NOTES

REPORT INTO THE SINKING OF THE IRISH FISHING VESSEL "ST GERVASE" CLOSE TO MIZEN HEAD, CO. CORK ON 23 NOVEMBER 2000.

The Marine Casualty Investigation Board was established on the 5th, June 2002 under The Merchant Shipping (Investigation of Marine Casualties) Act 2000

CONTENTS

1. SYNOPSIS.

1.1 On November 23rd 2000 at 0102 hours GMT, the "St Gervase" a 64.50 feet wooden fishing vessel sailed from Castletownbere, Co. Cork. The vessel proceeded directly out to sea, bound for the fishing grounds, believed to be, to the south of the Fastnet Rock.

1.2 Winds were from the North West force 3/ 5. Visibility was good with a rough seastate. A crew of four was on board.

1.3 At 0255 hours GMT, EPIRB 121.5 MHz tracer signals were picked up and the original position estimate was 51 15.20 North 008 36.5 West. The initial 406 MHz report at 0308 was a detect only report. Following this report, unsuccessful efforts were made to contact the vessel. A mayday relay was broadcast and the rescue services in the area were tasked.

1.4 The first Cospas / Sarsat satellite reception was at 0434 GMT and telexed at 0454. The position given indicated that the signal was coming from the Mizen Head area. Subsequently, a position of 51 27.249 North 009 49.131 West was confirmed.

1.5 At 0640 hours debris was found by the Baltimore lifeboat off Mizen Head. All search units were directed to this area. Irish Navy divers carried out two dives of the area during the early afternoon but nothing was found. However, dive conditions were not favourable due to a large swell and were suspended until conditions improved.

1.6 On the following morning a liferaft was found on the surface of the water, which was still attached by the painter to the vessel below. The divers carried out a number of dives during which they located the wreck and also the body of one of the crew. Due to the unfavourable weather conditions in the area, it was not possible to carry out further dives, until the 29th December, 2000. By this time the wreck was found to have been severely damaged and broken up on the sea bed. In the meantime, debris from the vessel had been washed up on the shoreline and a second crewmember's body was found in Dunmanus Bay.

2. FACTUAL INFORMATION

2.1 Particulars of the Vessel "St Gervase"

Built:	1968 in Pont Lorois, France.
Owners:	Gary and Alexandra Kane, Rodeen, Castletownbere, Co. Cork.
Purchased:	1998.
Registered Length:	64.50 feet.
Registered Breadth:	19.00 feet.
Registered Depth:	8.10 feet.
Gross Tonnage:	68.06 tons.
Register Tonnage:	41.30 tons
Port of Registry:	Skibbereen.
Official Number:	400468.
Machinery:	One Societe Meteurs Bandouin Diesel 12 Cylinder Main Engine. B.H.P. 360. Engine made in 1968. The engine gives an estimated speed of 10.8 knots.
Description of Vessel:	Carvel built, wooden fishing vessel with a cruiser stern. The vessel had three bulkheads fitted. See photographs of the vessel in Appendix 9.1. The vessel was being used as a stern trawler.

2.2 During the change of ownership survey carried out by Thomas A. Livesey & Associates on 29th November 1997 the following Lifesaving Appliances were found on board.

Lifejackets:	Six Imco approved type.
Lifebuoys:	Two Perrybuoys.
Manoverboard:	Pains Wessex light and smoke.
Pyrotechnics:	Twelve Pains Wessex parachute flares.
Line throwing apparatus:	Four units Pains Wessex.
Liferafts:	Two RFD six person with H.R.U.
E.P.I.R.B.:	Jotron Cosalt with HRU

2.3 During the same survey the following Navigational aids were found on board.

Radar:	Koden MD 3600 D.V.R. 32-mile range.
Radar:	Decca RM 107A 96 mile range.
Navigator:	Decca MK 53.
Navigator:	Decca MK 90 GPS.
Navigator:	Furuno GP 50 MK 2 GPS.
Plotter:	Shipmate RS 2500.
Plotter:	Racal Decca CVP.
Radio telephone:	Sailor Compact 2048 VHF.
Radio telephone:	Sailor Compact SSB HF 2100.
Radio telephone:	Sailor SSB HF R104/T121E.
Radio telephone:	Skanti VHF.
Searcher:	Realistic VHF.
Auto pilot:	Cetrek Pro-Pilot 725.
Echo sounder:	JRC V 105 CVS.
Echo sounder:	JRC V 122 CVS

2.4 The crew of the "St Gervase" on 23rd November 2000 consisted of the following persons.

Gary Kane, aged 29 years, of Rodeen, Castletownbere, Co. Cork. He had been fishing at sea for many years and was the Skipper of the vessel. He had been sailing on the "St Gervase" for about five or six years. Although an experienced fisherman he is not known to hold any formal sea going qualifications.

Jaques Biger, a French national aged 36 years, of West End, Castletownbere, Co. Cork. Mr. Biger was known to be an experienced fisherman. He does not hold any Irish formal sea going qualifications but has obtained some qualifications from the French Authorities. He had been on the vessel for two and a half years.

Kieran Harrington, aged 18 years, of St. Martins Avenue, Castletownbere, Co. Cork. Mr. Harrington had been fishing on the vessel for about two years. He is not known to hold any formal sea going qualifications.

Timothy Angland, aged 30 years, of 6, Gweedore Avenue, Mayfield, Cork. He had been fishing for about 7 years and had been on board the vessel for two weeks. He is not known to have any formal sea going qualifications.

3. THE EVENTS PRIOR TO THE INCIDENT

3.1 The vessel, manned as stated above, sailed from Castletownbere, Co. Cork at 0102 hours GMT on 23-November-2000.

3.2 All the crew had rejoined the "St Gervase" between 2330 and 2345 hours on 22nd November.

3.3 Stephen Hyde (who was on the pier) recalls that at about 0015 hours he let go the mooring ropes of the "St Gervase" and he then left the harbour.

