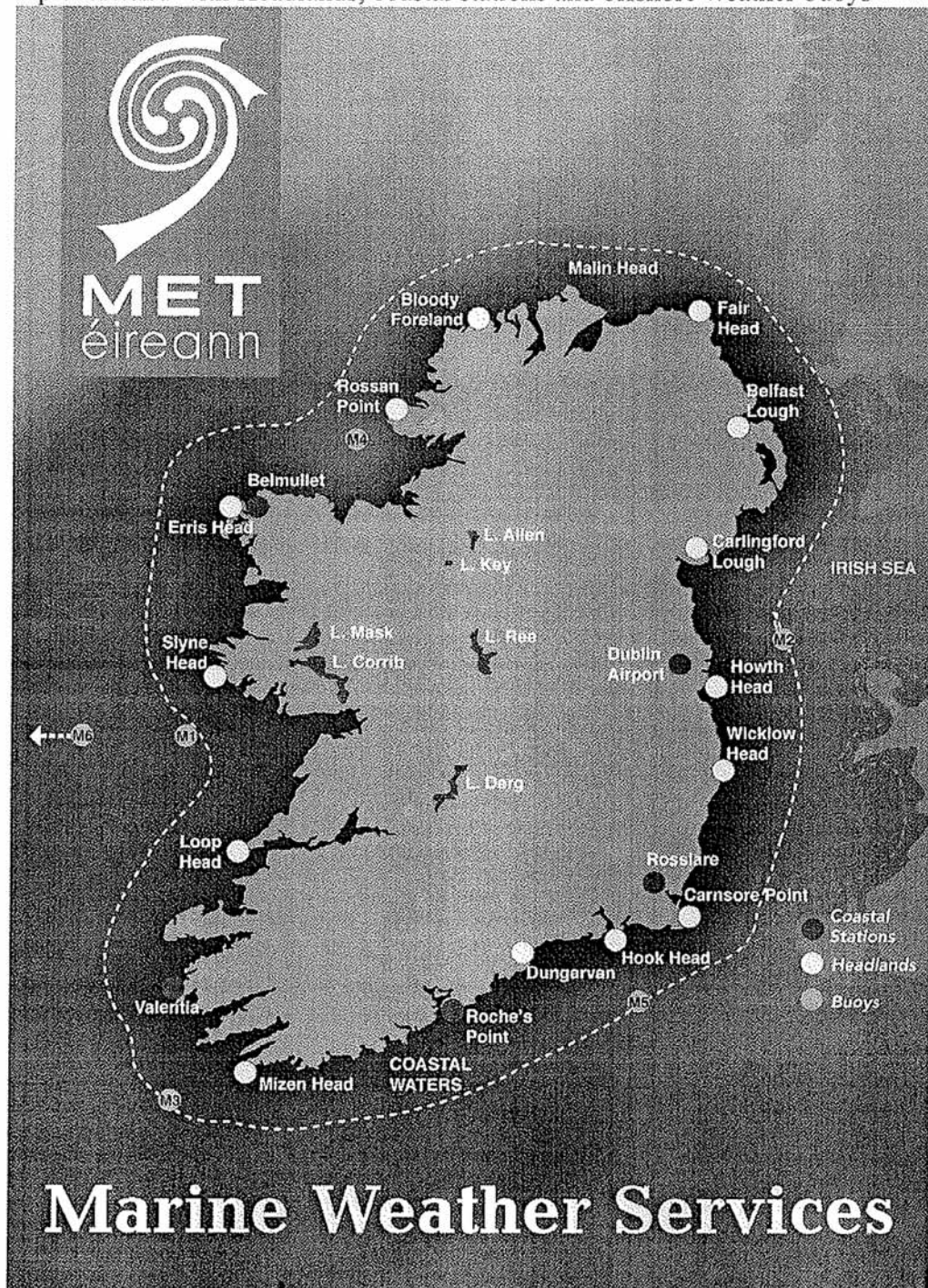
Descriptions of visibility mean the following:

Visibility (Descriptive)	Visibility in nautical miles (kilometres)
Good	More than 5 nm (> 9 km)
Moderate	2 – 5 nm (4 – 9 km)
Poor	0.5 – 2 nm (1 – 4 km)
Fog	Less than 0.5 nm (< 1km)



Appendix 9.1 Weather and Sea Conditions Report.

