MCIB
Marine Casualty Investigation Board
Bord Imscrúdú Taismí Muirí

REPORT OF AN INVESTIGATION INTO A MARINE CASUALTY INVOLVING A VESSEL IN OR AROUND BRUCKLESS PIER, DARNEY, CO. DONEGAL 28 SEPTEMBER 2023

REPORT NO. MCIB/332
(No.8 OF 2024)

The Marine Casualty Investigation Board (MCIB) examines and investigates all types of marine casualties to, or on board, Irish registered vessels worldwide and other vessels in Irish territorial waters and inland waterways.

The MCIB objective in investigating a marine casualty is to determine its circumstances and its causes with a view to making recommendations for the avoidance of similar marine casualties in the future, thereby improving the safety of life at sea and inland waterways.

The MCIB is a non-prosecutorial body. We do not enforce laws or carry out prosecutions. It is not the purpose of an investigation carried out by the MCIB to apportion blame or fault.

The legislative framework for the operation of the MCIB, the reporting and investigating of marine casualties and the powers of MCIB investigators is set out in the Merchant Shipping (Investigation of Marine Casualties) Act, 2000.

In carrying out its functions the MCIB complies with the provisions of the International Maritime Organisation's Casualty Investigation Code and EU Directive 2009/18/EC governing the investigation of accidents in the maritime transport sector transposed into Irish law by the European Communities (Merchant Shipping) (Investigation of Accidents) Regulations 2011.

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

Glossary of Abbreviations and Acronyms

AGS	An Garda Síochána
C	Celsius
CGU	Coast Guard Unit
CoP	Code of Practice
CPR	Cardiopulmonary Resuscitation
EPIRB	Emergency Position Indicating Radio Beacon
ETA	Estimate Time of Arrival
EU	European Union
IRCG	Irish Coast Guard
ISO	International Organisation for Standardisation
LOA	Length Overall
MCIB	Marine Casualty Investigation Board
MN	Marine Notice
MOB	Man Overboard
MRSC	Marine Rescue Sub-Centre
NAS	National Ambulance Service
PAN-PAN	International Urgency Signal
PFD	Personal Flotation Device
PLB	Personal Locator Beacon
RNLI	Royal National Lifeboat Institution
R118	Coast Guard Helicopter
S.I.	Statutory Instrument
SOLAS	Convention for the Safety of Life at Sea (SOLAS Convention)
UTC	Co-ordinated Universal Time
VHF	Very High Frequency
WSI	Water Safety Ireland
Z	Zulu time (Co-ordinated Universal Time)

Horsepower	hp
Hour	hr
Kilogram	kg
Kilometre	km
Knot	kt
Litre	lt
Metre	m
Millimetre	mm

Report MCIB/332 published by the Marine Casualty Investigation Board.
28th August 2024.

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1. SUMMARY

1.1 The owner of a recreational motor boat was alone aboard his vessel when he fell overboard and subsequently drowned. This occurred between 15.30 hours (hrs) and 16.30 hrs on Thursday, 28 September 2023. The vessel was at its mooring approximately 50 metres (m) from the shore, in a rural area near Bruckless Pier, Co. Donegal. The weather conditions were poor, with winds of force 6 and gusts of up to 35 knots (kts) (65 km/h). A Small Craft Warning was in effect.

1.2 The vessel was an older model of a recreational motor boat (see Figure 1). The vessel predated the introduction of modern design requirements to both minimise the risk of falling overboard and to facilitate reboarding, which were introduced in 2013 by the European Union (EU) Directive for Recreational Craft. The vessel had no means of unaided reboarding, either accessible to, or deployable by, a person in the water.

1.3 The Casualty was not wearing a Personal Flotation Device (PFD), he had no means of contacting the emergency services, and he had not left notice of his intentions with a shore contact.

1.4 This marine casualty occurred because of a combination of the following causal and contributory factors:

1. A fall overboard into cold water.
2. Operating alone, in challenging weather conditions.
3. Lack of formal training and planning of the voyage.
4. Inadequate safety and emergency equipment, being the omission of: a PFD; a means of raising the alarm, either in-person by Very High Frequency (VHF), Personal Locator Beacon (PLB) or mobile phone in waterproof pouch or via a shore contact; and, a means of unaided reboarding of the vessel from the water.

1.5 The Marine Casualty Investigation Board (MCIB) has made recommendations addressed to the Minister for Transport, Water Safety Ireland (WSI) and Irish Sailing that seek to avoid similar marine casualties in the future.

Note: Times are local time = UTC +1 (Co-ordinated Universal Time +1).

Figure 1: The Casualty's vessel, after being removed from the water on the evening of this marine casualty. Source: An Garda Síochána.

2. FACTUAL INFORMATION

2.1 Vessel Particulars

2.1.1 The Casualty's vessel was the Nuala Bríd. This was a displacement-type recreational motor boat that was used by the Casualty for coastal sea angling. The Casualty had a small dinghy tender kept ashore that was used to access the Nuala Bríd when on its mooring. The dinghy tender was powered by an electric outboard engine that was lost overboard in this incident (see Figures 1 – 3).

Figure 2: The interior of the Casualty's vessel, showing the forward cabin, foredeck compartment, and steering console.

Figure 3: The dinghy tender that the Casualty had used to access the casualty vessel. Note: not shown is the battery-operated engine that was secured to the transom but was lost overboard in this incident.

	The Casualty's Vessel	The Dinghy Tender
Vessel Name:	Nuala Bríd.	Not Determined.
Vessel Type:	Recreational motor boat.	Recreational boat.
Construction:	Glass-Reinforced Polyester.	Glass-Reinforced Polyester.
Owner:	Privately owned.	Privately owned.
Builder:	Orkney Boats, Chichester, UK[1].	Not Determined.
Model:	Longliner 16.	Not Determined.
Serial Number:	Not Determined.	Not Determined.
Year Built:	Not Determined[2].	Not Determined.
Purchased:	2011.	Not Determined.
Length Overall (LOA):	4.88 m.	2.76 m.
Breadth:	1.70 m.	1.22 m.
Engine:	Four stroke, 20 horsepower (hp).	Yamaha outboard. Battery operated outboard (not recovered).

2.1.2 The Casualty's vessel was fitted with a forward cabin, extending back approximately 2.37 m from the bow, with an outward-opening window onto the foredeck. The Casualty's vessel had been modified from the original Longliner design specifications[3] with the addition of: a forward compartment; a remote steering console on the starboard side; and a 20 hp engine (which exceeded the vessel's 15 hp design rating).

2.1.3 The dinghy tender had been modified from the original design specifications with the addition of:

- Aluminium checker plate bottom boards forward and aft, and an aluminium checker plate reinforcement of the transom. This had a cumulative weight of approximately 10 kilograms (kg).
- Launching wheels attached to the transom. This had a weight of approximately 8 kg.

1. This is presumed to be the boat's builder, based on the nameplate on the gunwhale. The builder's identification plate was not present.

2. Distinctive features of the vessel's design indicate it may date from in or around the 1980s.

3. Source: Orkney Boats Limited

2.2 Location

2.2.1 This incident occurred approximately 50 m offshore from Bruckless Pier, Darney, Co. Donegal. Bruckless Harbour is a small, south-facing, tidal inlet located at the northeastern corner of Donegal Bay. The inlet has a width of approximately 250 m and extends approximately 500 m inland from the pier. Bruckless Pier and its two concrete slipways are on the eastern side of the inlet. The pier is under the authority of Donegal County Council and is fully accessible to the public via a public laneway off the N56 National Road between Donegal Town and Killybegs. The harbour has moorings for recreational boats arranged up to 200 m from the pier (see Figures 4 – 8).

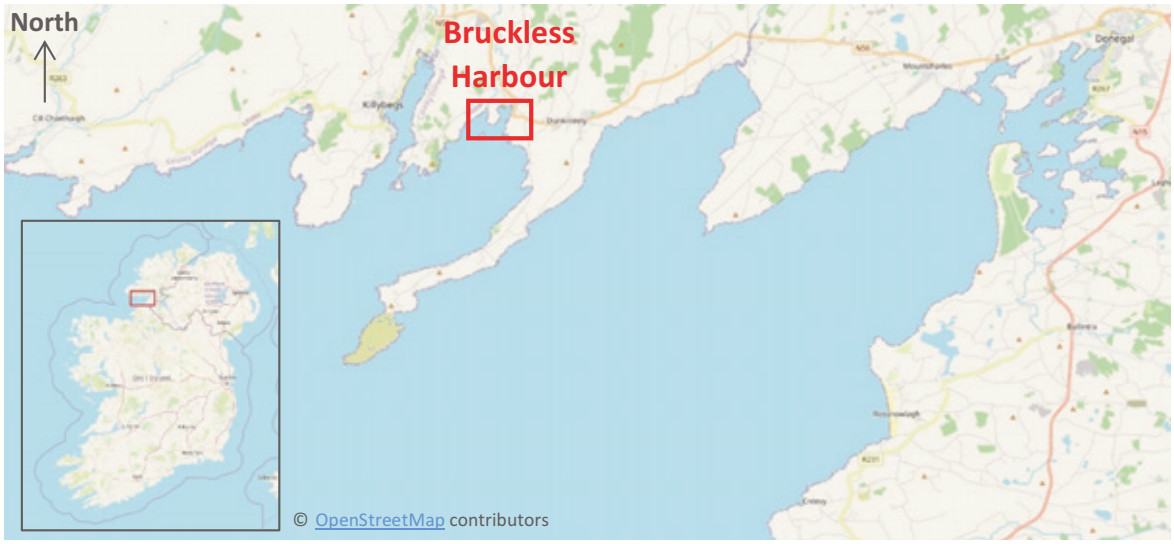

Figure 4: Location of this marine casualty event, Bruckless Pier, Darney, Co. Donegal.

Figure 5: Location of this marine casualty event, Bruckless Pier, Darney, Co. Donegal.

Figure 6: Bruckless Harbour, looking north, highlighting the position at which the Casualty's vessel was moored.

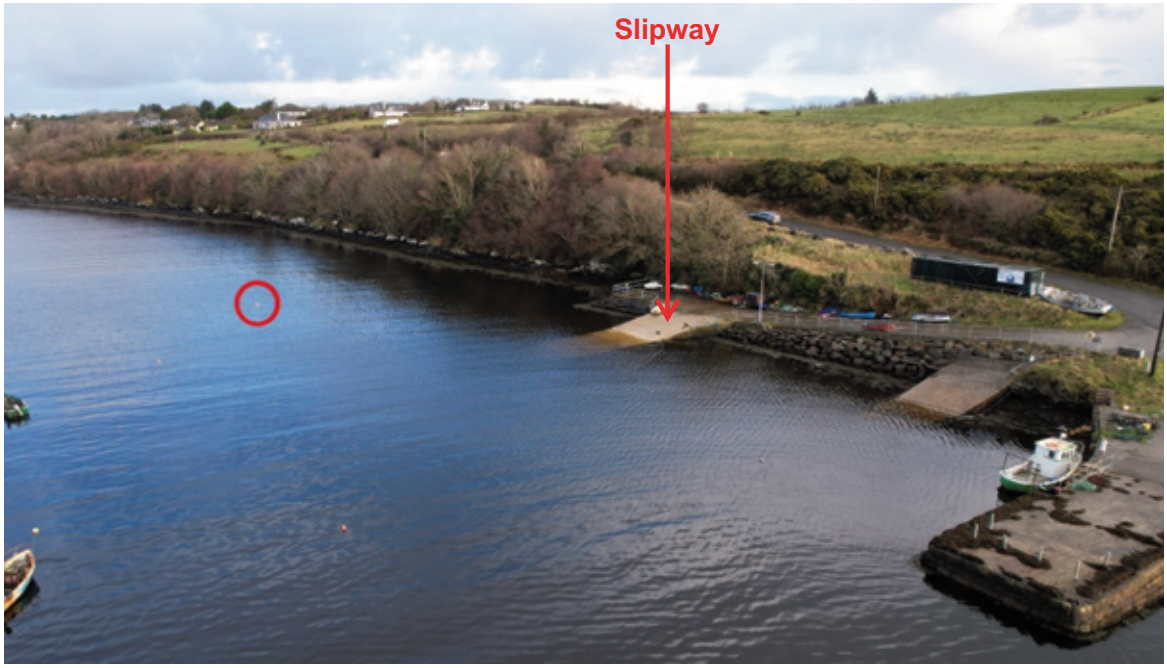

Figure 7: Bruckless Harbour, looking east, highlighting the position at which the Casualty's vessel was moored, and the slipway from which the Casualty had launched when going afloat.