3.4 After this, the Castletownbere Harbour Master's video recorder shows that, the "St Gervase" came stern onto the pier at 0018 hours GMT in order to take on board a fishing net.

3.5 This video recording also shows that the vessel departed from it's berth at 0102 hours and proceeded directly out to sea bound for the fishing grounds, believed to be, to the south of the Fastnet Rock.

3.6 The weather conditions in the area at this time were: winds from the North West force 3 to 5, visibility good with a rough seastate. The Met Eireann weather report is given in Appendix 9.2.

4. THE INCIDENT AND THE LOCATING OF THE WRECK.

4.1 At 0255 hours GMT, EPIRB 121.5 MHz tracer signals were picked up. The original position estimate was 51 15.20 North 008 36.51 West. The initial 406 MHz report at 0308 was a detect only report. Following this report unsuccessful efforts were made to contact the vessel. A mayday relay was broadcast and the rescue services in the area were tasked in order to search and locate the vessel.

4.2 The first Cospas / Sarsat satellite reception was at 0434 GMT and was telexed at 0454. The position given indicated that the signal was coming from the Mizen Head area. Subsequently a position of 51 27.249 North 009 49.131 West was confirmed and this position is set out in Appendix 9.3.

4.3 At 0640 hours debris was found by the Baltimore lifeboat off Mizen Head. All search units were directed to this area. Irish Navy divers who were on a training week on Bere Island were brought to the scene by the LE Roisin. Two dives were completed during the early afternoon in the area where debris and fuel was evident but nothing was found. However, dive conditions were not favourable due to a large swell and were suspended until conditions improved.

4.4 On the following morning 24th November 2001 when the LE Aoife arrived on the scene it found a liferaft on the surface, which was still attached by the painter to the vessel below.

5. SEARCH OF THE WRECK.

5.1 Although surface conditions had not improved and having consulted the weather forecast for the following days, the divers decided to attempt a dive down the liferaft painter to search the vessel.

5.2 The divers carried out a complete dive of the outside of the vessel. The "St. Gervase" was located at the foot of the cliff face in 33-36 metres of water, lying on flat bedrock at an angle of approx. 60/70 degrees on her starboard side, with her bow in a NE direction. Areas along her starboard side were leaning against the cliff face. There was some damage to the visible areas of the vessel, with indentation on the port bow and some planking popped along the port side. However an inspection of the starboard side was not possible, due to the way the vessel was lying. Nets were observed along the port quarter and seen leading from the net drum aft. A substantial ground swell was again observed by divers to such an extent that the vessel was moving from side to side.

5.3 Three further dives were carried out culminating in the recovery of one crewman from the galley of the vessel. This recovery was made all the more difficult by the fact the vessel's only entry and exit from the superstructure was located on the starboard side which was lying against the cliff. This crewman was later identified as Mr. Timothy Angland.

5.4 After the recovery of the crewman, due to the expending of all available divers at depth and the approaching storms, diving operations were suspended for the day. At this stage the diving team had confirmed the position, the condition and the accessibility of the vessel. However no other signs of the remaining crewmen were observed. The wheelhouse, accommodation space and engine room had not been searched at this stage. Divers disembarked from the LE Aoife and returned to Crookhaven after the body of the crewman was handed over to local Gardaí in Castletown.

5.5 There were severe storms over the next few days along the SW coast. During this time the Diving Team remained in the area, using the break in diving to gather as much information about the internal fixtures and fittings on the vessel. A visit to a similar vessel, the "Fiona Patricia" was carried out to accustom the Diving Team to the general layout of the "St Gervase". Drawings of the vessel were also acquired. From Mon. 26th Nov 00, debris from the vessel began to wash up from Dursey Head to Seven Heads. This debris ranged from fish pound boards to large sections of the bow and internal support beams. Some personal effects were also washed up. The divers' marker buoy, secured to the vessel's port quarter was recovered in the Galley Head area, along with parts of the vessel's gunwhale and nets. Due to the continuous storm conditions the Diving Team was stood down and returned to the Naval Base, awaiting a break in the weather.

CONTD.

5.6 The Diving Team was twice recalled to the Mizen Head area to attempt to relocate the vessel and complete the search for the missing crewmen. These attempts occurred on the 08th - 10th Dec 00 and 15th - 16th Dec 00. On both occasions, conditions were outside diving limits and the Diving Team returned to the Naval Base.

5.7 On Thurs. 28th Dec 00 the Diving Team travelled to the dive site and four dives were completed each day on both Fri 29th Dec and Sat 30th Dec in the last known position of the "St Gervase". The wreck was located and dived on in a depth of between 33-36 metres, at the foot of the cliff face.

5.8 Widespread damage was noted along the remainder of the wreckage. The keel was broken off and lying on the seabed, as was the vessel's shaft. The aft section was broken off, while the bow section was missing. The deck and superstructure were gone and the vessel's trawls were around the wreck, caught on protruding fittings and lying on the seabed. The engine block was still secured in position within the hull of the wreck. The hull was lying on its port side away from the cliff. The port side was heavily damaged with its support beams and ribs disintegrated into the surrounding rock and boulders. The starboard side was also heavily broken up, in particular the aft area. The net drum had repositioned itself at the forward section of the starboard side with the nets leading off ahead and to the both sides. Out to port large sections of flat white metal lay tangled and protruding from the net on the seabed. This protruded to a max height of one foot off the seabed.

5.9 The areas where the crewmembers could possibly be found were all missing. The hull of the vessel was opened completely with no internal fittings present and only the support ribs and outer planking visible. Internal bulkheads separating different areas inside the hull were all missing. Both sides of the hull showed extensive damage and neither was complete. The top deck and superstructure were not located - however large sections of what appears to be the superstructure (approx. 6-ft. sq. each) were located tangled and covered by the nets. These sections were all lying flat on the seabed and no larger pieces remained intact. There are no sections of the vessel remaining that could conceal bodies, accordingly it is felt that further diving on the site would be non productive.

6. OTHER FACTS TO BE CONSIDERED.

6.1 From all available information it would appear that all navigational equipment on board the "St Gervase" was operating correctly.