Map of Ireland with Headlands, coastal stations and offshore weather buoys







# APPENDIX 9.3

## Appendix 9.3 Liferaft Inspection Check List.

<b>Main Buoyancy</b>	✓	<b>Standard Equipment</b>	✓	<b>Date</b>
Buoyancy Upper	✓	Knife	✓	
Buoyancy Lower	✓	Rescue Line & Quoit	✓	
Arches	✓	Sea Anchor	✓	
Lifelines Outer	✓	Paddles	✓	
Handlings Inner	✓	Solas Tape	✓	
Towing Patch	✓		✓	
Ramp	✓	<b>Emergency Equipment</b>	✓	
Boarding Webbing	✓	Radar Reflector	✓	
	✓	Type	✓	
<b>Canopy</b>	✓	Serial No.	✓	
Outer Canopy	✓	First Aid Pack	✓	06/2011
Inner Canopy	✓	Type	✓	CAT.C
Rainwater Collector	✓	Serial No.	✓	119610
Entrances	✓	Sponges	✓	
Tie Tapes	✓	Baler	✓	
Observation Ports	✓	Bellows	✓	
	✓	Repair Kit	✓	
<b>Floor</b>	✓	Fishing Kit	✓	
Inner Floor	✓	Water	✓	
Outer Floor	✓	Heliograph	✓	
Water Pockets	✓	Rockets	✓	05/2012
CO2 Cylinder Pocket	✓	Flares	✓	06/2012
Righting Strap	✓	Smoke Float	✓	05/2012
Emergency Pack Straps	✓	Anti Sea Sickness Tablets	24 ✓	06/2012
	✓	Rations	✓	
<b>Inflation Equipment</b>	✓	Torch	✓	
CO2 Cylinders	✓	Batteries	✓	
Ser. No.	191437	Bulbs ( Torch )	✓	
Weight	7.57	Can Opener	✓	
Cont. CO2 Kgs	1.5	Instruction Book	✓	
Cont. N2 Kgs	0.15	Drinking Vessel	✓	
Latest Hyd. Test	08/2010	Whistle	✓	
Ser. No.		T.P.A.	✓	
Weight		Scissors	✓	
Cont. CO2 Kgs		Sea Cells Exp. Date	✓	
Cont. N2 Kgs		Bulbs & Housing	✓	
Latest Hyd. Test			✓	
Operating Heads	✓	<b>Container</b>		
Valve Inlets	✓	Outer Shell		
Top Up Valves	✓	Labels		
Deflate Screws	✓	Drain Holes		
Relief Valve Bunge	✓	Fill Out Id. Card		
Painter Line	✓	All Valves Tight		
	✓	P V R Bungs Out		
<b>Test</b>	01	Dust Caps On & Tools Out		

x 3L GAS REFILL  
 DIAPHRAGM  
 CABLE  
 24 SEA SICK  
 RAC



Appendix 9.4 Liferaft Declaration of Conformity.



EC Declaration of Conformity to Test Certificate  
issued in accordance with the  
2003 PrISO9650-1

[Manufacturer's or Importer's name and address]

Shanghai Youlong Rubber Products Company

Xinchun Cun, Huanglou Town, Pudong New Area

Shanghai, 201205, P.R. China

Nautic Service Sauvetage

declares that the procedure detailed below conforms to type as described in the EC test certificate

Certificate No. 83041 SHA

( ID No. 0801 ) and the product detailed below conforms to test certificate as described

[Product description] inflatable Life rafts

[Product type] KHY inflatable Life raft EQUIPMENT: PACK (KHY-4)

[Serial or batch No. ] 0041

Conforms to the following standard(s), regulation(s) and resolution(s):  
[Titles and/or number of the normative document(s)]

Specified standards: 2003 PrISO9650-1

Shanghai

MAY 2005

(Place and date)

[Name and signature of authorized person]

Chen Guo

(Signature)

Director

(Name and position)



# APPENDIX 9.5

## Appendix 9.5 Liferaft Pressure Test Certificate.

Certificate No. 10097  
 Ship J N G HMB  
 Date \_\_\_\_\_  
 Customer \_\_\_\_\_  
 Address \_\_\_\_\_