Figure 8: Bruckless Harbour, looking south towards Donegal Bay, highlighting the position at which the Casualty's vessel was moored, and the slipway from which the Casualty had launched when going afloat.

2.2.2 There was signage at the entrance to the pier from the public road, which was erected by Donegal County Council prior to this marine casualty (see Figure 9). The warnings on this signage included:

"Warning – Wear Personal Flotation Device[4]"

Figure 9: Signage at the entrance to Bruckless Pier.

4. PFD is a Personal Flotation Device.

"This is an all-encompassing term, which covers all forms of lifejackets and buoyancy aids intended to help keep a person afloat in the water. These range from "CE" marked lifejackets through to "CE" marked buoyancy aids. Lifejackets provide face up in-water support to the user regardless of physical conditions. Buoyancy aids require the user to make swimming and other postural movements to position the user with the face out of the water."

Source: Code of Practice for the Safe Operation of Recreational Craft, Appendix 5.

2.3 Marine Casualty Information

Type of Incident:	Marine Casualty.
Date and Time:	28 September 2023, 17.00 hrs.
Location:	50 m northwest of Bruckless Pier, Co. Donegal.
Position:	Latitude 54°37'57"N, Longitude 08°23'15"W.
Casualty Event:	Man overboard (MOB) and loss of life.
Vessel Type:	Recreational motor boat.
Persons Onboard:	One.
Consequences:	One fatality.
Vessel Operation:	Moored.
Voyage Segment:	Pre-Departure.
External and Internal Environment:	Daylight; wind south to southwest, force 4 to 5 occasionally force 6; gusts of up to 35 kts; visibility generally good, but moderate to poor in heavy rain; air temperature 13–16 degrees Celsius (°C); water temperature 14°C.

2.3.1 This incident resulted in a marine casualty as defined in Section 2 of the Merchant Shipping (Investigation of Marine Casualties) Act, 2000. This defines a marine casualty and a vessel in the following terms:

"marine casualty" means an event or process which causes or poses the threat of—

(a) death or serious injury to a person;

(b) the loss of a person overboard;

(c) significant loss or stranding of, or damage to, or collision with, a vessel or property; or

(d) significant damage to the environment,

in connection with the operation of—

(i) a vessel in Irish waters;

(ii) an Irish registered vessel, in waters anywhere; or

(iii) a vessel normally located or moored in Irish waters and under the control of a resident of the State, in international waters contiguous to Irish waters, and includes an accident or damage referred to in section 26(1)(b);

"vessel", in relation to a marine casualty, means a vessel or craft (or part of a vessel or craft) which at the time of the casualty—

(a) is registered in the State, or

(b) is located in the State (including in Irish waters), or

(c) being a vessel normally located or moored in Irish waters, is under the control of a resident of the State in international waters contiguous to Irish waters, and capable of being used, or intended to be used, for navigation or transportation on water, but does not include a seaplane."

2.4 The Casualty

2.4.1 There was one person onboard (the owner) who was in his late sixties and who is now deceased as a result of this incident. The Casualty's family described how:

- The Casualty had grown up in the area and had been on and around boats all of his life. He could swim. He had not obtained formal training in the operation of a powerboat, such as the National Powerboat Certificate awarded by Irish Sailing.
- He bought the Nuala Bríd in 2011 after he retired from his career. He used the boat for recreational angling. He used a swing mooring, formed from a fisherman's anchor and buoy, positioned approximately 200 m north of (inland from) Bruckless Pier. He put the boat in the water each year, for the summer months of May through to the end of September. He had used the boat no more than six times in 2023 because of that summer's poor weather.
- He was a keen recreational boater and had been involved in the founding of the local rowing club. They trained and raced in 20-foot wooden rowing skiffs, and he had helped with crew training and coxing of the boats.
- He had sustained a serious back injury in past years. He had been fitted with a spinal cord stimulator[5] for pain management. He had been advised by his medical specialists to avoid using the device when in bed and when doing physical activities, and he typically switched off the device when boating.

5. A spinal cord stimulator is an implanted medical device that is controlled by the patient, to send low levels of electrical current into a lead implanted along the length of the spinal cord.

- He typically accessed the Nuala Bríd with the use of a dinghy tender that he kept out of the water on the pierside. He had a set of removeable wheels fitted to the dinghy's transom, which he used to wheel the boat from the pierside down the slipway into the water. He was unable to use oars because of his back pain so he powered the dinghy tender with a small, removable, battery-operated outboard engine.

- His family further described how: he was a cautious and diligent person, who ensured that he did tasks correctly; his equipment all had its own storage places and he was diligent about this, including keeping his lifejacket in his van, hung up in a bag, so that it was always available to him; he was diligent about the use of lifejackets and he would normally wear a lifejacket when afloat.

- When he was found in the water:

  He was not wearing a lifejacket. His lifejacket was found in the van in its bag. This was checked and found to be dry, which indicated to the family that he had not worn the lifejacket on the other occasion when he had gone afloat that day, earlier that morning, as there had been heavy rain then and everything he had been wearing had become wet.

  The clothing he was wearing consisted of a hat, jacket, jumper and oilskin leggings. He is presumed to have been wearing his wellington boots but these were not on him when he was brought to shore, they were not in the van with his other equipment, and they were never recovered from the sea.

2.5 Cause of Death

2.5.1 The determination of the cause of death is a matter for the Coroner.

2.6 Weather Conditions

2.6.1 On the day of this incident, the 28 September 2023, Met Éireann published a Sea Area Forecast at 12.00 hrs. This was a meteorologist's assessment of what the weather conditions were likely to be in the forecast area.

See Appendix 7.1 - Met Éireann (Pre-Incident) Weather Forecast.

2.6.2 The weather on the western seaboard, from Slyne Head in Co. Galway north to Malin Head in Co. Donegal, was forecasted to be:

"Wind: Southwest force 6 or 7, soon becoming westerly force 6 or 7.

Weather: Cloudy with rain or showers, possibly heavy"

2.6.3 A Small Craft Warning was in effect for all Irish coasts, with a warning that:

"South to southwest winds, veering southwest to west, will reach force 6 or higher…"

2.6.4 Met Éireann has also prepared a post-incident weather report with a meteorologist's assessment of what the weather conditions are likely to have been in the Bruckless area of Donegal on the day of this casualty event.

See Appendix 7.2 - Met Éireann (Post-Incident) Weather Forecast. This report describes:

"Meteorological Synopsis: A complex area of low pressure to the north of Ireland directed a south- southwesterly airflow over the country on the 28-September-2023. An active and slow-moving cold front affected Donegal during the period in question.

Hour	Wind Description & Beaufort Force	Wind Direction	Mean Wind Speed (knots)	Maximum Gust (knots)
11.00 –17.00	Moderate to Fresh force 4 or 5 occasionally Strong force 6	S to SW	10 – 25	35

Weather: A band of rain reached the area around [13.00 hrs local time] and tracked eastwards across the area with heavy downpours from around (14.00 hrs to 17.00 hrs local time). Estimated rainfall total for the entire day (from midnight to midnight): 6 to 10mm, most of which fell in the afternoon.

Visibility: Visibility was moderate to poor in heavy rain, otherwise visibility was good. Temperature: Air temperature: 13 - 16 degrees Celsius. Sea temperature: 14 degrees Celsius".

2.7 Emergency Response

2.7.1 The Marine Rescue Sub-Centre (MRSC) at Malin Head co-ordinated a multi-agency emergency response, involving land and air resources from the Irish Coast Guard (IRCG), the National Ambulance Service (NAS) and An Garda Síochána (AGS). The speed of response was prompt. The Casualty was removed to the shore by members of the public who first arrived on scene and raised the alarm, prior to the arrival of the emergency services.

2.7.2 The IRCG's Situation Report provides the following summary of the emergency services' response.

17.00 hrs A member of the public contacts the emergency services on 999. The call is received at MRSC Malin. The incident is described as a

capsized dinghy at the shoreline off Bruckless Pier, and that a vessel's engine is still running.

17.02 hrs MRSC Malin tasks Coast Guard helicopter R118 and Killybegs Coast Guard Unit (CGU) to respond.

17.06 hrs A PAN-PAN urgency broadcast is issued on VHF Channel 16 by Donegal Bay Coast Guard Radio requesting the assistance of any vessels.

17.11 hrs Members of the public locate the Casualty in the water and take him ashore.

17.12 hrs MRSC Malin notifies AGS.

17.16 hrs R118 departs their base in Sligo to the scene.

17.25 hrs R118 arrives on scene and deploys a paramedic.

17.32 hrs Cardiopulmonary resuscitation (CPR) underway.

18.22 hrs CPR ceases.

18.50 hrs R118 released from scene and returns to base.

19.59 hrs Killybegs CGU has returned to base.

2.8 Recreational Craft Directive and Regulations

2.8.1 The EU's Directive on Recreational Craft and Personal Watercraft is Directive 2013/53/EU (as amended)[6] which dates from 2013. This was transposed into Irish law[7] on the 10 March 2017 by the EU (Recreational Craft and Personal Watercraft) Regulations 2017.

2.8.2 The Casualty's vessel is a recreational craft within the meaning of the Directive and the implementing Regulations, but the vessel's construction predates the introduction of the Directive and the Regulations.

2.8.3 There is no requirement in legislation for registration of recreational craft of the size of the Casualty's vessel, no requirement for an initial or annual survey, and no requirement for the owner of such craft to undertake formal training.

2.8.4 Section 2.3 of the Directive deals with protection from falling overboard and means of reboarding, which are requirements that are to be incorporated into vessels designed in accordance with the Directive. This requires that:

6. 2013/53/EU, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0053&rid=10

7. S.I. No. 65 of 2017, European Union (Recreational Craft and Personal Watercraft) Regulations 2017 as amended by S.I. No. 288 of 2023.

https://www.irishstatutebook.ie/eli/2017/si/65/made/en/print

https://www.irishstatutebook.ie/2023/en/si/0288.html

"Watercraft shall be designed to minimise the risks of falling overboard and to facilitate reboarding. Means of reboarding shall be accessible to or deployable by a person in the water unaided."

2.8.5 The latest design iteration of the Orkney Boats' Longliner is a Category C vessel in accordance with the EU's Directive on Recreational Craft and Personal Watercraft. This means that the current design of this vessel type is intended for use in: winds of up to and including force 6 on the Beaufort Scale; and, significant wave heights of up to and including 2 m. This is associated with[8] 'inshore' conditions, within ten miles of land and always about four hours from a safe harbour that can be accessed at all times and under all tidal conditions.

2.9 Code of Practice for the Safe Operation of Recreational Craft

2.9.1 The Code of Practice (CoP) for the Safe Operation of Recreational Craft[8] was published by the Department of Transport, Tourism and Sport in 2017, with updates[9] in 2021. While not mandatory in terms of legal enforceability, the CoP provides guidance on the regulations surrounding recreational craft, which are legally enforceable. The CoP is an authoritative guidance document that encourages compliance with its safety recommendations.