6.2 From all available information, Dekkaman Marine was the only company who carried out any navigation or electronic equipment repairs on board the vessel. It would appear that there were no changes made to the equipment on board by Gary Kane from the time he purchased the vessel in 1998.

6.3 Dekkaman Marine recalls that the Racal Decca plotter was collected by Gary Kane on 22nd November after repair.

6.4 There was a watch alarm fitted to the auto-pilot on board which operated a low tone every four minutes with a high klaxon tone after a further minute if not answered.

6.5 Apart from the auto-pilot there were two other steering methods on board. (1) a hydraulic wheel and (2) an electrically controlled tiller / joystick. However, the watch alarm was not connected to either of these two latter systems.

6.6 The distance from its berth to its final location is 13 nautical miles and the length of time from the departure from Castletownbere to the EPIRB alarm is one hour 53 minutes. This would give an average speed of 6.90 knots. When allowance is made for the slower speed when departing the harbour there would appear to be an average speed on passage of about 8 or 9 knots, which is consistent with the vessel's normal steaming speed.

6.7 The Commissioners of Irish Lights have confirmed that all aids to navigation in the area were functioning correctly at the time of the grounding.

6.8 To date only the bodies of Timothy Angland and Kieran Harrington have been recovered.

7. CONCLUSIONS.

7.1 Whatever took place on the bridge of the "St Gervase" is shrouded in obscurity since none of the crew survived Whatever did happen appears to have taken place suddenly with little or no forewarning to the crew. It appears that insufficient time was available to raise the alarm or to attempt to launch the lifesaving appliances on board.

7.2 The initial divers survey reveals that some damage was caused to visible areas of the vessel, with indentation on the port bow and some planking popped along the port side. An inspection of the starboard side was not possible, due to the way the vessel was lying. Unfortunately, due to weather conditions, further dives were not immediately possible and when weather conditions improved the wreck was found to be damaged to such an extent that further information in relation to the cause of the sinking could not be obtained. However, it is possible that the vessel was making way possibly at its normal steaming speed of 8 or 9 knots, when it steamed into the cliff, adjacent to Mizen Head, and then sank.

8. RECOMMENDATIONS.

8.1 All fishing vessels should at all times keep a safe navigational watch on board. The International Maritime Organisation (IMO) has adopted Resolution A.484 (XII) "Basic Principles to be observed in keeping a Navigational Watch on board Fishing Vessels" relating to the principles to be observed in order to ensure that a safe navigational watch is maintained at all times. The basic principles have been reproduced in the Annex to Marine Notice No. 39 of 1999 and should be observed by all concerned. (See Appendix 9.4). Following this incident Marine Notice No. 39 of 1999 should be reproduced.

8.2 It is important to ensure that inflatable liferafts are properly stowed and secured and can float free when a vessel sinks. In this case, one liferaft came to the surface about one day after the sinking and the second liferaft did not float free at all. Marine Notice No. 6 of 2000 provides general advice and guidance on the securing, stowage and launching of liferafts, and the fitting of Hydrostatic Release Units – HRU`s. This notice is reproduced in Appendix 9.5.

8.3 A Marine Notice should be issued stating that all fishing vessels must be manned as required by the Fishing Vessels (Certification of Deck Officers and Engineer Officers) Regulations, 1988 (S.I. No. 289 of 1988), as amended. *This recommendation has subsequently been implemented (see Marine Notice 10 of 2002 at Appendix 9.6).*

9. APPENDICES

9.1 Photographs of fishing vessel "St Gervase".

9.2 Weather Report from Met. Eireann.

9.3 Chart extract showing position of sinking.

9.4 Copy of Marine Notice No. 39 of 1999, dealing with the keeping of a safe navigational watch on board fishing vessels.

9.5 Copy of Marine Notice No 6 of 2000, dealing with the stowage and float free arrangements for inflatable liferafts.

9.6 Marine Notice 10 of 2002, dealing with the manning of fishing vessels.

9.1 Photographs of fishing vessel "St Gervase".

9.2 Weather Report from Met. Eireann.

MET ÉIREANN
The Irish Meteorological Service

Glasnevin Hill, Dublin 9, Ireland. | Cnoc Ghlas Naíon, Baile Átha Cliath 9, Éire. | Tel: +353-1-806 4200 Fax: +353-1-806 4247

Weather Report for the sea area near 51° 27.2'N, 9° 49.1'W
November 23rd 2000
1 to 6 hours

General Situation

A complex area of Low Pressure stretched over the UK and Ireland and south down to Biscay. One Low Pressure centre in the pressure system had moved eastwards across the south coast of Ireland overnight and a weak ridge of High Pressure followed during the early hours of the 23rd.

Details:

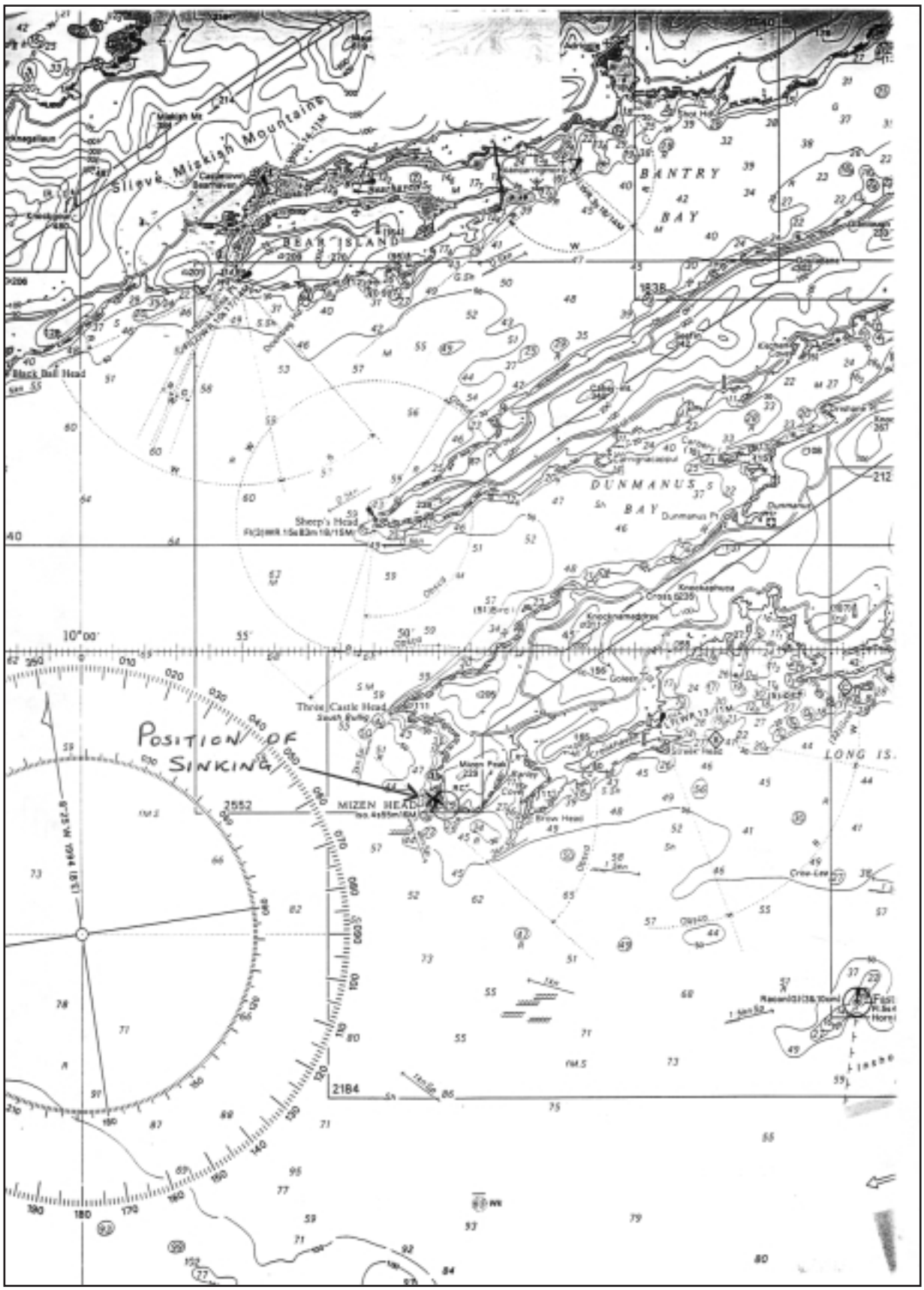
Winds: North westerly Force 3 to 5

Weather: Good clear spells but some cloud also.

Visibility: Observations overland indicated good visibility throughout. Ships in the area were 60 miles away, these also reported good visibility except one which gave moderate visibility, concluding that the visibility was good in the area.

Seastate: Rough (from wave model but confirmed by off-shore buoys)

9.3 Chart extract showing position of sinking.



APPENDIX 9.4

9.4 Copy of Marine Notice No. 39 of 1999, dealing with the keeping of a safe navigational watch on board fishing vessels.

Department of the Marine and Natural Resources

Roinn na Mara agus Acmhainní Nádúrtha

MARINE NOTICE

No. 39 of 1999

NOTICE TO ALL OWNERS, OPERATORS, SKIPPERS, SECOND HANDS AND CREWS OF FISHING VESSELS, AND TO NAUTICAL SCHOOLS

KEEPING A SAFE NAVIGATIONAL WATCH ON BOARD FISHING VESSELS

The International Maritime Organisation (IMO) has adopted Resolution A.484(XII) "Basic Principles to be Observed in Keeping a Navigational Watch on board Fishing Vessels" relating to the principles to be observed in order to ensure that a safe navigational watch is maintained.

These principles were in effect reviewed and updated by the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel 1995.

The basic principles are reproduced in the Annex to this Notice and should be observed by all concerned.

Candidates for all fishing certificates of competency will be expected to have a thorough knowledge of the content and application of the basic principles.

Marine Notice 6 of 1982 is hereby withdrawn as it is superseded by this Notice.

Any enquiries concerning Marine Notices should be addressed to Maritime Safety Division Tel: 01- 6199359; Fax: 01-6620774

Secretary-General
Department of the Marine
and Natural Resources
Dublin 2.

16 September, 1999.

BASIC PRINCIPLES TO BE OBSERVED IN KEEPING A NAVIGATIONAL WATCH ON BOARD FISHING VESSELS

1 These basic principles are to be observed by skippers and watchkeeping personnel to ensure that a safe navigational watch is maintained at all times.

2 The skipper of every fishing vessel is bound to ensure that watchkeeping arrangements are adequate for maintaining a safe navigational watch. Under the skipper's general direction, the officers of the watch are responsible for navigating the vessel safely during their periods of duty when they will be particularly concerned with avoiding collision and stranding.

3 The basic principles, including but not limited to the following, should be taken into account on all fishing vessels. However, very small fishing vessels may be excluded from fully observing the basic principles. References to the wheelhouse should, in such vessels, be construed as meaning the position from which the navigation of the ship is controlled.

4 **En route to or from fishing grounds**

4.1 **Arrangements of the navigational watch**

4.1.1 The composition of the watch should at all times be adequate and appropriate to the prevailing circumstances and conditions and should take into account the need for maintaining a proper look-out.

4.1.2 When deciding the composition of the watch the following factors, inter alia, should be taken into account:

(i) at no time should the wheelhouse be left unattended;

(ii) weather conditions, visibility and whether there is daylight or darkness;

(iii) proximity of navigational hazards which may make it necessary for the officer in charge of the watch to carry out additional navigational duties;

(iv) use and operational condition of navigational aids such as radar or electronic position-indicating devices and any other equipment affecting the safe navigation of the vessel;

(v) whether the vessel is fitted with automatic steering;

(vi) any unusual demands on the navigational watch that may arise as a result of special operational circumstances.