Raft Ser. No.	Type Size	Date Of Man.	Last Survey
0041	NH4-4	05/2005	

Pressure Test							
Stretch		Time		Temp.		Reading	
On	Off	On	Off	On	Off	On	Off
		10:00	11:00	17.5	17.8	14.3	13.9
		10:00	11:00	17.5	17.6	12.6	13.5

Pressure Relief Valve			
Blow Off		Reset	
Top	Bottom	Top	Bottom
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Floor							
Stretch		Time		Temp.		Reading	
On	Off	On	Off	On	Off	On	Off

Arch Non Return Valve		
Time On	Time Off	Pass/Fail
		P

Ramp Non Return Valve		
Time On	Time Off	Pass/Fail

Surveyor Signature David M. M.

Appendix 9.6 Liferaft Service Log.

09/2010

Contrôle Périodique du  
Periodic Control of the

AFFECTATION DU RADEAU / ASSIGNMENT OF THE RAFT

Nom du navire / Name of the ship: .....  
 N° d'immatriculation / Registered number: .....  
 Nom du propriétaire / Owner's name: SWANNET GUNDRY CASTLETOWNBERE HULL

OPERATIONS DE CONTROLE / CONTROL OPERATIONS	Numéro Bouteille Cylinder number
1 Poids de la bouteille vide équipée Net weight of the equipped cylinder: .....	1.65
2 Poids de la charge de gaz(CO <sub>2</sub> +N <sub>2</sub> ) Weight of the gas charge (CO <sub>2</sub> +N <sub>2</sub> ): .....	7.59
3 Poids théorique total (1)+(2) / Whole theoretic weight (1)+(2): .....	9.24
4 Poids de la bouteille pleine (constaté en cours de visite) Gross weight of the full cylinder (during the control): .....	0.15
5 Différence (4)-(3) / Difference (4)-(3): .....	
6 Pression de N <sub>2</sub> / N <sub>2</sub> pressure: .....	

Toutte déperdition d'un poids de gaz égale ou supérieure à la plus petite des deux valeurs suivantes : 5% du poids du gaz ou 250 grammes, ou toute pression égale ou inférieure à 190 bars pour les bouteilles remplies d'azote entraîne le remplacement obligatoire de la bouteille.  
 If there is any loss of weight of the gas equal or more than the smaller of the following values: 5% of the weight of gas or 250 g, or for any pressure equal or less than 190 bars for nitrogen-cylinders, the replacement of the cylinder is compulsory.

- Constataions / Statements: OK
- Réparations / Servicing: OK
- Remplacements / Replacements: GAS RMTN, BAL
- Essais effectués / Tests carried out: Cr1
- Observations / Remarks: OK

● Rapport de contrôle n° / Control report number: 103251

Nom du vérificateur homologué  
 Authorised controller's name: POVAL 0125

Signature et cachet de la Station Service  
**SWANNET GUNDRY  
 CASTLETOWNBERE  
 027 - 70502**

Visé de l'inspecteur de la navigation  
 Seal of the navigation inspector:

Contrôle Périodique du  
Periodic Control of the

AFFECTATION DU RADEAU / ASSIGNMENT OF THE RAFT

Nom du navire / Name of the ship: .....  
 N° d'immatriculation / Registered number: .....  
 Nom du propriétaire / Owner's name: .....

OPERATIONS DE CONTROLE / CONTROL OPERATIONS	Numéro Bouteille Cylinder number
1 Poids de la bouteille vide équipée Net weight of the equipped cylinder: .....	
2 Poids de la charge de gaz(CO <sub>2</sub> +N <sub>2</sub> ) Weight of the gas charge (CO <sub>2</sub> +N <sub>2</sub> ): .....	
3 Poids théorique total (1)+(2) / Whole theoretic weight (1)+(2): .....	
4 Poids de la bouteille pleine (constaté en cours de visite) Gross weight of the full cylinder (during the control): .....	
5 Différence (4)-(3) / Difference (4)-(3): .....	
6 Pression de N <sub>2</sub> / N <sub>2</sub> pressure: .....	

