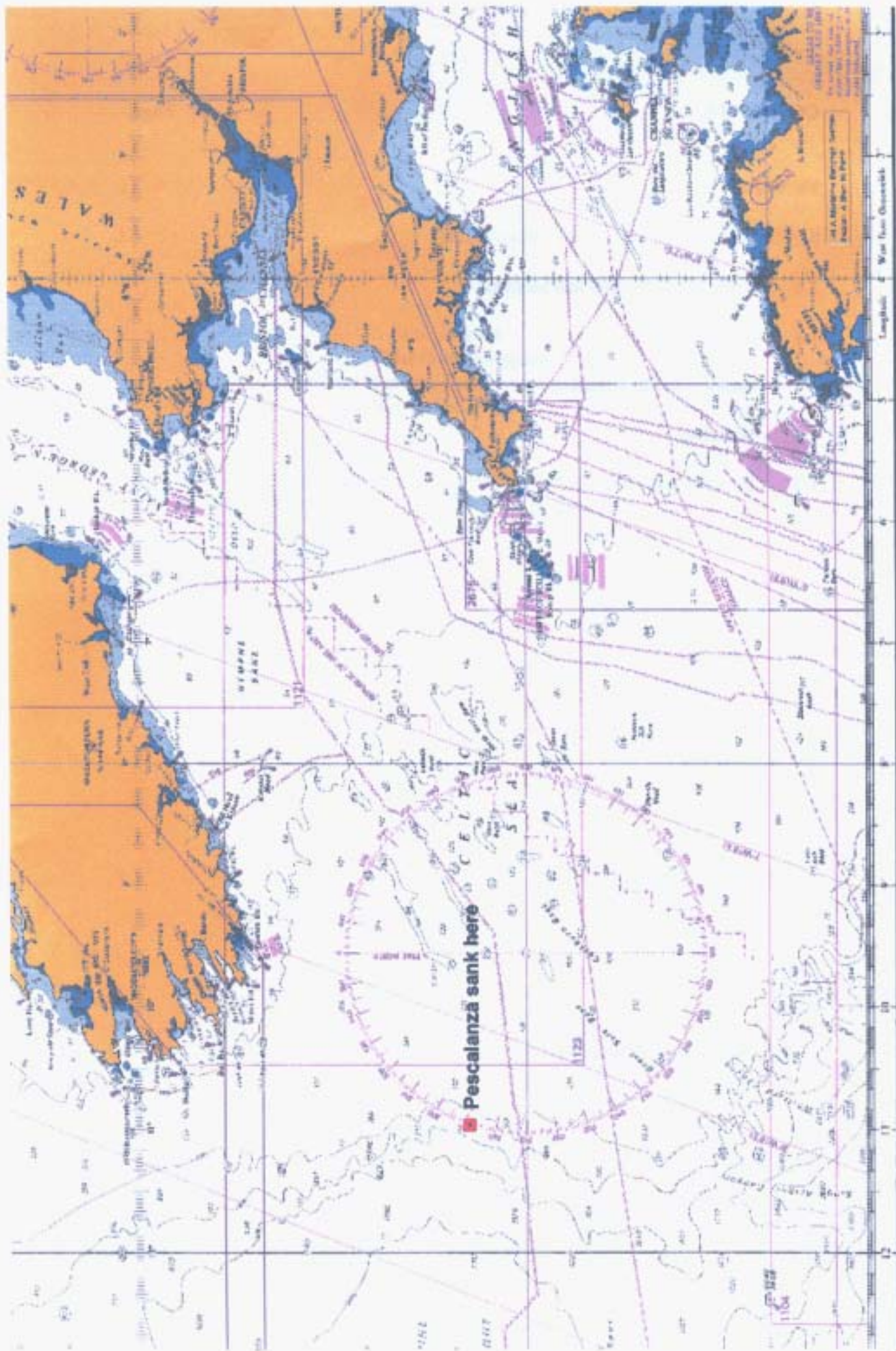


**Report of an investigation  
into the loss of  
PESCALANZA PZ744  
and six lives  
on  
2 November 1998**

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

**The fundamental purpose of investigating an accident under these Regulations is to determine its circumstances and the causes with the aim of improving the safety of life at sea and the avoidance of accidents in the future. It is not the purpose to apportion liability, nor, except so far as is necessary to achieve the fundamental purpose, to apportion blame.**