4.2 Fitness for duty

4.2.1 The watch system should be such that the efficiency of watchkeeping personnel is not impaired by fatigue. Duties should be so organised that the first watch at the commencement of a voyage and the subsequent relieving watches are sufficiently rested and otherwise fit for duty.

4.3 Navigation

4.3.1 The intended voyage should, as far as practicable, be planned in advance taking into consideration all pertinent information and any course laid down should be checked before the voyage commences.

4.3.2 During the watch the course steered, position and speed should be checked at sufficiently frequent intervals, using any available navigational aids necessary, to ensure that the vessel follows the planned course.

4.3.3 The officer in charge of the watch should have full knowledge of the location and operation of all safety and navigational equipment on board the vessel and should be aware and take account of the operating limitations of such equipment.

4.3.4 The officer in charge of a navigational watch should not be assigned or undertake any duties which would interfere with the safe navigation of the vessel.

4.4 Navigational equipment

4.4.1 The officer in charge of the watch should make the most effective use of all navigational equipment at his disposal.

4.4.2 When using radar the officer in charge of the watch should bear in mind the necessity to comply at all times with the provisions on the use of radar contained in the applicable regulations for preventing collisions at sea.

4.4.3 In cases of need the officer of the watch should not hesitate to use the helm, engines and sound signalling apparatus.

4.5 Navigational duties and responsibilities

4.5.1 The officer in charge of the watch should:

(i) keep his watch in the wheelhouse;

(ii) which he should in no circumstances leave until properly relieved;

(iii) continue to be responsible for the safe navigation of the vessel despite the presence of the skipper in the wheelhouse until the skipper informs him specifically that he has assumed that responsibility and this is mutually understood;

(iv) notify the skipper when in any doubt as to what action to take in the interest of safety;

(v) not hand over the watch to a relieving officer if he has reason to believe that the latter is obviously not capable of carrying out his duties effectively, in which case he should notify the skipper accordingly.

4.5.2 On taking over the watch the relieving officer should satisfy himself as to the vessel's estimated or true position and confirm its intended track, course and speed and should note any dangers to navigation expected to be encountered during his watch.

4.5.3 Whenever practicable a proper record should be kept of the movements and activities during the watch relating to the navigation of the vessel.

4.6 Look-out

4.6.1 A proper look-out shall be maintained in compliance with Rule 5 of the International Regulations for Preventing Collisions at Sea, 1972. It shall serve the purpose of:

(i) maintaining a continous state of vigilance by sight and hearing as well as by all other available means, with regard to any significant changes in the operating environment;

(ii) fully appraising the situation and the risk of collision, stranding and other dangers to navigation, and;

(iii) detecting ships or aircraft in distress, shipwrecked persons, wrecks and debris;

The look-out must be able to give full attention to the keeping of a proper look-out and no other duties shall be undertaken or assigned which could interfere with that task.

4.6.2 In determining that the composition of the navigational watch is adequate to ensure that a proper look-out can continuously be maintained, the skipper shall take into account all relevant factors, including those described under paragraph 4.1, as well as the following factors:

(i) visibility, state of weather and sea;

(ii) traffic density and other activities occurring in the area in which the vessel is operating;

(iii) the attention necessary when navigating in or near traffic separation schemes and other routing measures;

(iv) the additional workload caused by the nature of the vessel's functions, immediate operating requirements and anticipated manoeuvres;

(v) rudder and propeller control and vessel manoeuvring characteristics;

(vi) the fitness for duty of any crew members on call who may be assigned as members of the watch;

(vii) knowledge of and confidence in the professional competence of the vessel's officers and crew;

(viii) the experience of the officer of the navigational watch and the familiarity of that officer with the vessel's equipment, procedures and manoeuvring capability;

(ix) activities taking place on board the vessel at any particular time and the availability of assistance to be summoned immediately to the wheelhouse when necessary;

(x) the operational status of instrumentation in the wheelhouse and controls, including alarm systems;

(xi) the size of the vessel and the field of vision available from the conning position;

(xii) the configuration of the wheelhouse, to the extent such configuration might inhibit a member of the watch from detecting by sight or hearing any external developments.

4.7 Protection of the marine environment

4.7.1 The skipper and the officer in charge of the watch should be aware of the serious effects of operational or accidental pollution of the marine environment and should take all possible precautions to prevent such pollution particularly within the framework of relevant international and port regulations.

4.8 Weather conditions

4.8.1 The officer in charge of the watch should take relevant measures and notify the skipper when adverse changes in weather could affect the safety of the vessel, including conditions leading to ice accretion.

5.1 **Navigation with pilot embarked**

5.1.1 The presence of a Pilot on board does not relieve the skipper or officer in charge of the watch from their duties and obligations for the safety of the vessel. The skipper and the pilot should exchange information regarding navigation procedures, local conditions and the vessel's characteristics. The skipper and the officer of the watch should co-operate closely with the pilot and maintain an accurate check of the vessel's position and movement.

6.1 **Vessels engaged in fishing or searching for fish**

6.1.1 In addition to the principles enumerated in paragraph 4, the following factors should be considered and properly acted upon by the officer in charge of the watch:

(i) other vessels engaged in fishing and their gear, own vessel's manoeuvring characteristics, particularly in stopping distance and the diameter of turning circle at sailing speed and with the fishing gear overboard;

(ii) safety of the crew on deck;

(iii) adverse effects on the safety of the vessel and its crew through reduction of stability and freeboard caused by exceptional forces resulting from fishing operations, catch handling and stowage, and unusual sea and weather conditions;

(iv) the proximity of offshore structures, with special regard to the safety zones; and

(v) wrecks and other underwater obstacles which could be hazardous for fishing gear.

6.2 When stowing the catch, attention should be given to the essential requirements for adequate freeboard and adequate stability and watertight integrity at all times during the voyage to the landing port taking into consideration consumption of fuel and stores, risk of adverse weather conditions and, especially in winter, risk of ice accretion on or above exposed decks in areas where ice accretion is likely to occur.