2.9.2 Section 1.2 of the CoP sets out the legal regime that applies to all recreational craft. It describes how the EU Directive 2013/53/EU on recreational craft and personal watercraft updated the legislative requirements in Ireland dating from June 1998, for the design and construction of leisure boats and personal watercraft between 2.5 m and 24 m in length, such as sailing craft, motor boats and jet skis. The Directive also lays down particular requirements for manufacturers, importers, private importers and distributors of watercraft. The Directive is aimed at ensuring standards in design, equipment and traceability. A number of regulations in Chapter V of the International Convention for the Safety of Life at Sea (SOLAS Convention) dealing with safety of navigation apply to all recreational craft. Some of these have relevance to this marine casualty event, in particular voyage planning and communications.

2.9.3 Section 1.2.11.1 of the CoP deals with radiocommunications afloat, and states:

"…a PLB is not considered to be a substitute for an EPIRB[10] [installed on a vessel]. However, the wearing of a PLB by seafarers, particularly those boating alone, is recommended."

2.9.4 Section 2.1 of the CoP deals with training, and states:

"It is recommended that persons participating in sailboat and motorboat

8. www.gov.ie/en/publication/66ff7e-safe-operation-of-recreational-craft
9. https://www.gov.ie/pdf/?file=https://assets.gov.ie/39340/983e61f87c214bf289e55d1a287520f3.pdf
10. Emergency Position Indicating Radio Beacon

activities undertake appropriate training. A number of training schemes and approved courses are available and information can be obtained directly from course providers."

2.9.5 Section 2.2 of the CoP deals with voyage planning, and states:

"All voyages, regardless of their purpose, duration or distance, require some element of voyage planning…"

2.9.6 Section 10.1 of the CoP deals with tendering operations to moored craft, and states:

"There are instances where boats are moored offshore due to tidal or draft restrictions and access to them is achieved by the use of a smaller tender launched from shore. In such instances, where a tender is used to access and board a moored vessel, the following precautions should be taken:

- *Crew must wear a PFD/lifejacket at all times for the operation of boarding the tender, transit to and boarding of the moored craft.*
- *It is recommended that operators carry a waterproof handheld VHF radio...*
- *Be aware of tidal and wind conditions prior to commencing any tendering operation...*
- *Suitable means of boarding the moored vessel should be provided, e.g. boarding ladder, access gates on railings, etc."*

2.9.7 Section 10.3 of the CoP deals with the use of slipways, and states:

"… Note and follow any warnings or safety instructions posted by the owner of the slipway…".

2.10 Marine Notices

2.10.1 Marine Notices (MN) are information notices issued by the Department of Transport to publicise important safety, regulatory and other information relating to the maritime sector in Ireland. All MNs are published and catalogued online[11] and are issued by email directly to those who subscribe to the relevant mailing list. MNs that relate to the use of recreational craft are specifically addressed to the owners and operators of such craft. All MNs provide contact details for persons seeking further technical assistance on the subjects raised.

2.10.2 Table 1 lists the MNs published in the four years prior to this casualty event that particularly relate to issues raised in this investigation report, as they highlighted to the seafarers: important safety advice for owners of recreational craft;

11. www.gov.ie/en/collection/e762fd-marine-notices

potential issues with the modification of vessels and to seek advice about construction standards; the application of SOLAS Chapter V, Convention for the Safety of Life at Sea, to recreational craft; the CoP for the Safe Operation of Recreational Craft; the importance of voyage planning and avoiding dangerous situations in adverse weather and sea conditions; the potential hazards of operating alone afloat; and, the use of PFDs on recreational craft.

Table 1: Marine Notices related to the issues raised in this investigation report

Number	Date	Subject
No. 52 of 2023	27-Jul-23	Think and Prepare – Important safety advice for owners and users of recreational craft.
No. 35 of 2023	16-May-23	Reminder – Dangers and requirements associated with the modification of vessels.
No. 30 of 2023	20-Apr-23	Application of SOLAS Chapter V to Recreational Craft.
No. 32 of 2022	02-Jun-22	Code of Practice for the Safe Operation of Recreational Craft.
No. 40 of 2021	25-Jun-21	Code of Practice for the Safe Operation of Recreational Craft.
No. 19 of 2021	01-Apr-21	Importance of Voyage Planning and avoiding dangerous situations in Adverse Weather and Sea Conditions.
No. 58 of 2020	07-Dec-20	Two separate fatal incidents involving recreational fishing by persons operating alone.
No. 27 of 2020	21-Jul-20	Code of Practice for the Safe Operation of Recreational Craft.
No. 51 of 2019	07-Nov-19	Amendments to the 2017 Edition of the Code of Practice for the Safe Operation of Recreational Craft.
No. 32 of 2019	29-Aug-19	Personal Flotation Devices for Pleasure Craft and Personal Watercraft.

2.10.3 MN No. 58 of 2020 was published[12] by the Department of Transport on 7 December 2020, in response to investigation reports by the MCIB dealing with two separate fatal incidents in which persons were operating recreational motor boats alone (see Appendix 7.3 - Marine Notice No. 58 of 2020). This MN was addressed to all masters, owners, boating clubs and users of pleasure and recreational craft, and highlighted how:

"The Department would like to remind the operators of recreational craft of the following advice and recommendations:

- *The importance of abiding by the legal requirements in relation to the wearing and carrying of Personal Flotation Devices/Lifejackets. It is a statutory requirement to wear a Personal Flotation Device (PFD) when on board an open craft of less than 7 metres in length overall or whilst on deck onboard a decked craft of less than 7 metres in length overall. Wearing a PFD will increase your chance of survival in the event of entering the water. Please see Marine Notice No. 32 of 2019 (Personal Flotation Device for Pleasure Craft and Personal Watercraft) for further information.*

- *The importance of checking current weather forecasts and sea / lake /river conditions prior to departure and to plan your voyage accordingly (see Appendix 6 (Weather, Sea States and Tides) and Appendix 8 of the Code of Practice for an example of a passage planning template).*

The Department also wishes to highlight the increased risks involved with single person operation. Particular attention is drawn to the following safety advice:

- *Users should carry out a risk assessment of the intended operations and take appropriate actions to reduce/mitigate the inherent risks that arise when nobody else is on-board to render assistance or to raise the alarm.*

- *When operating single handed, make sure an effective means of quickly re-boarding the boat is available in the event of a person overboard situation occurring, for example, a boarding ladder.*

- *Ensure that a designated person ashore is aware of your departure and return times, where you are going, and have a procedure in place to raise the alarm if necessary."*

2.10.4 MN No. 52 of 2023 was published[13] by the Department of Transport on 27 July 2023 and is titled "Think and Prepare - Important safety advice for owners and users of recreation craft" (see Appendix 7.4 - Marine Notice No. 52 of 2023). This was directed to the owners and users of recreational craft and contains essential information and guidance. Of particular relevance to this investigation is the following content:

12. https://www.gov.ie/pdf/?file=https://assets.gov.ie/100596/64f994c1-816c-4e92-8135-6bc9f45c9c74.pdf#page=null

13. https://www.gov.ie/pdf/?file=https://assets.gov.ie/265723/5489b3cd-1103-4bff-b1ae-d0c9d4c1d11e.pdf#page=null

" ✓ *Get training from an approved training provider in the correct use of the type of craft you wish to use;*

✓ *Wear a suitable Personal Flotation Device/Lifejacket: Know about the legal requirements in relation to the wearing and carrying of Personal Flotation Devices/Lifejackets and the need for the proper care and maintenance of such devices. Select the proper type based on activity or boating conditions. See Marine Notice No. 32 of 2019 for further information;*

✓ *Check current weather forecasts and sea/lake/river conditions prior to departure and plan your voyage accordingly;*

✓ *Check for any hazards and risks and Prepare a Passage Plan;*

✓ *Avoid operating alone: There are increased risks involved with single person operation when there is nobody else on board or nearby to help you or to raise the alarm. Make sure you have an effective means of quickly re-boarding the boat in the event that you fall overboard;*

✓ *Carry out Pre-Departure Safety Checks and Briefing: Check your craft and safety equipment. All persons on board should know what to do in the event of an emergency, where the safety/emergency equipment is on board, e.g. flares, radio equipment, life jackets, etc., and how to use the equipment;*

✓ *Tell someone about the plans for your trip: A designated person ashore should know your departure and return times, where you are going, and what to do to raise the alarm if necessary;*

✓ *Bring a dependable means of communication: VHF radio equipment is the recommended method of communication and craft users should be familiar with its use, reference Marine Notice No. 70 of 2022. Mobile phones should not be relied on and should only be considered as a back-up means of communication. Where mobile phone use is proposed, the phone should be in a waterproof pouch with a lanyard, be fully charged at all times and the signal strength and charge indicator should be regularly checked while the vessel is underway;*

✓ *Emergency Beacons: Consider having a Personal Locator Beacon (PLB) or an Emergency Position Indicating Beacon (EPIRB) as appropriate. See Marine Notice No. 25 of 2010 as amended, Marine Notice No. 38 of 2013 and Marine Notice No. 70 of 2022 for further information, including in relation to registration of PLBs and EPIRBs;*

✓ *Do not consume alcohol or drugs before or during a trip: When operating a recreational craft, a person must not be under the influence of alcohol or drugs or any combination of drugs or of drugs and alcohol;*

✓ *Be aware of and recognise the symptoms of fatigue: Get proper sleep and rest before your journey;*

- ✓ *Relax and float: If you fall into the water, the initial shock of being in cold water can cause you to gasp and panic. Stay calm and relax. Try to float or tread water while you catch your breath. A properly fitted lifejacket will keep your head above water, ensuring you gasp air. Try to get hold of something that will help you float and get as much of your body out of the water as possible. To lessen heat escape, keep your legs together with arms/elbows by your side. Once you are calm, call for help;*

- ✓ *Wear suitable clothing and footwear;*

- ✓ *In a marine emergency, raise the alarm on VHF Channel 16 or call 999 or 112 and ask for the Coast Guard."*

2.11 Water Safety Regime in Ireland

The Department of Transport

2.11.1 The Department of Transport's approach to the safety of recreational craft is described in the Irish Maritime Directorate Strategy 2021–2025[14] and includes work on policy development, statutory regulation, safety awareness promotion and enforcement. The Department of Transport publishes the MNs. The Department of Transport published the CoP and they have commenced a review and updating of this, which remains ongoing.

Water Safety Ireland

2.11.2 WSI is a statutory body[15] that was established in 2019 under the aegis of the Department of Rural and Community Development. It has a statutory role that includes the promotion of both public awareness of water safety and measures to prevent accidents in water, and is defined in legislation as involving the following:

"4. (1) The Body shall provide the following services for or on behalf of the Minister:

(a) the promotion of public awareness of water safety;

(b) the promotion of measures, including the advancement of education, related to the prevention of accidents in water;

(c) the provision of instruction in water safety, rescue, swimming, resuscitation and recovery drills;

(d) the promotion of efficiency of the service provided by lifeguards, including enhancing the standard of lifesaving through the promotion and

14. https://www.gov.ie/en/publication/a7b8d-irish-maritime-directorate-strategy-2021-2025
15. S.I. No. 56 of 2019, Water Safety Ireland (Establishment) Order 2019.
Source: https://www.irishstatutebook.ie/eli/2019/si/56/made/en/print

development of lifesaving to international standards;

(e) the establishment of, and provision of training in, national standards for lifeguards, lifesaving and water safety;

(f) the provision of instruction, training, assessment and certification in aquatic rescue for boat crews of independent voluntary community organisations for the time being known as the "Community Rescue Boats Service" and other organisations involved in aquatic rescue."

2.11.3 WSI's website[16] has specific guidance for boating, which includes 14 steps to safe boating, stated as follows:

" 1. Check condition of boat and equipment, hull, engine, fuel, tools, torch.