Toutte déperdition d'un poids de gaz égale ou supérieure à la plus petite des deux valeurs suivantes : 5% du poids du gaz ou 250 grammes, ou toute pression égale ou inférieure à 190 bars pour les bouteilles remplies d'azote entraîne le remplacement obligatoire de la bouteille.  
 If there is any loss of weight of the gas equal or more than the smaller of the following values: 5% of the weight of gas or 250 g, or for any pressure equal or less than 190 bars for nitrogen-cylinders, the replacement of the cylinder is compulsory.

- Constataions / Statements: .....
- Réparations / Servicing: .....
- Remplacements / Replacements: .....
- Essais effectués / Tests carried out: .....
- Observations / Remarks: .....

● Rapport de contrôle n° / Control report number: .....

Nom du vérificateur homologué  
 Authorised controller's name: .....

Signature et cachet de la Station Service  
 Service station's signature and seal:

Visé de l'inspecteur de la navigation  
 Seal of the navigation inspector:

## Appendix 9.7 Liferaft Gas Cylinder Hydraulic Test Certificate.

### SAFETY SERVICE AGENCY

Unit 52, Ledcom Industrial Estate, Bank Road, Larne, Co. Antrim BT40 3AW  
 Telephone: (028) 2827 6609 Fax: (028) 2826 0648

### CERTIFICATE OF HYDRAULIC TEST

CUSTOMER ORDER NO. **VERBAL** CERTIFICATE No **1678**

CUSTOMER ADDRESS DELIVERY ADDRESS

<b>SWAN NET GUNDRY                  DINISH ISLAND                  CASTLETOWNBERE                  CO. CORK                  IRELAND</b>	<b>LIFERAFT CYLINDERS</b>
--	---------------------------

CYL. SERIAL NO.	D.O.M.	TEST PRESSURE	TYPE	TARE WEIGHT	GROSS WEIGHT	TEST DATE	RESULT
154754	02/05	315 BAR	3.04LTR	5.232KG	6.871KG	30/07/10	PASS
<< 191439	09/05	315 BAR	3.10LTR	5.946KG	7.590KG	30/07/10	PASS
155719	02/05	315 BAR	3.08LTR	5.402KG	7.045KG	30/07/10	PASS
156091	02/05	315 BAR	3.04LTR	5.413KG	7.053KG	30/07/10	PASS
126384	06/04	315 BAR	3.11LTR	5.550KG	6.842KG	30/07/10	PASS
129545	07/04	315 BAR	3.14LTR	5.438KG	6.732KG	30/07/10	PASS
151007	01/05	315 BAR	3.12LTR	5.542KG	6.828KG	30/07/10	PASS
156375	02/05	315 BAR	3.06LTR	5.307KG	6.608KG	30/07/10	PASS
190202	09/05	315 BAR	3.06LTR	5.878KG	7.168KG	30/07/10	PASS
190261	09/05	315 BAR	3.04LTR	6.014KG	7.312KG	30/07/10	PASS
355503	09/03	315 BAR	4.00LTR	6.953KG	9.554KG	30/07/10	PASS
350919	04/08	315 BAR	4.22LTR	6.764KG	9.364KG	30/07/10	PASS
172031	05/06	315 BAR	5.00LTR	7.811KG	10.671KG	30/07/10	PASS
230027	07/06	315 BAR	5.17LTR	7.906KG	10.777KG	30/07/10	PASS

This is to certify that the above cylinders were hydraulically tested to the pressure specified, in accordance with BS EN 1802, BS EN 1803 or BS EN 1968 as appropriate, and were found to be satisfactory.

No. of Cylinders on this Certificate

14

DATE **30-7-2010**

SIGNED

QUALITY MANAGER

SSA 007 11/93

Appendix 9.8 Approved Liferaft Service Stations (Marine Notice No. 19 of 2010).



**Department of Transport**  
*An Roinn Iompair*



**Marine Notice No. 19 of 2010**

NOTICE TO ALL SHIPOWNERS, FISHING VESSEL OWNERS, AGENTS, SHIPMASTERS,  
SKIPPERs, FISHERMEN, YACHTSMEN AND SEAFARERS

**Approved Liferaft Service Stations for SOLAS and MED  
Inflatable Liferrafts**

The Department of Transport wishes to remind shipowners, masters, skippers and yachtmen of the need to have inflatable SOLAS and MED liferafts and hydrostatic release units (HRUs), where applicable, which form part of their vessels' life-saving appliances, regularly serviced at an approved service station. Such inflatable liferafts and hydrostatic release units (HRUs), except for disposable HRUs, are required to be serviced annually at service stations approved by the Minister for Transport.