7.1 **Anchor watch**

7.1.1 The skipper should ensure, with a view to the safety of the vessel and crew, that a proper watch is maintained at all times from the wheelhouse or deck on fishing vessels at anchor.

8.1 **Radio watchkeeping**

8.1.1 The skipper should ensure that an adequate radio watch is maintained while the vessel is at sea, on appropriate frequencies, taking into account the requirements of the Radio Regulations.

END

8.1.1 The skipper should ensure that an adequate radio watch is maintained while the vessel is at sea, on appropriate frequencies, taking into account the requirements of the Radio Regulations.

END

9.5 Copy of Marine Notice No 6 of 2000, dealing with the stowage and float free arrangements for inflatable liferafts.

Marine Notice

No. 6 of 2000

NOTICE TO ALL OWNERS, MASTERS, SKIPPERS AND CREWS OF MERCHANT SHIPS AND FISHING VESSELS

STOWAGE AND FLOAT FREE ARRANGEMENTS FOR INFLATABLE LIFERAFTS

The Purpose of this Notice is to provide general advice and guidance on the securing, stowage and launching of liferafts, and the fitting of Hydrostatic Release Units (HRU's).

STATISTICS SHOW THAT UP TO 1 IN EVERY 5
MERCHANT SHIPS AND FISHING VESSELS HAS
AN INCORRECTLY SECURED LIFERAFT
WHICH MAY NOT WORK IN AN EMERGENCY

Part One

A liferaft is required to do two things:

1. **Float free and automatically inflate if the ship sinks**

    1. This is achieved by fitting a Hydrostatic Release Unit (HRU), which automatically releases when the liferaft is submerged.

    2. The liferaft then starts to float to the surface because of its internal buoyancy, pulling out the painter, which is now only connected by the weak link at the end of the painter to the vessel.

    3. When the painter is pulled all the way to the end, the gas cylinder is activated, and the raft inflates.

    4. At this point the buoyancy force of the inflated liferaft is sufficient to break the weak link, and the liferaft will float to the surface, fully inflated and ready for boarding.

2. **Be manually released and thrown overboard**

    1. In a more controlled abandonment, the liferaft retaining strap is released at the senhouse slip and the raft is physically thrown over the side. The painter is then pulled to inflate the liferaft.

    2. This system relies critically on the painter being made fast to a strong point. If it is rigged correctly the HRU is a good strong point.

    3. If the raft is only secured to the ship by the weak link, and is thrown over the side, the dynamic shock of being thrown over may break the weak link, instead of pulling out the painter, and therefore the whole liferaft and painter may be lost.

3. For these reasons the liferaft and HRU must be fitted correctly, otherwise one or both of the above functions may not work.

4. Please note the diagrams of the most common types of HRU in the Appendix to this Notice.

Part Two

Key points on the stowage of liferafts and HRU's

Liferafts Must

- Float free.
- Automatically inflate.
- Have launching instructions displayed.
- Be lit by emergency lighting at the stowage position.
- Clear projections and belting.
- Have approved HRU's.
- Be drop tested and approved for the stowage height.
- Have adequate length painters for the drop height.

Do

- Consult manufacturers instructions for HRU fitting instructions.
- Stow clear of propellers and thrusters.
- Stow container with drain holes at the bottom.
- Stow longitudinally in a horizontally fixed cradle.
- Stow to give protection from weather, smoke, soot, oil, heat, flooding.
- Distribute evenly Port and Starboard, and separate longitudinally, to provide redundancy in event of collision, fire etc.
- Carefully identify and remove any transport lashings.
- Inspect frequently for damage to the container. If it is damaged it needs to be checked by an approved service station.

Don't

- Lash in cradles.
- Stow under overhanging decks or awnings.
- Allow contact with materials containing copper or copper compounds.
- Hose down.
- Use bottle screws instead of slips.
- Concentrate all Life-Saving Appliances in one place.

Consider

- Will it float free?
- The risk of damage from cargo or fishing operations.
- Interference with other rafts or lifeboats.
- Effects of icing.
- Effects on ship's compass.
- Ability to manually transfer liferaft to either side.
- Height above waterline – should be as near to waterline as safe and practicable.

Davit Launched Liferafts (DLR's)

- Must be at least 9m forward of propeller.
- Must be not less than 2m above waterline at embarkation position, in fully loaded condition, unfavourable trim and 20-degree list.
- 2 crew can prepare for embarkation and launching in less than 5 minutes per raft.

Forward Liferaft on ships greater than 100m

- HRU not required.
- Must have manual release.
- Must have means of embarkation (a securely fastened knotted lifeline is sufficient).

Fishing Vessels less than 12m in length

There is no mandatory requirement to fit a liferaft to these smaller fishing vessels, however it is strongly recommended that they are provided and fitted with an HRU.

Marine Notice No. 24 of 1999

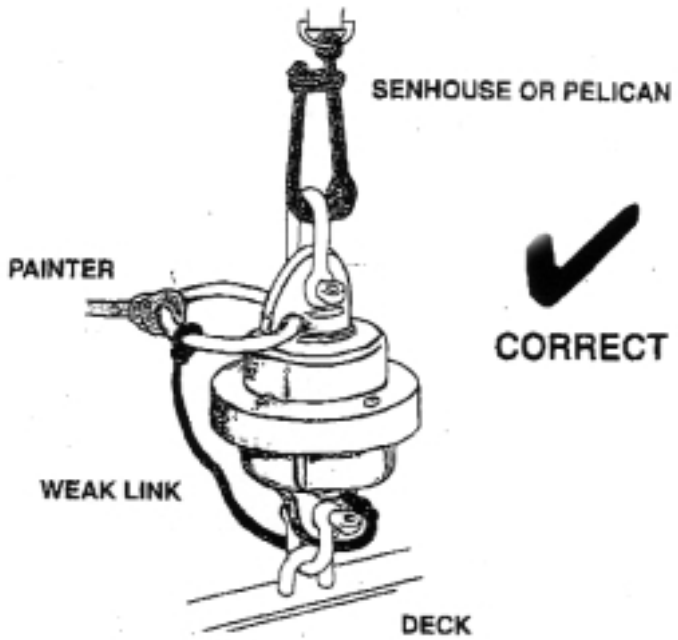
The Department wishes to again draw attention to Marine Notice No. 24 of 1999 on the Launching of Liferafts Stowed on the Wheelhouse and Galley Top of Fishing Vessels.