2. Check the weather forecast for the area.

3. Check locally concerning dangerous currents, strong tides.

4. Do not drink alcohol while setting out or during your trip.

5. Carry an alternative means of propulsion e.g. sails and oars or motor and oars.

6. Carry a first aid kit on board and distress signals (at least two parachute distress rockets, two red hand flares).

7. Carry a fire extinguisher, a hand bailer or bucket with lanyard and an anchor with rope attached.

8. Carry marine radio or some means of communication with shore.

9. Do not overload the boat - this will make it unstable.

10. Do not set out unless accompanied by an experienced person.

11. Leave details of your planned trip with someone ashore - including departure and arrival times, description of boat, names of persons on board, etc.

12. Wear a lifejacket at all times.

13. Keep an eye on the weather - seek shelter in good time.

14. In Marine Emergencies, call 999 or 112 and ask for the coast guard."

16. www.watersafety.ie/boating

2.11.4 WSI has published specific guidance[17] for those going afloat for recreational angling, highlighting the importance of safety measures, including those that had relevance for the casualty's trip afloat:

- Trip planning and contingency planning;
- Being prepared to change your plans or cancel the trip in the event of bad weather;
- Never going alone;
- Telling someone where you are going; always wearing a PFD;
- The provision of a boarding ladder to get back onboard; and,
- A means of communicating with the emergency services.

2.12 Personal Flotation Devices

2.12.1 A person going afloat in a recreational craft operated in Irish waters has statutory obligations[18] in relation to the wearing of a PFD, as described in Pleasure Craft (Personal Flotation Devices and Operation) (Safety) Regulations 2005 (Statutory Instrument (S.I.) No. 921 of 2005) as amended. These obligations applied to the Casualty during this incident.

2.12.2 Regulation 3(1) describes how:

"These Regulations apply to pleasure craft being operated in Irish waters and to—

(a) any person on board such craft, and

(b) any person being towed by such craft or on board a vessel or object of any kind, being towed by such craft..."

2.12.3 A buoyancy aid is a form of PFD which, if designed to the relevant standards, may be used by adults, and children with a body mass greater than 25 kg, to provide a minimum of 50 Newtons (N) of buoyancy[19]. A buoyancy aid is not a lifejacket. A buoyancy aid requires active participation by the user, therefore they are only

17. https://watersafety.ie/wp-content/uploads/2021/03/Angling-Safety-Guidelines-2021.pdf

18. The legislation on the mandatory wearing of Personal Flotation Devices:

https://www.gov.ie/en/publication/c1a570-lifejackets-and-personal-flotation-devices/#:~:text=400%20of%202018.,use%20of%20alcohol%20and%20drugs.

•. Pleasure Craft (Personal Flotation Devices and Operation) (Safety) Regulations 2005 (S.I. No. 921 of 2005) as amended by;

•. Pleasure Craft (Personal Flotation Devices and Operation) (Safety) (Amendment) Regulations 2012 (S.I. No. 349 of 2012) and further amended by;

•. Pleasure Craft (Personal Flotation Devices and Operation) (Safety) (Amendment) Regulations 2018 (S.I. No. 400 of 2018).

19. EN ISO 12402-5, Personal flotation devices - Part 5: Buoyancy aids (level 50) - Safety requirements.

intended for use by someone who can swim, where help and rescue are close at hand. A buoyancy aid will not hold the face of an unconscious wearer clear of the water and it does not have sufficient buoyancy to protect a person who is unable to help themselves. A buoyancy aid is not intended to keep the user safe in the water for a long period of time.

2.12.4 A lifejacket is a form of a PFD which, if designed to the relevant standards, may be used by adults, children and infants to provide 150 N of buoyancy[20]. A lifejacket of 150 Ns is intended for general offshore or rough water use, or when the user is fully clothed. Such a lifejacket: may be suitable for use in tidal waters or when foul weather clothing is being worn; where the user may not be capable of helping themselves due to injury or exhaustion; is intended for use by swimmers and non-swimmers of any age; and, are designed to turn most unconscious wearers face-up in water however, performance may be affected if the user is wearing heavy and/or waterproof clothing.

2.13 Cold Water Immersion

2.13.1 Cold water is defined[21] as water of 15°C or less. On the day of this casualty event, the water temperature was cold, at 14°C. There are known dangers associated with sudden immersion in cold water, and the effects of prolonged exposure to cold water. Without a PFD, cold incapacitation can lead to death by drowning as the individual loses the ability to maintain their airway above the water.

2.13.2 Summarised below are important aspects from Chapters 4 and 6 of Essentials of Sea Survival dealing with the critical effects on the human body of the initial and short-term responses that occur following immersion in cold water, before the long-term onset of hypothermia:

- The initial response is known as cold shock. The cold water causes a sudden lowering of skin temperature, which has a significant effect on a person's circulation and breathing. The body's responses commence almost immediately upon immersion, peaks during the first 30 seconds, and lasts for two to three minutes. This effect is believed to be responsible for the majority of immersion deaths in cold water, not the later onset of hypothermia.

- The initial changes to the circulation system occur because of constriction of the skin's blood vessels. This increases the resistance to blood flow in the skin. Blood pressure rises dramatically. The heart works harder as it tries to pump blood through constricted blood vessels.

- In cold water an initial breathing gasp of up to two or three litres (lts) – close to the total lung capacity for an adult – is followed by uncontrollable rapid

20. EN ISO 12402-3, Personal flotation devices - Part 4: Lifejackets, performance level 150 - Safety requirements.
21. F. StC. Golden & M. J. Tipton (2002) Essentials of Sea Survival, Human Kinetics, Champaign, Illinois.

over-breathing (hyperventilation). The rapid over-breathing can result in a ten-fold increase of the volume of gas entering and leaving the lungs each minute, which can cause dizziness and confusion, and can create a sensation of breathing difficulty or suffocation. These are physiological effects that can contribute to the feelings of panic experienced by a person.

- The reduction in breath-hold time that occurs after initial immersion in water is a major danger for a person who is otherwise fit and healthy. While a person may normally be able to hold their breath on average for over one minute, this reduces to less than ten seconds upon immersion in cold water. Consequently, in choppy or turbulent water where small waves may intermittently submerge the head or airway, a person is at risk of inhaling water during the first few minutes until they can regain control over their breathing. Breath-holding to facilitate escape from a capsized or submerged vessel may be difficult and can result in entrapment and drowning. Near drowning can occur after someone has inhaled only a small volume of water, of 0.25–0.5 lts for an average individual, which is a particularly small volume when compared with breathing volumes of over 150 lts recorded in the first minute after immersion in cold water.

- Many of the activities that are critical to survival require effective use of the hands. However, in some cases as short as just minutes, the ability to use the hands is impaired in cold water as they, and the muscles in the forearms that help control them, experience cooling. This can lead to a significant decrease in manual dexterity, handgrip strength, and speed of movement. This loss of ability can have serious consequences for activities such as righting or re-entering a recreational vessel, manipulating the inflation valve of a lifejacket or activating a manually-inflating lifejacket, tightening straps, locating a whistle and other survival aids, holding onto a flotation aid or activating a signalling device such as a flare.

- Having survived the initial responses, those without a flotation aid will have to make swimming movements to remain afloat or swim to a safe refuge, but it has been shown to be extremely difficult to swim during the first minutes after immersion in cold water, even for those considered to be “good” swimmers in warm water, even to save their lives.

- As buoyant air within the clothing gradually escapes from within the fabric the person experiences a lowering in the water, which requires them to try and lift the head higher out of the water to breathe, which can further exacerbate the effects. Even small waves on the surface can have the effect of bringing the mouth close to water, thereby tending to cause inhalation of water.

- Rescuers have described how the sound of a rescue boat’s arrival sometimes prompts a person in the water to wave, but this can disturb the air trapped in and under clothing, which further reduces the person’s buoyancy in the water. A person who finds themselves immersed in water should try and remain as

motionless as much as possible.

2.13.3 The Royal National Lifeboat Institution's (RNLI) guidance[22] on the steps to take in the event of someone finding themselves in water in an emergency situation is shown in Figure 10, and is to apply their 'Float to Live' principles, to:

"1. Tilt your head back - with ears submerged.

2. Relax - and try to breathe normally.

3. Move your hands - to help you stay afloat.

4. It's OK if your legs sink - we all float differently.

5. Spread your arms and legs - to improve stability".

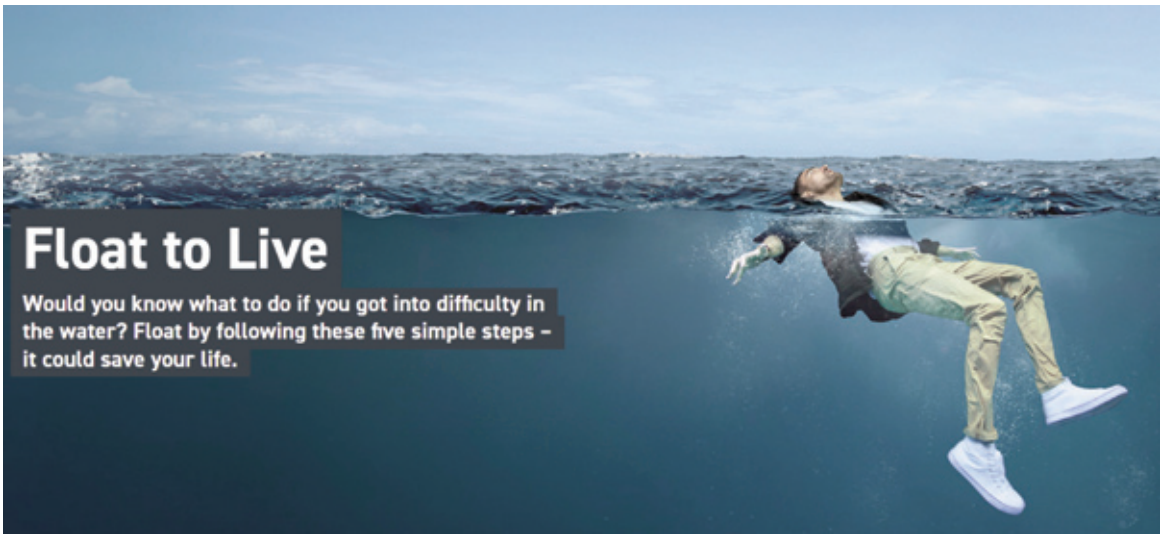

Figure 10: The RNLI's guidance on the posture to adopt by someone in difficulty in the water.

2.14 Water Safety Training

2.14.1 Irish Sailing is recognised by the Irish Sports Council as the National Governing Body for powerboating, which includes the recreational motor boat that was being operated by the Casualty. Irish Sailing is a non-statutory body and has no legislative power to enforce standards of conduct.

2.14.2 The National Powerboat Training Scheme operated by Irish Sailing includes the National Powerboat Certificate[23]. This award aims to develop the skills and knowledge necessary for a person to safely, and effectively, operate an open powerboat, by day, on inland and coastal waters with which they are familiar. The Casualty was not the holder of the National Powerboat Certificate.