An approved service station is one which has been formally appointed by the manufacturer of the approved equipment and which has been approved by the Minister for Transport. Listed below are the names and contact details of the currently approved service stations in Ireland:

- |   |   |
|---|---|
| <p>1. Atlantic Marine Supplies Ltd.,<br/>Donegal Road,<br/>Killybegs,<br/>Co. Donegal.<br/>Tel: 074-9731440<br/>Fax: 074-9731699<br/>Email: atlanticmarine@eircom.net</p> | <p>4. Maritime Safety Ltd.,<br/>Kilmore Quay,<br/>Co Wexford.<br/>Tel: 053-9148781<br/>Mob: 087-2529736<br/>Email: maritimesafety@eircom.net</p>  |
| <p>2. CH Marine Ltd.,<br/>Nautic House,<br/>Marsh Road,<br/>Skibbereen,<br/>Co. Cork.<br/>Tel: 028-23190<br/>Fax: 028-22028<br/>Email: sales@chmarine.com</p>             | <p>5. Solas Marine Services Ltd.,<br/>Unit R, Crosbie's Yard,<br/>Tolka Quay Road,<br/>Dublin Port,<br/>Dublin 1.<br/>Tel: 01-8561320<br/>Fax: 01-8561321<br/>Email: info@solasmarine.net</p> |
| <p>3. G.R. Liferrafts Ltd.,<br/>Croaghlin,<br/>Killybegs,<br/>Co. Donegal.<br/>Tel: 074-9741760<br/>Email: grliferrafts@eircom.net</p>                                    | <p>6. Swan Net-Gundry Ltd.,<br/>Dinish Island,<br/>Castletownbere,<br/>Co. Cork.<br/>Tel: 027-70502<br/>Fax: 027-70503</p>  |

Marine Notice No. 10 of 2005 is hereby withdraw



### Appendix 9.9 SOLAS B Equipment Pack List.

## SOLAS B EQUIPMENT PACK



### Contents:

- Hand Pump
- Paddles (2)
- Spare Sea Anchor
- Sponges (2)
- Bailer (1 or 2 depending on raft capacity)
- First Aid Kit
- Signal Mirror
- Repair Kit
- Pressure Relief Valve Plugs
- Whistle
- Flashlight
- Spare Flashlight Bulbs (2)
- Flashlight Batteries (6)
- Red Hand Flares (3)
- Red Parachute Flares (2)
- Orange Smoke Signals (1)
- Anti Sea Sickness Tablets (6 per person)
- Thermal Protective Aids (6-20 person- 2 / 25 person- 3)

Appendix 9.10 Liferaft after deflation.