All enquiries concerning Marine Notices should be addressed to Maritime Safety Division - Tel: 01-6199359; Fax: 01-6620774.

Secretary-General
Department of the Marine and
Natural Resources
Dublin 2.
2 March, 2000.

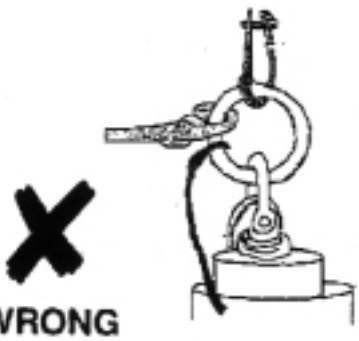
Appendix - Diagrams of commonly fitted HRU's

BERWYN MK 9 TYPE HRU



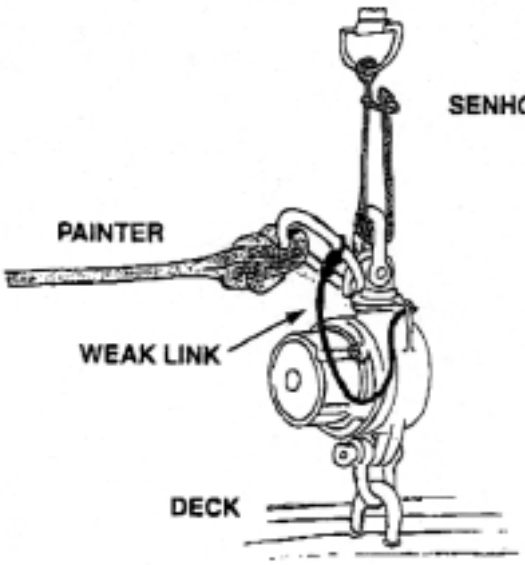
EXAMPLES OF INCORRECT METHODS OF CONNECTION

LIFERAFT WILL NOT RELEASE FROM CRADLE IF SHIP SINKS



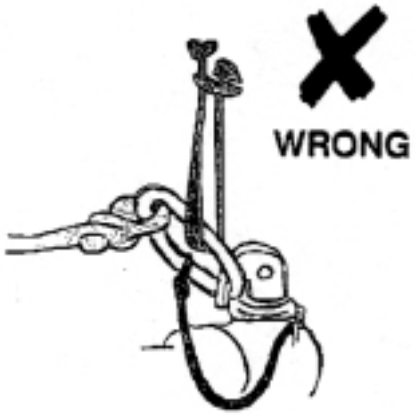
LIFERAFT WILL NOT RELEASE FROM CRADLE IF SHIP SINKS

BERWYN MK 7 TYPE HRU



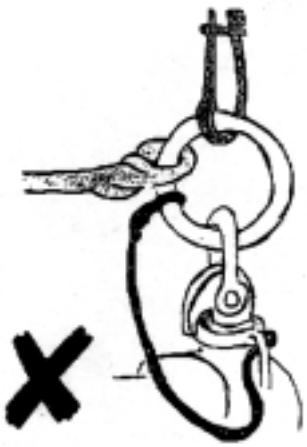
CORRECT

EXAMPLES OF INCORRECT METHODS OF CONNECTION



WRONG

LIFERAFT WILL NOT RELEASE FROM CRADLE IF THE SHIP SINKS

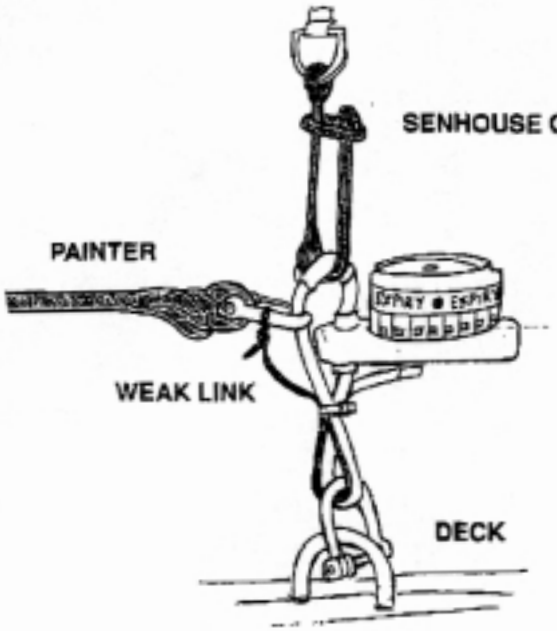


WRONG

LIFERAFT WILL NOT RELEASE FROM CRADLE IF THE SHIP SINKS

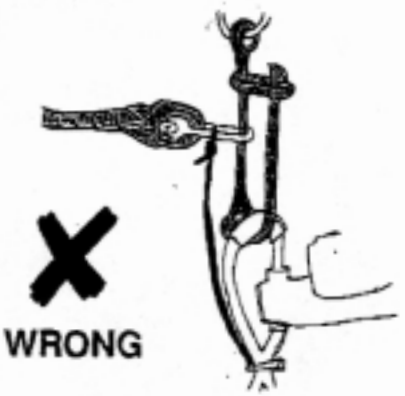
CONTD.