22. https://rnli.org/safety/float
23. www.sailing.ie/Portals/0/National-Powerboat-Certificate.pdf

2.14.3 A person who has obtained the National Powerboat Certificate has received comprehensive training, in theory and practice, of the following important skills:

- Preparation for going afloat safely, including:
  - Selecting a PFD appropriate to the activity and how to correctly wear it.
  - Selecting clothing to wear while afloat.
  - Preparation of a boat for use, including use of mooring lines, boat hook, bilge-pump, bailer, paddles or oars.
  - Identifying and implementing national legislation, international regulations, local regulations and bye-laws.
- Boat handling, including:
  - Launching and recovering a boat, including how to effectively launch and recover a powerboat from a slipway using a road trailer.
  - Navigating a vessel and applying international navigation rules.
  - Maintaining a powerboat away from a fixed or moored object, while allowing for the effects of wind and current.
  - Leaving and coming alongside, including a mooring or pier, use of mooring lines cleats, any likely hazards associated with this manoeuvre.
  - Securing to a mooring buoy, including picking up a mooring, using a boat hook to recover a mooring buoy, making fast to a mooring, and releasing from a mooring.
  - Anchoring, including determining whether or not the anchor is holding.
  - Towing vessels.
- Safety afloat, including:
  - Man-overboard; summoning assistance in an emergency; what actions might be taken in the event of a capsize.
  - Dealing with a person overboard in the water, including how to manoeuvre the boat up to the person and then recover them into the boat, and how to manage the situation after the person has been recovered.
- Nautical knowledge, including:
  - How weather affects powerboating activities; how to identify sources of weather forecasts; how to interpret a weather forecast with regard to planned activities.

- Coastal knowledge, including the effects of tides in powerboating activities.

- Understanding the different types of powerboat craft, the advantages and disadvantages of their different hull forms, with regard to use and ability afloat.

- Ropework including how to fasten a line to a cleat and anchor, how to stow a line, and the use of common knots.

3. NARRATIVE

3.1 Background

3.1.1 The Casualty was alone in his vessel and this incident was not witnessed by anyone else. The following narrative has been compiled from the information provided by the Casualty's family and the members of the public who came upon the incident and notified the emergency services.

3.2 The Preceding Events

3.2.1 The Casualty left his home that day at approximately 06.30 hrs and drove the short distance to Bruckless Pier. His intention was to go out onto his motor boat to prepare it to be taken out of the water that evening for the end of the boating season. High water that morning was at approximately 05.40 hrs, with the next high water occurring that evening at approximately 17.55 hrs. He had planned to make use of that evening's high water to take the boat out of the water, to be done at approximately 18.45 hrs when assisted by a family member. As part of this, he moved his boat off its normal mooring and placed it on another mooring closer to the pier, approximately 50 m offshore. This other closer mooring had been in place for a number of years and was known to be an effective mooring.

3.2.2 At 08.00 hrs, the Casualty arrived back at his house, soaking wet. He explained that the battery had gone flat on the electric motor for his dinghy tender and that he had got wet from heavy rain. He had breakfast, did some tasks with his boating equipment, and helped with his family.

3.2.3 The Casualty made his way back to the pier at approximately 10.40 hrs. He had received a phone call from another recreational boater who had noticed that the Casualty's boat was not in its normal position.

3.2.4 The Casualty was still at the pier at approximately 13.00 hrs when another recreational boater visited. They talked for approximately 30 minutes. The Casualty stayed on at the pier for some time but had returned home by approximately 15.30 hrs.

3.2.5 The Casualty's movements between 15.30 hrs and 16.30 hrs are unknown but at some stage during this one-hour period he returned to Bruckless Pier and launched his dinghy tender to go out to his motor boat again.

3.3 The Casualty Events

3.3.1 The casualty events are the MOB and the owner's loss of life.

3.3.2 At 16.30 hrs, another boat owner arrived at the pier to check on his own motor boat as there were strong winds blowing. He saw that the Casualty's van was parked in an unusual position, largely blocking the roadway to the slipway, which was unusual for any vehicle but especially for the Casualty, who he knew as someone who would normally park in a very considerate manner. He then noticed that there was a capsized dinghy tender alongside the Casualty's motor boat. The capsized dinghy tender was largely submerged, upright in the water with only the bow projecting above the water.

3.3.3 He put on his own PFD and launched in another dinghy tender (of the same type as the Casualty's, see Figure 11) and rowed out to the Casualty's motor boat. The conditions were very challenging for him. He initially tried to approach the motor boat from upwind, but was blown downwind behind the boat. He struggled to row back up against the wind and swell.

Figure 11: The dinghy tender used by the other boat owner to reach the Casualty's vessel.

3.3.4 He came alongside the Casualty's motor boat and boarded it. He immediately noticed that there was nobody onboard; that the engine was running in idle; and that the boat hook was in his way, loose on the deck.

3.3.5 He thought that perhaps the Casualty had fallen into the water while attempting to climb from the motor boat back into the dinghy tender, but with the strong wind and rough sea state he felt that this was highly unlikely, as the conditions were so obviously hazardous that he himself would not have attempted to reboard the dinghy tender.

3.3.6 He noticed that the openable front window on the motor boat's cabin was locked, indicating to him that the Casualty had not attempted to access the bowline (that attached the motor boat to its mooring buoy) by reaching or climbing out onto the foredeck through the window.

3.3.7 There was a tangle of line in the water between the Casualty's motor boat and the capsized dinghy tender. He pulled on this line and found that the resistance was initially strong but then became weak quite quickly. It was soon after this that he saw the Casualty's body floating on the surface of the water between the boat and the shore. He believes that the Casualty had been in amongst this line but had floated free when the line was pulled.

3.3.8 He cut away the lines that attached the capsized dinghy tender to the motor boat. He used the boat hook to take in the bowline that secured the boat to its mooring buoy. He struggled with this, having to lean out over the gunwhale to hook the line and then take it in to allow him to untie it, while trying to account for the strong wind and swell. He secured his dinghy tender to this mooring.

3.3.9 He untied the Casualty's motor boat from the mooring and then drove the motor boat to the shore to take onboard a person who had come to the pier to help. Together, they motored over to the Casualty's body in the water and retrieved him into the boat (see Figure 12). This was at approximately 17.00 hrs.

Figure 12: Bruckless Harbour, highlighting the approximate positions where the Casualty's vessel was moored and the Casualty was recovered from the water.

3.3.10 He noticed an abrasion on the Casualty's forehead and a red mark above his left eye, but he was aware that the body had floated onto the shore in the wind, up against the rocks, and he believes this is what had caused this mark.

3.3.11 They started CPR in the motor boat as they motored towards the pier. The sea state was rough and they had difficulty bringing the boat alongside the pier. They were assisted at the pier by two other members of the public who had been called to the pier to help.

3.3.12 At the pier at 17.15 hrs was a member of AGS and a crewmember from R118 who continued CPR until 18.19 hrs.

4. ANALYSIS

4.1 Fall Overboard

4.1.1 On the day of this casualty event, the Casualty's intention was to remove his motor boat from the water at the end of the boating season. To carry out this task, he had arranged to meet a family member at the pier at high water at approximately 18.45 hrs. The Casualty was afloat alone in his motor boat in the one-hour period between 15.30 hrs and 16.30 hrs. As the Casualty was operating alone, it has not been possible to establish the exact circumstances leading up to this casualty event, therefore the most probable sequence of events are as follows.

4.1.2 The motor boat was on a mooring that had been used before and that remained in its normal position after this casualty event. Although the incoming tide and strong winds were acting on the vessel and mooring, it is unlikely that the Casualty needed to board the vessel in an attempt at halting the vessel from dragging its mooring.

4.1.3 The Casualty had successfully disembarked from the dinghy tender into the motor boat. There were minor items of work that could have been done on the vessel to prepare it for being removed from the water in two to three hours' time, such as preparing loose items of equipment to be removed, but this would not have required the full two to three hours timeframe that was available. It is also noted that the Casualty had been onboard earlier in the day to move the vessel closer to the pier.

4.1.4 The Casualty had started the vessel's outboard engine. If the Casualty's intention was to motor over to the pier, then the next step in the process would have been to access the vessel's bowline and untie it from the mooring buoy.

4.1.5 In its open-deck arrangement (without a forward cabin in place) there is unencumbered, direct access to the bowline from within this type of vessel. With the forward cabin in place on this vessel, access to the bowline first requires opening of the top-hung window, to reach for the bowline attached to a cleat out on the foredeck (see Figure 13). However, after this incident, the top-hung window was found to be locked, which indicates that the Casualty had not attempted to access the bowline in this standard manner. Alternatively, the Casualty may have attempted to use the vessel's boat hook to retrieve the bowline, which is likely to have required him to stand up and reach over the gunwhale to try and hook and then pull the bowline inboard.

4.1.6 Accessing the bowline through the top-hung window would have had less of an effect on the stability of either the vessel or the Casualty, than the somewhat awkward actions involved in standing up alongside the gunwhale and reaching over to hook and pull on the bowline, while taking account of wind and swell.

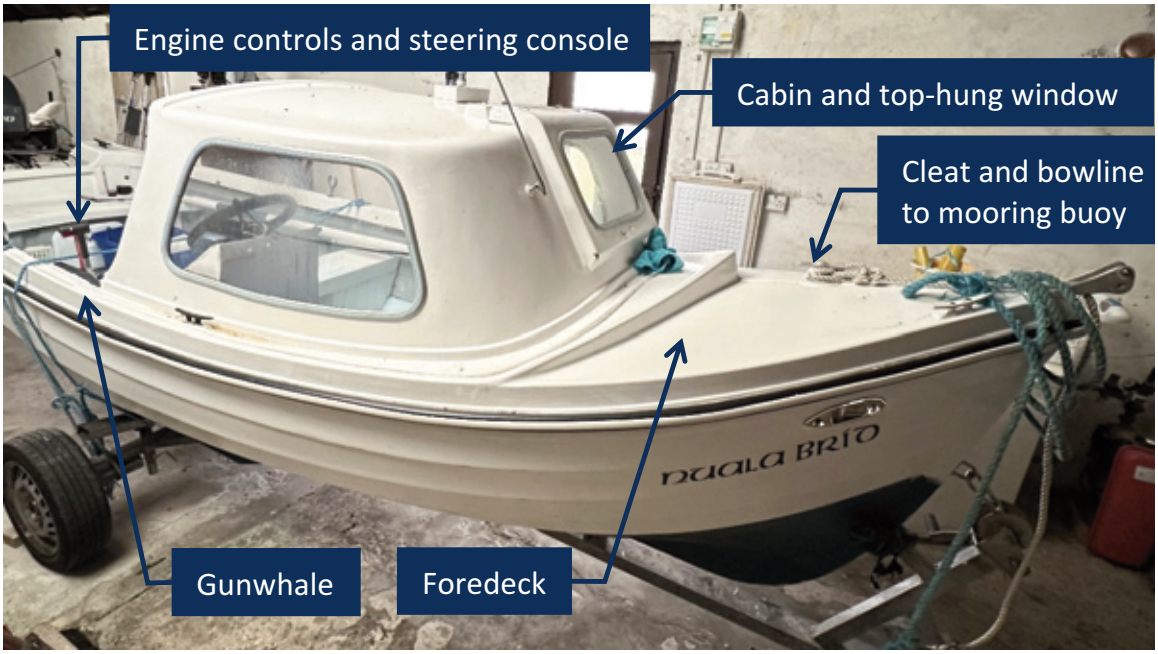

Figure 13: Overview of the main forward parts of the Casualty's vessel.

4.1.7 The dinghy tender was found in a capsized state alongside the motor boat. The most likely explanation for this capsize is that it occurred when the Casualty was attempting to climb out of the water, probably at the dinghy's transom, after falling overboard from the motor boat.

4.1.8 The MCIB's analysis indicates that a causal factor in this marine casualty event was the Casualty's fall overboard, occurring in the course of his actions on the vessel prior to untying the bowline from its mooring buoy.

4.2 Operating Alone

4.2.1 The Casualty was operating alone in his recreational motor boat. The increased risks associated with this were highlighted to recreational boat users in MN No. 58 of 2020, in response to investigation reports by the MCIB dealing with two separate fatal incidents in which persons were operating recreational motor boats alone, including the recommendations that:

"Users should carry out a risk assessment of the intended operations and to take appropriate actions to reduce/mitigate the inherent risks that arise when nobody else is on-board to render assistance or to raise the alarm"

When operating single handed, make sure an effective means of quickly re-boarding the boat is available in the event of a person overboard situation occurring, for example, a boarding ladder.