<b>CONTENTS</b>	<b>Page</b>
<b>SYNOPSIS</b>	<b>1</b>
<b>SECTION 1 - FACTUAL INFORMATION</b>	<b>2</b>
1.1 Particulars of vessel and incident	2
1.2 Crew	2
1.3 Background to voyage	2
1.4 Narrative	3
1.5 Weather and wave heights	4
1.6 Search and rescue	4
<b>SECTION 2 - ANALYSIS</b>	<b>7</b>
2.1 <i>Pescalanza</i>	7
2.2 Fishing in severe weather conditions	8
2.3 Weather and wave heights	8
2.4 Search and rescue	8
<b>SECTION 3 - CONCLUSIONS</b>	<b>9</b>
3.1 Findings	9
3.2 Causes	9
<b>SECTION 4 - RECOMMENDATIONS</b>	<b>10</b>



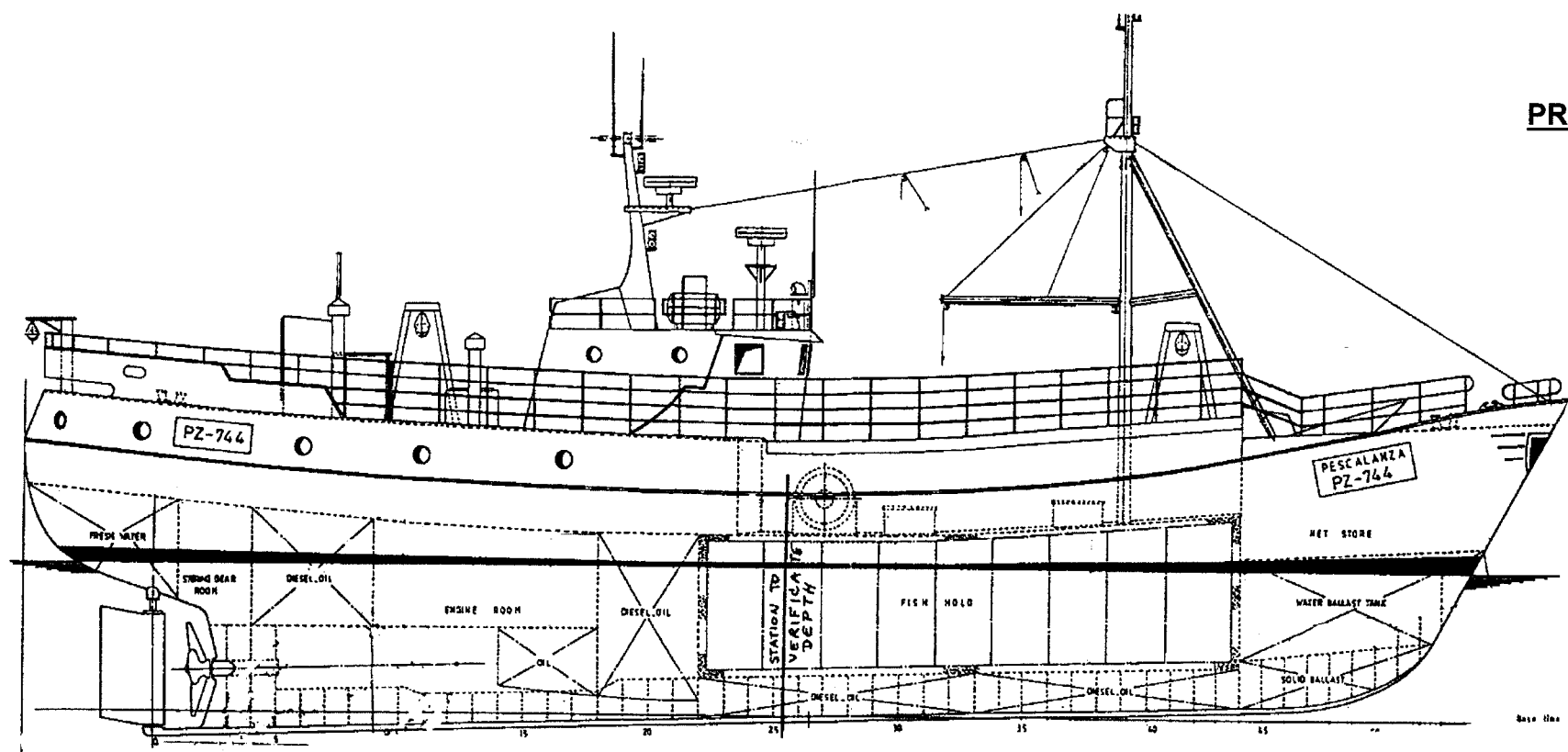
## SYNOPSIS

At 1434 on 2 November 1998, MAIB received a telex from MRCC Falmouth which reported the sinking of a Spanish fishing vessel 82 miles south-west of Mizen Head in Ireland. In fact the vessel was Spanish-owned but was registered in Penzance.