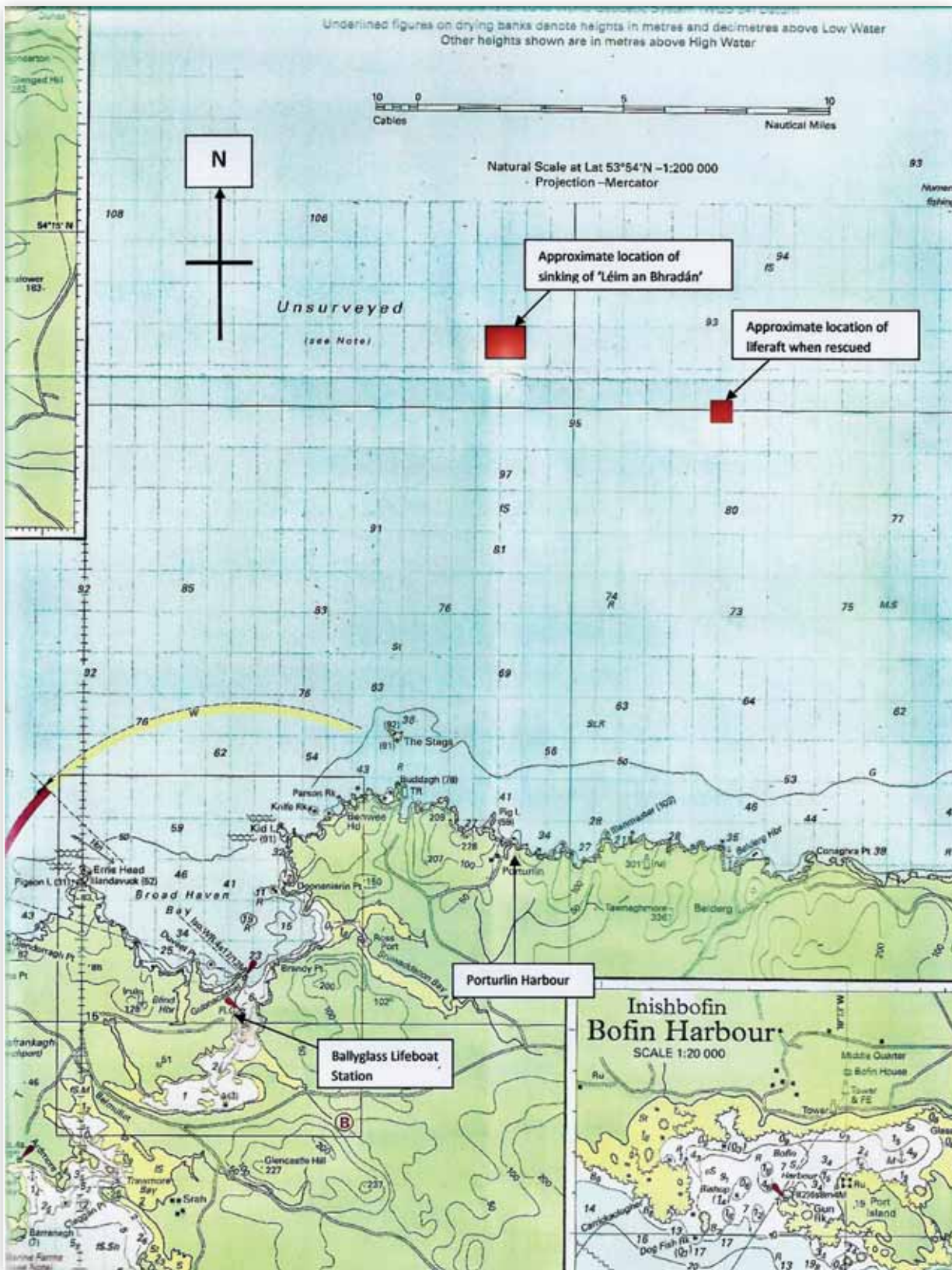


Appendix 9.11 Liferaft as picked up by the Ballyglass Lifeboat





Appendix 9.12 Location Chart.



## 10. CORRESPONDENCE RECEIVED

	PAGE
10.1 Irish Coast Guard	43
MCIB Response	43
10.2 Royal National Lifeboat Institution	44
MCIB Response	44
10.3 An Garda Síochána	45
MCIB Response	45



10<sup>th</sup> May 2011.

Ms Eve Reddin  
Secretariat,  
Marine Casualty Investigation Board  
Leeson Lane  
Dublin 2.

Dear Eve,

Re: Draft report of the investigation into the sinking of the fishing vessel "Léim an Bhradáin" on 30<sup>th</sup> October 2010.

The Irish Coast Guard is in agreement with the recommendations made in the report and advise that it is vital to notify IRCG as soon as any suspicions arise as to the fate of a craft.

Being placed on "alert stage" early allows for a response to be prepared, fishing vessels may also contact IRCG regularly and advise of their position. IRCG strongly advise the fitting of AIS to all craft regardless of size or use.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Elizabeth Smith".

Elizabeth Smith  
Irish Coast Guard

Administration Office, Irish Coast Guard, Department of Transport, Leeson Lane, Dublin 2, Ireland.  
Oifig Riaracháin, Garda Cóstá na hÉireann, An Roinn Iompair, Lána Chill Mochargán, Baile Átha Cliath 2, Éire.  
Tel: + 353 1 6783455 / 3427, Fax: + 353 1 6783459, email: [admin@irishcoastguard.ie](mailto:admin@irishcoastguard.ie)

1

## MCIB RESPONSE

The Board notes the contents of this Correspondence.