Ensure that a designated person ashore is aware of your departure and return

times, where you are going, and have a procedure in place to raise the alarm if necessary."

4.2.2 Similarly, MN No. 52 of 2023, published two months prior to this incident, highlighted to the owners of recreational craft to:

"Avoid operating alone: There are increased risks involved with single person operation when there is nobody else on board or nearby to help you or to raise the alarm. Make sure you have an effective means of quickly re-boarding the boat in the event that you fall overboard".

4.2.3 The MCIB's analysis indicates that operating alone while afloat was a causal factor in this marine casualty event.

4.3 Weather Conditions

4.3.1 The wind conditions – both forecasted and determined by post-incident analysis – match the experiences described by others who were present that day. The wind was from the southwest, as forecasted, which is the direction that Bruckless Harbour becomes exposed to wind because of the surrounding topography. The wind speed increased during the day to occasional force 6 and with strong gusts of up to 35 kts (65 km/h). A Small Craft Warning was in effect. These conditions were foreseeable prior to departure, using standard trip planning skills.

4.3.2 The MCIB's analysis indicates that these were challenging weather conditions in the circumstances and were a causal factor in this marine casualty event.

4.4 Cold Water Immersion

4.4.1 The Casualty fell into cold water, being only 14°C. There are known dangers associated with sudden immersion in cold water, and the effects of prolonged exposure to cold water, described authoritatively in Essentials of Sea Survival. Without a PFD, cold incapacitation can lead to death by drowning as the individual loses the ability to maintain their airway above the water.

4.4.2 When the Casualty entered the water, he is likely to have been subjected to the stress of: the cold water temperature; an effect on the circulatory and breathing systems; and, increasing difficulties with manual dexterity and maintaining an open airway above the waterline. These conditions are likely to have had an adverse effect on the Casualty.

4.4.3 The MCIB's analysis indicates that cold water immersion is likely to have been a causal factor in this marine casualty event.

4.5 Voyage Planning

4.5.1 There is no indication that the Casualty carried out any formal voyage planning process prior to going afloat. There are multiple, authoritative sources highlighting the importance of adequately planning each trip afloat, as, for example:

- The CoP recommends[24] that:

  "All voyages, regardless of their purpose, duration or distance, require some element of voyage planning…".

- MN No. 52 of 2023, published two months prior to this incident, highlighted to the owners of recreational craft to:

  "Check current weather forecasts and sea/lake/river conditions prior to departure and plan your voyage accordingly. Check for any hazards and risks and Prepare a Passage Plan".

- MN No. 30 of 2023, published five months prior to this incident, highlighted to the owners of recreational craft to:

  "…make sure that someone ashore knows the plans for the trip and knows what to do should they become concerned for the crews' wellbeing. Ensure a designated person/organisation ashore is aware of the intended voyage, departure and return times, and has a procedure in place to raise the alarm if the need arises. Communication: make sure to have reliable means of communication in the event of an emergency while at sea or on inland waters."

4.5.2 The MCIB's analysis indicates that a lack of adequate planning is likely to have been a contributory factor in this marine casualty event.

4.6 Water Safety Training

4.6.1 The Casualty's knowledge about the safe operation of recreational craft had been developed through his experience of going afloat. Section 2.1 of the CoP describes how:

"It is recommended that persons participating in sailboat and motorboat activities undertake appropriate training. A number of training schemes and approved courses are available and information can be obtained directly from course providers…"

4.6.2 The Casualty was not the holder of the National Powerboat Certificate, administered by Irish Sailing. This training scheme is designed to develop the

24. Code of Practice for the Safe Operation of Recreational Craft, Sections 2.2, 10.1.

skills and knowledge necessary for a person to safely, and effectively, operate an open powerboat, by day, on inland and coastal waters with which they are familiar. The scheme includes training and assessment of the following important skills:

- Preparation for going afloat safely, including:
  - Selecting a PFD appropriate to the activity and how to correctly wear it.
  - Preparation of a boat for use, including use of mooring lines.
  - Identifying and implementing national legislation, international regulations, local regulations and bye-laws.
- Safety afloat, including:
  - MOB; summoning assistance in an emergency; what actions might be taken in the event of a capsize.
  - How weather affects powerboating activities; how to identify sources of weather forecasts; and how to interpret a weather forecast with regard to planned activities.

4.6.3 The course curriculum for the National Powerboat Certificate includes guidance on how to avoid a person falling overboard, and practical training for the helm and crew as they recover a person from the water. The curriculum does not deal with the particular scenarios of:

- The overboard person being the helm of the vessel who is operating alone;
- The practical difficulties that can be experienced for an overboard person attempting unaided reboarding of a vessel; or,
- The risks, and potential control measures, associated with operating vessels that pre-date the introduction of modern design standards intended to both minimise the risk of falling overboard and to facilitate reboarding, which were introduced in 2013 by the EU Directive for Recreational Craft.

4.6.4 The MCIB's analysis indicates that a lack of formal water safety training is likely to have been a contributory factor in this marine casualty event.

4.7 Personal Flotation Devices

4.7.1 The Casualty was not wearing a PFD during this activity afloat on his recreational motor boat. The Casualty had also been afloat in his motor boat on another occasion earlier that day, during which he did not wear a PFD[25].

25. Source: Based on information provided by the Casualty's family.

4.7.2 A person going afloat in a recreational craft operated in Irish waters has statutory obligations in relation to the wearing of a PFD. These obligations applied to the Casualty during this incident.

4.7.3 The CoP provides the following specific guidance[26] in relation to the use of PFDs on sea angling boats such as the Casualty's boat, tendering to these when moored, and when launching from a slipway:

"Always wear a PFD when moving around the open deck; Recognise the dangers of moving about on the deck of a moving boat and always use suitable hand holds and the rails provided;"

"Crew must wear a PFD/lifejacket at all times for the operation of boarding the tender, transit to and boarding of the moored craft."

"… Note and follow any warnings or safety instructions posted by the owner of the slipway…".

4.7.4 As previously described, the wearing of a PFD is likely to have an important safety role in the event of sudden immersion in cold water.

4.7.5 Despite the regulatory framework in place, for the enforcement of the requirements of the Pleasure Craft (Personal Flotation Devices and Operation) (Safety) Regulations 2005, instances of non-compliance appear to persist. Although the Department of Transport continues to communicate MNs to inform maritime users of legislative requirements, including MN No. 32 of 2019, incidents involving pleasure craft continue to be observed in which the omission of a PFD is a factor.

4.7.6 The MCIB's analysis indicates that the omission of a PFD was a causal factor in this marine casualty event.

4.8 Emergency Equipment

4.8.1 The Casualty was not the owner of a PLB and was not carrying either a handheld marine VHF radio or a mobile phone in a waterproof pouch as a means of communicating with the emergency services.

4.8.2 A PLB is designed to be carried/worn by an individual so that, when correctly activated in an emergency situation, the PLB transmits a signal that is detected by satellite systems and then reported to the emergency services. Section 1.2.11.1 of the CoP describes how:

"…the wearing of a PLB by seafarers, particularly those boating alone, is recommended."

26. Sections 2.10, 10.1, 10.3, Code of Practice for the Safe Operation of Recreational Craft.

4.8.3 The Casualty's vessel was not fitted with a boarding ladder or an emergency ladder, or other means of reboarding in the event of someone falling overboard. Section 2.3 of the EU Recreational Craft Directive of 2013 describes how:

"Watercraft shall be designed to minimise the risks of falling overboard and to facilitate reboarding. Means of reboarding shall be accessible to or deployable by a person in the water unaided."

4.8.4 Section 10.1 of the CoP deals with tendering operations to moored craft, and recommends that:

"Suitable means of boarding the moored vessel should be provided, e.g. boarding ladder, access gates on railings, etc."

4.8.5 The construction of the Casualty's vessel pre-dates the introduction of the EU Recreational Craft Directive and its Regulations. There is no legal requirement for such vessels to be upgraded to current design standards simply because new standards came into effect. However, in Table E of the CoP, a "boarding ladder" is listed as one of the pieces of "Lifesaving and personal safety equipment" that is recommended on motorboats and sailboats that are intended to operate beyond the sheltered waters of tidal estuaries or inshore coastal waters adjacent to a safe harbour.

4.8.6 There were positions available on the transom of the Casualty's vessel and off the quarters that could have potentially facilitated the voluntary retrofitting of a fixed reboarding ladder (see Figure 14). Alternatively, there are multiple types of deployable emergency overboard ladders available commercially[27] that can be considered for retrofitting to a recreational vessel (see Figures 15 – 16).

Figure 14: Aft of the Casualty's motor boat, with space available for the potential retrofitting of a reboarding ladder or an emergency overboard ladder.

27. https://www.chmarine.com/chandlery/boarding-ladders/emergency-mob-ladders/

Figure 15: Examples of reboarding ladders for narrow width spaces.
Sources: https://www.trem.net/scaletta-pieghevole-per-specchio-di-poppa-723.html
https://www.plastimo-pro.com/65957-echelle-basculante-teles-3-marches-1

Figure 16: Examples of emergency overboard ladders to be fitted onto recreational craft.
https://www.chmarine.com/chandlery/boarding-ladders/emergency-mob-ladders/

4.8.7 The MCIB's analysis indicates that the absence of a means of reboarding the vessel was a causal factor in this marine casualty event.

4.9 Human Factors

4.9.1 The Casualty had been a long-term user of a medical device for the management of chronic back pain, known as a spinal cord stimulator. The Casualty had been advised by his medical specialists to avoid using the device when in bed or when doing physical activities, and the Casualty typically switched off the device when boating.

4.9.2 It has not been possible to determine:

- Whether the Casualty's spinal cord stimulator medical device had been in operation at the time of this incident; or
- What contribution the use, or non-use, of a spinal cord stimulator may have had to the particular circumstances of the Casualty falling overboard or being unable to exit the water into either of the vessels alongside.

4.9.3 The control measures that have been developed into recommended practices for safe boating[28] are based on the reasonably foreseeable circumstances that apply to typical boating scenarios. This does not include the special circumstances of a person who may be in need of a pain management medical device who is going afloat, which may create the need for additional control measures, in particular if operating alone.

28. Including the Code of Practice for the Safe Operation of Recreational Craft; Irish Sailing's National Powerboat Training Scheme; and, Water Safety Ireland's boating guidance.

5. CONCLUSIONS

5.1 The Casualty was operating alone in a recreational motor boat, in challenging weather conditions, when he fell overboard into cold water and drowned. He was not wearing a PFD, he had no means of contacting the emergency services, and he had not left notice of his intentions with a shore contact.

5.2 The Casualty's situation was noticed by the owner of another recreational motor boat who had arrived on the shore and went afloat specifically to ascertain the situation, despite this boat owner's awareness of how unsuitable the weather conditions were at that time for going afloat.

5.3 The Casualty's vessel had not been retrofitted with a means of unaided reboarding, either accessible to, or deployable by, a person in the water. The age of the Casualty's vessel meant that it predated the introduction of modern design requirements to both minimise the risk of falling overboard and to facilitate reboarding, which were introduced in 2013 by the EU Directive for Recreational Craft. There was no requirement for the Casualty, or the owner of any recreational vessel, to retrospectively assess their vessel against design standards introduced after the vessel's construction simply because new standards came into effect.

5.4 The MCIB's analysis of the available information indicates that the Casualty's overboard situation is likely to have occurred in the course of his actions on the boat prior to untying the vessel's bowline from its mooring buoy.

5.5 The circumstances of this incident mean that it has not been possible to determine exactly how the Casualty fell overboard and whether the Casualty's spinal cord stimulator medical device may have been a causal or contributory factor.