HAMMAR DISPOSABLE TYPE HRU



✔ CORRECT

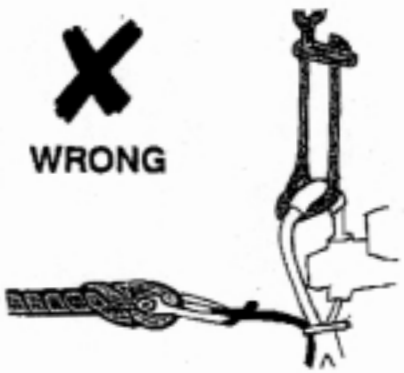
EXAMPLES OF INCORRECT METHODS OF CONNECTION



✘ WRONG

LIFERAFT WILL NOT RELEASE FROM CRADLE IF SHIP SINKS

✘ WRONG



WILL WORK CORRECTLY ON AUTOMATIC RELEASE BUT THE LIFERAFT WILL ONLY BE SECURED BY THE WEAK LINK IF THROWN OVERBOARD - WEAK LINK MAY BREAK AND LIFERAFT WILL BE LOST

9.6 Marine Notice 10 of 2002, dealing with the manning of fishing vessels.

Department of the Marine and Natural Resources

Roinn na Mara agus Acmhainní Nádúrtha

MARINE NOTICE NO 10 OF 2002

ATTENTION: ALL FISHING VESSEL OWNERS, SKIPPERS, MATES AND FISHERMEN

Manning Of Fishing Vessels

An investigation into a recent fishing vessel incident found that the person on watch at the time of the incident did not hold a certificate of competency or have any formal training in the use of navigational equipment.

The fishing vessel did not carry the correct number of qualified Deck Officers as required by the Fishing Vessels (Certification of Deck Officers and Engineer Officers) Regulations 1988 (S.I. No. 289 of 1988), as amended, the requirements of which are set out in Appendices I and II attached.

All fishing vessel owners and skippers are reminded that they are required to ensure that their vessels are correctly manned and that the proper number of certificated officers are carried for the appropriate fishing area, i.e. Limited or Unlimited.

Skippers are reminded that navigational watchkeeping duties must be carried out by properly qualified personnel at all times.

All watchkeeping personnel must be thoroughly familiar with all the electronic equipment they are expected to use.

The attention of fishing vessel owners and skippers is drawn to the following information, concerning the Fishing Vessels (Certification of Deck Officers and Engineer Officers) Regulations 1988, as amended.

1. The Regulations

The Fishing Vessels (Certification of Deck Officers and Engineer Officers) Regulations 1988, as amended, require:

(a) those fishing vessels of 17 metres in length and over, which operate in the
Limited Area, and all fishing vessels that operate in the Unlimited Area to carry a specified number of deck officers, certificated in accordance with the Regulations. Existing certificates of competency issued under section 414 of the Merchant Shipping Act 1894, will be

treated as equivalent to specified certificates of competency issued under these Regulations.

(b) all fishing vessels of 750 kilowatt or more engine power to carry a specified
number of engineer officers certificated in accordance with the Regulations.

2. Certificates of Competency (Deck Officer)

The Regulations require fishing vessels registered in the State (and Government fishery research vessels) to be manned by duly certificated Deck Officers and set out the minimum number of Deck Officers to be carried determined by the length of the vessel and by the area (Limited or Unlimited) in which the vessel operates.

Every ship registered in the State, being a sea-going fishing vessel or Government fishery research vessel:

(a) which operates in the Unlimited area, or
(b) which being of 17 metres length or more, operates in the Limited area, when going to sea,

shall carry such number of qualified Deck Officers as set out in Appendix 1.

Existing Deck Officer certificates of competency issued under section 414 of the Merchant Shipping Act 1894, are to be treated as equivalent to specified certificates of competency issued under the Regulations.

3. Certificates of Competency (Engineer Officer)

The Regulations require fishing vessels registered in the State of 750 kilowatt registered power or more to be manned by duly certificated Engineer Officers, and lay down the minimum number of Engineer Officers and the level of their certificates related to the registered power in kilowatts (see Appendix II). The Regulations also specify that only duly certificated persons shall be employed in capacities, which require certificates.

4. Additional Information

The standards of competency which must be attained before a candidate will be issued with a certificate of competency under the Regulations together with examination syllabuses, specimen papers and requirements are set out in the Department of the Marine & Natural Resources publications entitled:

(1) Examination for Certificates of Competency for Fishing Vessels: Engineer Officer Requirements, Syllabuses and Specimen Papers

And

(2) Examination for Certificates of Competency for Fishing Vessels; Deck Officer Requirements, Syllabuses and Specimen Papers.

Copies of the Regulations and of the Department of the Marine & Natural Resources publications may be obtained from the Government Publications Sale Office, Sun Alliance House, Molesworth Street, Dublin 2.

5. Marine Notice No. 4 of 1995 is hereby withdrawn as this notice supersedes it.

Secretary-General
Department of the Marine and
Natural Resources
Dublin 2

13th May 2002

Any enquiries concerning Marine Notices should be addressed to:
Maritime Safety Division
Tel: 01-6199358 Fax: 01-6620774 email:
marine.notices@marine.gov.ie

Appendix 1

Column 1	Column 2	Column 3					Column 4
Fishing Area	Description of Length of Vessel	Minimum Number of Qualified Deck Officers to be Carried on Vessel					Number of other Officers to be carried on Vessel
		Skipper Full	2nd Hand Full	Skipper Limited	2nd Hand Limited	2nd Hand Special	
Unlimited	> 100 Metres	1	3 or	3			3 Officers required in addition to Skipper
Unlimited	50 Metres to <100 Metres	1	2 or	2			2 Officers required in addition to Skipper
Unlimited	< 50 Metres	1	1 or	1			1 Officer required in addition to Skipper
Limited	>100 Metres	1	1or	1	1 or	1	2 Officers required in addition to Skipper
Limited	50 Metres to <100 Metres			1	2 or	2	2 Officers required in addition to Skipper
Limited	24 Metres to <50 Metres			1	1 or	1	1 Officer required in addition to Skipper
Limited	17 Metres to <24 Metres					1	

Appendix 2

COLUMN 1	COLUMN 2		
Registered Power (Kilowatts)	Required Classes of Certificate		
	Chief Engineer Officer	Senior Engineer Officer	Third Engineer Officer
3,000 and over	1	2	3
2,000 or more but under 3,000	1	3	—
750 or more but under 2,000	2	3	—