## Royal National Lifeboat Institution

Admiral the Lord Boyer GCB OBE DL  
Trustee: John Cayle MBE  
Chief Executive: Paul Rossiter

RNLI (Trading) Ltd 27073377, RNLI (Charity) Ltd 2702440 and RNLI (Incorporated) Ltd 1784930  
are all companies registered at World Quay Road, Poole, Dorset BH15 7NJ

From:

**RNLI Ireland**  
Airsides, Swords, Co. Dublin  
Telephone: (01) 8900460  
Fax: (01) 8900458  
www.lifeboats.ie

Inspector of Lifeboats: Martyn Smith

Mr. John G O'Donnell B.L.  
Chairman  
Marine Casualty Investigation Board  
Leeson Lane  
Dublin2

11<sup>th</sup> May 2011

Sir,

**DRAFT REPORT INTO THE SINKING OF THE FISHING VESSEL "LÉIM AN BHRADÁN 30<sup>TH</sup> OCTOBER 2010**

Reference: Your letter MCIB/193 dated 19<sup>th</sup> April 2011

Thank you for affording the RNLI the opportunity to comment on the draft report into the sinking of fishing vessel "Léim an Bhradán"

It goes without saying that the two crew are fortunate to have survived their ordeal, due in large part to their own efforts whilst aboard the liferaft.

The timely response of search and rescue agencies such as the RNLI relies heavily on the Coast Guard receiving the earliest possible indication of a vessel being in distress whether it be from those ashore who are aware of a vessels programme or from electronic aids such as EPIRB's. The latter not only indicate a distress situation but assist greatly in the location of those in distress. The RNLI certainly supports and recommends the use of float free, self activating EPIRB's.

Critical to the successful outcome of any distress situation is the existence aboard a vessel of the appropriate safety equipment, which is properly fitted and for which the crew have the appropriate training.

Yours faithfully

  
Martyn Smith  
**RNLI Divisional Inspector of Lifeboats**  
**Ireland**



**The RNLI is the charity that saves lives at sea**

Charity number CHY 2678 in the Republic of Ireland and registered in England and Wales (208602) and Scotland (SC037796)

## MCIB RESPONSE

The Board notes the contents of this Correspondence.



## An Garda Síochána

An Leas-Choimisinéara  
(Oibríochtaí)  
An Garda Síochána  
Ceanncheathrú na nGardai  
Páirc an Fhionn-Uisce  
Baile Atha Cliath 8

Tel. / Teileafón (01) 666 2057/8/9  
Fax. / Facs (01) 666 2060

Please quote the following Ref. No.



Deputy Commissioner  
(Operations)  
An Garda Síochána  
Garda Headquarters  
Phoenix Park  
Dublin 8

Web Site : [www.garda.ie](http://www.garda.ie)

E-mail : [commissioner\\_ops@garda.ie](mailto:commissioner_ops@garda.ie)

OPS 79.13/10  
MCIB/193

**Mr. John O'Donnell,  
Marine Casualty Investigation Board,  
Lesson Lane,  
Dublin 2.**



**Re: Draft Report of the sinking of the fishing vessel 'Léim an Bhradáin' on 30<sup>th</sup> October 2010.**

Dear Mr. O'Donnell,

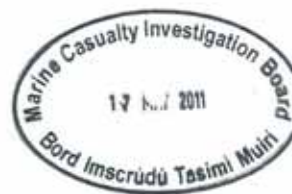
I am directed by Deputy Commissioner, Operations, to refer to your letter of the 19<sup>th</sup> April 2011 to the Garda Commissioner in the above and to advise that An Garda Síochána is in agreement with its findings and conclusion.

Local Garda management have noted that no formal arrangements were in place where the crew of the vessel would check in with persons onshore. Perhaps, this is a matter which the Marine Safety Authorities may be in a position to pursue to facilitate the monitoring of vessels at sea.

Yours sincerely,

**Frank Walsh  
Superintendent for  
Deputy Commissioner**

16<sup>th</sup> May, 2011



Mission Statement / Ráiteas Misin :

Working with Communities to Protect and Serve / Ag obair le Pobail chun iad a chosaint agus chun freastal orthu

### MCIB RESPONSE

The Board notes the contents of this Correspondence.