5.6 This marine casualty occurred because of a combination of the following causal and contributory factors:

1. A fall overboard into cold water.

2. Operating alone, in challenging weather conditions.

3. Lack of formal training and planning of the voyage.

4. Inadequate safety and emergency equipment, being the omission of: a PFD; a means of raising the alarm, either in-person by VHF, PLB or mobile phone in waterproof pouch or via a shore contact; and, a means of unaided reboarding of the vessel from the water.

6. SAFETY RECOMMENDATIONS

6.1 Preamble

6.1.1 The following safety recommendations are made having regard to: the findings from this investigation; the Marine Casualty Investigation Board's continued observation of a pattern to the repeated incidence of marine casualties in the recreational craft sector; and the recommendations in the Maritime Safety Strategy 2015–2019.

6.1.2 The Marine Casualty Investigation Board recognises the valuable input by the Department of Transport's Marine Survey Office in communicating information via Marine Notices, which are an invaluable source of information to recreational craft users. The question remains as to why there still appears to be limited compliance with the basic safety recommendations set out in Marine Notice No. 52 of 2023. The Marine Casualty Investigation Board is of the view that there is no point in recommending the issuance of another Marine Notice with similar or related content. The issues that may arise for consideration, which are outside the remit of the Marine Casualty Investigation Board, are those relating to communication and training.

6.1.3 The importance of training is recognised in the CoP:

"2.1 Training It is recommended that persons participating in sailboat and motorboat activities undertake appropriate training. A number of training schemes and approved courses are available and information can be obtained directly from course providers (see Appendix 9 for details of course providers)."

6.1.4 The Code of Practice for the Safe Operation of Recreational Craft has no regulatory remit and simply provides safety information and guidelines (albeit important ones). The training referred to is therefore voluntary, and it is unlikely that the current revisions to the Code of Practice for the Safe Operation of Recreational Craft will alter that. A further issue arises as to the nature of that training and whether there should be some sort of regime that requires recreational craft users to have engaged in basic safety training/awareness, similar perhaps to the online preliminary driving test assessment.

6.1.5 The Marine Casualty Investigation Board is not equipped to conduct any comparative study in respect of the content or efficacy of other European regimes for privately owned recreational/small vessels. There does not appear to be any single approach.

6.1.6 Water Safety Ireland is a body under the aegis of the Department of Rural and Community Development. It has a statutory role that includes the promotion of both public awareness of water safety and measures to prevent accidents in water. It was established by S.I. No. 56/2019 - Water Safety Ireland

(Establishment) Order 2019[29]. Section 4(1) of the Order sets out mandatory obligations and section 4(2) sets out additional functions that Water Safety Ireland may carry out. Section 4 (1) sub sections (a), (b), (c) and (e) mandate its functions in respect of education awareness and training (it is also enabled to licence trainers)[30].

6.1.7 The Marine Casualty Investigation Board recognises the valuable work carried out by Water Safety Ireland and acknowledges the difficulties in effecting behavioural change, and the limitations of regulation in some respects. It is, however, relevant to have regard to the powers of the Minister for Transport who has the statutory power to introduce legislation in accordance with Section 20 of the Merchant Shipping Act 1992 (as amended by the 2000 Act) which can:

"(2)(e) provide for the registration of specified classes of pleasure craft[31] and the licensing or certification of masters or persons in control of or operating pleasure craft or specified classes of pleasure craft,

(2)(f)(i) regulate the use of pleasure craft or specified classes of pleasure craft by reference to the age or other qualifications of masters or persons in control of or operating pleasure craft or pleasure craft of a specified class,"

6.1.8 The Recommendations made below to the Minister for Transport and to Water Safety Ireland are made having regard to the above.

6.2 Recommendations to the Minister for Transport

The Minister for Transport should:

a. Include in the Code of Practice for the Safe Operation of Recreational Craft:

   i. Further guidance on the importance of ensuring the fitting and use of a boarding ladder and/or overboard ladder on recreational craft, especially for craft that pre-date the implementation of the European Union Directive on Recreational Craft.

   ii. Guidance on hazard identification, analysis, evaluation and the implementation of control measures.

29. https://www.irishstatutebook.ie/eli/2019/si/56/made/en/print

30. "4. (1) The Body shall provide the following services for or on behalf of the Minister:

(a) the promotion of public awareness of water safety;

(b) the promotion of measures, including the advancement of education, related to the prevention of accidents in water;

(c) the provision of instruction in water safety, rescue, swimming, resuscitation and recovery drills;…

(e) the establishment of, and provision of training in, national standards for lifeguards, lifesaving and water safety;"

31. "(6) In this section 'pleasure craft' means vessels used otherwise than for profit and used wholly or mainly for sport or recreation but includes mechanically propelled vessels that are on hire pursuant to contracts or other arrangements that do not require the owners of the vessels to provide crews or parts of crews for them."

b. Maintain the ongoing communication strategy aimed at conveying to recreational craft operators the critical significance of all owners and users acquainting themselves with, and adhering to, the Code of Practice for the Safe Operation of Recreational Craft. Emphasis should also be placed on the importance for individuals to wear a Personal Flotation Device in situations where a potential risk of falling into the water exists.

c. Consider the development of a comprehensive communications strategy to effectively disseminate the information outlined in Marine Notice No. 32 of 2019 to all recreational craft users. This may involve the reissuance and reinforcement of the content in Marine Notice No. 32 of 2019.

d. Review the effectiveness of the lifejacket enforcement regime and consider ways in which inspections for the mandatory wearing of lifejackets can be increased.

e. Consider the introduction of basic safety training for operators of marine leisure vessels. Such basic training could cover the safety features set out in Marine Notice No. 52 of 2023, including the use of lifejackets, sea survival techniques, voyage planning, use of engines and actions to take in emergency situations.

6.3 Recommendations to Water Safety Ireland

Water Safety Ireland should:

a. Consider actions to further promote both public awareness of safe boating and measures to prevent related accidents, in particular to those members of the public who use recreational craft on their own without involvement in any local club or group.

b. Consider whether research should be carried out to assess, if possible, whether the introduction of some form of regulated training (which would be a matter for the Minister for Transport) would improve basic safety education.

c. Consider whether there is merit in a specific campaign on supporting the fitting and use of a boarding ladder and/or overboard ladder on recreational craft, especially for craft that pre-date the implementation of the European Union Directive on Recreational Craft.

6.4 Recommendations to Irish Sailing

Irish Sailing should consider the introduction of specific guidance within the curriculum of the National Powerboat Training Scheme dealing with the hazards for persons operating a powerboat alone, such as the particular scenarios of:

a. A vessel being operated by someone who is alone and falls overboard;

b. The difficulties that can be experienced for an overboard person attempting an unaided reboarding of a vessel;

c. The risks, and potential control measures, associated with vessels that pre-date the implementation of the European Union Directive on Recreational Craft.

7. APPENDICES

Appendix 7.1 Met Éireann (Pre-Incident) Weather Forecast

Met Éireann

24-hour Sea Area Forecast

Updated at 0000 / 0600 / 1200 / 1800

Sea Area Forecast until 1200 Friday, 29 September 2023
Issued at 1200 Thursday, 28 September 2023

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

2. Meteorological situation at 0900: Low pressure of 983hPa to the northwest of Ireland extends a complex trough with several embedded fronts southeast over Ireland, all moving east during the forecast period.

3. Forecast for Irish coastal waters from Slyne Head to Malin Head to Wicklow Head and for the Irish Sea

Wind: Southwest force 6 or 7, soon becoming westerly force 6 or 7.

Weather: Cloudy with rain or showers, possibly heavy.

Visibility: Decreasing moderate in precipitation.

Forecast for Irish coastal waters from Wicklow Head to Mizen Head to Slyne Head.

Wind: Southwest force 6 or 7, soon becoming westerly force 5 or 6. Later becoming westerly force 4 or 5.

Weather: Cloudy with showers.

Visibility: Decreasing moderate in showers.

Warning of Heavy Swell: Nil

4. Outlook for a further 24 hours until 1200 Saturday 30 September 2023: Moderate to fresh westerly winds becoming southerly but light and variable in the east Friday night. Strong to gale force southerly winds developing early Saturday morning. Weather: Fair with isolated showers. Rain developing in the south Saturday morning.

Appendix 7.1 Met Éireann (Pre-Incident) Weather Forecast

Met Éireann

Text of Gale Warning
Nil

Text of Small Craft Warning
1. South to southwest winds, veering southwest to west, will reach force 6 or higher on Thursday on all Irish coasts. 2. Westerly winds will reach force 6 or higher on Thursday night on Irish coasts from Valentia to Rossan Point to Fair Head.

Coastal Reports	11 AM Thursday, 28 September 2023
Malin Head Automatic	South, 25 Knots, Gust 35 Knots, Fair, 15 Miles, 1001, Falling slowly
Dublin Airport	South, 11 Knots, Cloudy, 13 Miles, 1007, Steady
Buoy M5 51° 41'N 6° 42'W	South, 17 Knots, Wave ht: 3.3 m, The visibility at Tuskar is greater than 10 Miles, 1009, Steady
Roches Point Automatic	South, 17 Knots, Gust 27 Knots, Recent drizzle, 4 Miles, 1007, Steady
Sherkin Island Automatic	South, 20 Knots, Recent rain, 5 Miles, 1005, Steady
Valentia Automatic	South-Southwest, 16 Knots, Gust 30 Knots, Rain shower, 4 Miles, 1003, Falling slowly
Mace Head Automatic	South, 28 Knots, Gust 35 Knots, Cloudy, 5 Miles, 1000, Falling slowly
Belmullet Automatic	South-Southwest, 24 Knots, Gust 41 Knots, Hvy rain shower, 1.0 Miles, 999, Steady
Buoy M1 53° 8'N, 11° 12'W	Report not available
Buoy M2 53° 29'N, 5° 26'W	South-Southwest, 25 Knots, Wave ht: 2 m, 1007, Steady
Buoy M3 51° 13'N, 10° 33'W	South, 19 Knots, Wave ht: 3.5 m, 1004, Steady
Buoy M4 55° 0'N 10° 0'W	South-Southwest, 26 Knots, Gust 37 Knots, Wave ht: 3.9 m, 996, Falling slowly
Buoy M6 53° 4'N 15° 56'W	West-Southwest, 26 Knots, Gust 36 Knots, Wave ht: 5.1 m, 993, Rising slowly

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

Sea Crossings	State of sea until 1200 Saturday 30 September 2023
Dublin - Holyhead	Moderate
Rosslare - South Wales	Moderate
Cork - South Wales	Moderate to rough
Rosslare - France	Moderate to rough
Cork - France	Rough to very rough
Rosslare – Spain	Rough to very rough

Next update before 1900 Thursday, 28 September 2023

Appendix 7.2 Met Éireann (Post-Incident) Weather Report

Met Éireann
The Irish Meteorological Service
Climate Services
Glasnevin Hill
Dublin 9

Seirbhísí Aeráide
Cnoc Ghlas Naíon
Baile Átha Cliath 9

Tel: +353-1-8064260
Email: legal@met.ie

Our Ref: WS1730/2403_2
Your Ref: MCIB/12/332

WEATHER REPORT

Estimated weather conditions in the vicinity of Bruckless Pier area, County Donegal (approximate position 54.632, -8.388) for the 6-hour period (10:00 – 16:00 UTC) on the 28th September 2023.

Meteorological Synopsis: A complex area of low pressure to the north of Ireland directed a south-southwesterly airflow over the country on the 28-September-2023. An active and slow-moving cold front affected Donegal during the period in question.

Wind:

Hour	Wind Description & Beaufort Force	Wind Direction	Mean Wind Speed (knots)	Maximum Gust (knots)
10-16 UTC	Moderate to Fresh force 4 or 5 occasionally Strong force 6	S to SW	10 - 25	35

Weather: A band of rain reached the area around 12noon UTC and tracked eastwards across the area with heavy downpours from around 13:00 to 16:00 UTC.

Estimated rainfall total for the entire day (from midnight to midnight): 6 to 10mm, most of which fell in the afternoon.

Visibility: Visibility was moderate to poor in heavy rain, otherwise visibility was good.

Temperature: Air temperature: 13-16 degrees Celsius.

Sea temperature: 14 degrees Celsius

This report was issued on: 08 March 2024

Appendix 7.3 Marine Notice No. 58 of 2020

An Roinn Iompair
Department of Transport

Marine Notice No. 58 of 2020

Notice to all Notice to all Masters, Owners, Boating Clubs and Users of Pleasure and Recreational Craft.

Two separate fatal incidents involving recreational fishing by persons operating alone

The purpose of this Marine Notice is to draw the attention of all masters, owners, boating clubs and users of pleasure and recreational craft to the Code of Practice for the Safe Operation of Recreational Craft in response to Marine Casualty Investigation Board (MCIB) recommendations contained in two recent MCIB reports concerning separate marine casualties. The full reports into fatal incidents on Lough Mask, Co. Mayo (Report No. 287), and in Dunmanus Bay, West Cork (Report No. 294), may be viewed on the website of the MCIB at mcib.ie.

The Code of Practice for the Safe Operation of Recreational Craft is a valuable source of information, advice and best practice guidance for owners, masters, operators and users of a range of pleasure and recreational craft operating in Irish coastal and inland waters. Part A of the Code of Practice outlines the legislative requirements that apply to all recreational craft or specific types or size of craft. Owners and operators must comply with the requirements appropriate to their craft. Part B contains recommended guidelines and best practice for safe operation. This includes Chapter 2, Coastal Operation of Sail and Motor Boats, and Chapter 3, Operation of Sail and Motor Boats on Inland Waterways. Section 2.10 of Chapter 2 contains specific advice relating to sea angling boats while section 3.4 of Chapter 3 contains advice on boat angling on inland waters.

The Department would like to remind the operators of recreational craft of the following advice and recommendations:

- The importance of abiding by the legal requirements in relation to the wearing and carrying of Personal Flotation Devices/Lifejackets. It is a statutory requirement to wear a Personal Flotation Device (PFD) when on board an open craft of less than 7 metres in length overall or whilst on deck onboard a decked craft of less than 7 metres in length overall. Wearing a PFD will increase your chance of survival in the event of entering the water. Please see Marine Notice No. 32 of 2019 (Personal Flotation Device for Pleasure Craft and Personal Watercraft) for further information.

Appendix 7.3 Marine Notice No. 58 of 2020

- The importance of checking current weather forecasts and sea / lake /river conditions prior to departure and to plan your voyage accordingly (see Appendix 6 (Weather, Sea States and Tides) and Appendix 8 of the Code of Practice for an example of a passage planning template).

The Department also wishes to highlight the increased risks involved with single person operation. Particular attention is drawn to the following safety advice:

- Users should carry out a risk assessment of the intended operations and take appropriate actions to reduce/mitigate the inherent risks that arise when nobody else is on-board to render assistance or to raise the alarm.

- When operating single handed, make sure an effective means of quickly re-boarding the boat is available in the event of a person overboard situation occurring, for example, a boarding ladder.

- Ensure that a designated person ashore is aware of your departure and return times, where you are going, and have a procedure in place to raise the alarm if necessary.

The Code of Practice is a free document and hardcopies can be obtained on request, in both English and Irish, from the Maritime Safety Policy Division of the Department at email MarineLeisureSafety@transport.gov.ie.

The Code is also available to view or download from the Department's website at the following link: Code of Practice for the Safe Operation of Recreational Craft.

All recreational craft users are encouraged to familiarise themselves with the Code of Practice and to heed the safety advice and recommendations. Boating Clubs are urged to circulate this Marine Notice to their members.

Safety information and advice is also available on the Department's Safety on the Water Website at the following link Safety on the Water.

Note: Marine Notices are issued purely for maritime safety and navigation reasons and should not be construed as conferring rights or granting permissions.

Irish Maritime Administration,
Department of Transport,
Leeson Lane, Dublin, D02 TR60, Ireland.

07/12/2020

For any technical assistance in relation to this Marine Notice, please contact:
The Marine Survey Office, MSO@transport.gov.ie
For general enquiries, please contact the Maritime Safety Policy Division,
MaritimeSafetyPolicyDivision@transport.gov.ie
Written enquiries concerning Marine Notices should be addressed to:
Dept. of Transport, Maritime Safety Policy Division, Leeson Lane, Dublin, D02 TR60, Ireland.
email: MarineNotices@transport.gov.ie or visit us at: https://www.gov.ie/transport

Appendix 7.4 Marine Notice No. 52 of 2023

An Roinn Iompair
Department of Transport

Marine Notice No. 52 of 2023

Notice to all Masters, Owners and Users of Pleasure and Recreational Craft.

Think and Prepare – Important safety advice for owners and users of recreational craft

The Department of Transport wishes to remind all masters, owners and users of recreational craft of the need to think and prepare before going out on the water. All owners and users of recreational craft should follow this **Checklist of Basic Requirements and Advice** both before going on the water and while on the water:

- ✓ **Get training** from an approved training provider in the correct use of the type of craft you wish to use;
- ✓ **Wear a suitable Personal Flotation Device/Lifejacket:** Know about the legal requirements in relation to the wearing and carrying of Personal Flotation Devices/Lifejackets and the need for the proper care and maintenance of such devices. Select the proper type based on activity or boating conditions. See Marine Notice No. 32 of 2019 for further information;
- ✓ **Check current weather forecasts and sea/lake/river conditions prior to departure** and plan your voyage accordingly**;**
- ✓ **Check for any hazards and risks and Prepare a Passage Plan;**
- ✓ **Avoid operating alone:** There are increased risks involved with single person operation when there is nobody else on board or nearby to help you or to raise the alarm. Make sure you have an effective means of quickly re-boarding the boat in the event that you fall overboard;
- ✓ **Carry out Pre-Departure Safety Checks and Briefing:** Check your craft and safety equipment. All persons on board should know what to do in the event of an emergency, where the safety/emergency equipment is on board, e.g. flares, radio equipment, life jackets, etc., and how to use the equipment;
- ✓ **Tell someone about the plans for your trip: A designated person ashore** should know your departure and return times, where you are going, and what to do to raise the alarm if necessary;
- ✓ **Bring a dependable means of communication**: VHF radio equipment is the recommended method of communication and craft users should be familiar with its use, reference Marine Notice No. 70 of 2022. Mobile phones should not be relied

Appendix 7.4 Marine Notice No. 52 of 2023

on and should only be considered as a back-up means of communication. Where mobile phone use is proposed, the phone should be in a waterproof pouch with a lanyard, be fully charged at all times and the signal strength and charge indicator should be regularly checked while the vessel is underway;

- ✓ **Emergency Beacons:** Consider having a Personal Locator Beacon (PLB) or an Emergency Position Indicating Beacon (EPIRB) as appropriate. See Marine Notice No. 25 of 2010 as amended, Marine Notice No. 38 of 2013 and Marine Notice No. 70 of 2022 for further information, including in relation to registration of PLBs and EPIRBs;
- ✓ **Do not consume alcohol or drugs before or during a trip:** When operating a recreational craft, a person must not be under the influence of alcohol or drugs or any combination of drugs or of drugs and alcohol;
- ✓ **Be aware of and recognise the symptoms of fatigue:** Get proper sleep and rest before your journey;
- ✓ **Relax and float:** If you fall into the water, the initial shock of being in cold water can cause you to gasp and panic. Stay calm and relax. Try to float or tread water while you catch your breath. A properly fitted lifejacket will keep your head above water, ensuring you gasp air. Try to get hold of something that will help you float and get as much of your body out of the water as possible. To lessen heat escape, keep your legs together with arms/elbows by your side. Once you are calm, call for help;
- ✓ **Wear suitable clothing and footwear;**
- ✓ **In a marine emergency**, raise the alarm on **VHF Channel 16** or **call 999 or 112** and **ask for the Coast Guard.**

Code of Practice for the Safe Operation of Recreational Craft

The Code of Practice for the Safe Operation of Recreational Craft provides information on the legislation that applies to recreational craft, as well as safety advice and best practice operational guidance for owners, masters, operators and users of a range of pleasure and recreational craft operating in Irish coastal and inland waters.

The Code highlights the importance of personal responsibility for all those who take to the water. Each person must take maritime safety seriously, prepare and plan for a safe trip, behave responsibly on the water and be properly equipped to be able to respond to any incidents that may arise.

A revised Code of Practice is being developed following a review of the 2017 edition within the Irish Maritime Directorate and consultation with the public and key stakeholders. An updated edition will be published later in 2023.

The existing edition is available to view or download at www.gov.ie and www.safetyonthewater.ie. For the convenience of those who may only be interested in a particular type of recreational craft, individual chapters of the Code are also available to view or download from the above websites.

Appendix 7.4 Marine Notice No. 52 of 2023

Additional online publications in relation to safety on the water are available at https://www.gov.ie/en/collection/60fd1-all-safety-on-the-water-booklets/.

Note: Marine Notices are issued purely for maritime safety and navigation reasons and should not be construed as conferring rights or granting permissions.

Irish Maritime Administration,
Department of Transport,
Leeson Lane, Dublin 2, D02 TR60, Ireland.

27/07/2023

For any technical assistance in relation to this Marine Notice, please contact:
The Marine Survey Office, email: MSO@transport.gov.ie.
For general enquiries, please contact the Maritime Safety Policy Division, email:
MaritimeSafetyPolicyDivision@transport.gov.ie.
Written enquiries concerning Marine Notices should be addressed to:
Dept. of Transport, Maritime Safety Policy Division, Leeson Lane, Dublin 2, D02 TR60, Ireland.
email: MarineNotices@transport.gov.ie or visit us at: www.gov.ie/transport.

SECTION 36 PROCESS

Section 36 of the Merchant Shipping (Investigation of Marine Casualties) Act, 2000

It is a requirement under Section 36 that:

(1) Before publishing a report, the Board shall send a draft of the report or sections of the draft report to any person who, in its opinion, is likely to be adversely affected by the publishing of the report or sections or, if that person be deceased, then such person as appears to the Board best to represent that person's interest.

(2) A person to whom the Board sends a draft in accordance with subsection (1) may, within a period of 28 days commencing on the date on which the draft is sent to the person, or such further period not exceeding 28 days, as the Board in its absolute discretion thinks fit, submit to the Board in writing his or her observations on the draft.

(3) A person to whom a draft has been sent in accordance with subsection (1) may apply to the Board for an extension, in accordance with subsection (2), of the period in which to submit his or her observations on the draft.

(4) Observations submitted to the Board in accordance with subsection (2) shall be included in an appendix to the published report, unless the person submitting the observations requests in writing that the observations be not published.

(5) Where observations are submitted to the Board in accordance with subsection (2), the Board may, at its discretion -

(a) alter the draft before publication or decide not to do so, or

(b) include in the published report such comments on the observations as it thinks fit.

The Board reviews and considers all observations received whether published or not published in the final report. When the Board considers an observation requires amendments to the report, those amendments are made. When the Board is satisfied that the report has adequately addressed the issue in the observation, then no amendment is made to the report. The Board may also make comments on observations in the report.

Response(s) received following circulation of the draft report (excluding those where the Board has agreed to a request not to publish) are included in the following section.

The Board has noted the contents of all observations, and amendments have been made to the report where required.

8. MSA 2000 – SECTION 36 OBSERVATIONS RECEIVED

No correspondence was received on the draft of this report.

NOTES

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