The 32 metre *Pescalanza* (Figure 1) had capsized at about 1230, while fishing in rough seas and north-north-west to north-west winds of force 8 to 9, and heavy rain showers. There were 12 people on board, all Spanish apart from one Ghanaian.

A fishing vessel, *Agorreta*, rescued six crew and recovered four bodies. A combined Irish and United Kingdom SAR operation, co-ordinated by Falmouth Coastguard was initiated but, despite helicopter and fixed wing aerial searches, the two missing persons were not found.

**PROFILE**



**SHELTER DECK**

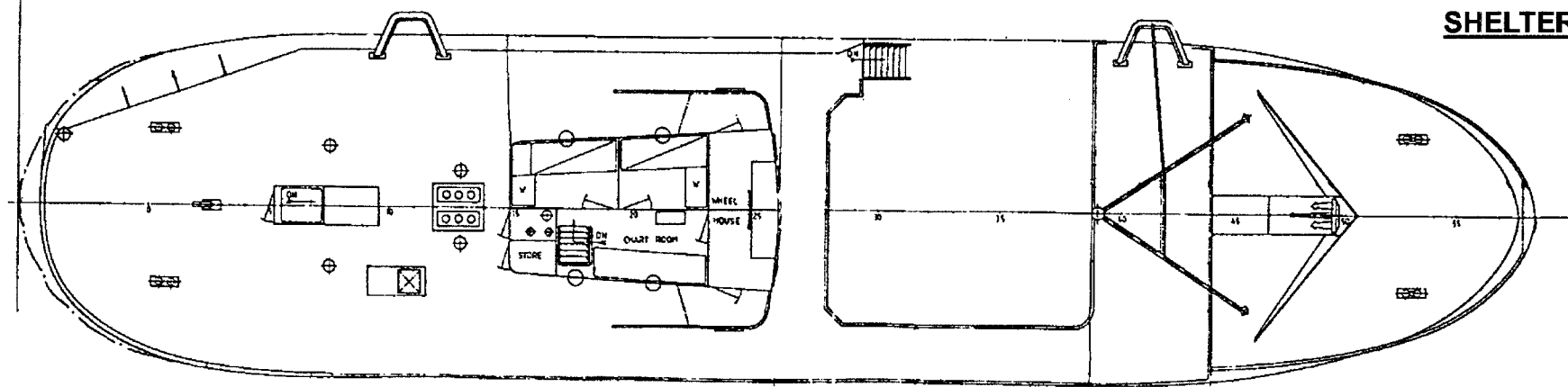


Figure 1 - FV Pescalanza PZ-744

## SECTION 1 FACTUAL INFORMATION (All times are UTC)

### 1.1 Particulars of vessel and incident

Name	<i>Pescalanza</i>
Official Number	A21958
Port of Registry	Penzance, United Kingdom
Port letters and number	PZ744
Registered length	28.32 metre
Year of build	1968
Builders	C N Santadomingo Avd Orillamar s/n Vigo, Spain
Engine	Klockner-Humboldt Deuz 436kW
Owners	Cutlerstar Limited Muelle Linares Rivas 85 Coruña, Spain
Managers	Ledbeam Limited Compton Barton Compton Paignton TQ3 1TA
Date and time of accident	2 November 1998 at about 1230 UTC
Position of accident	50° 18'N 10° 59'W

### 1.2 Crew

At the time *Pescalanza* sank there were 12 people on board of which 11 were Spanish and one Ghanaian. Six of the Spaniards died as a result of *Pescalanza* capsizing.

### 1.3 Background to voyage

*Pescalanza*, although registered in the United Kingdom, was manned predominantly by Spaniards and generally landed her catch in Marin on the Atlantic Coast of Spain.

She frequently fished 80 to 100 miles south of Ireland, in the company of other “Spanish” vessels. This area is particular good for whitefish in the winter months.

#### **1.4 Narrative**

On 2 November 1998 *Pescalanza* was fishing in an area about 80 miles south of Mizen Head, with an estimated 12 tonne of fish on board. The weather was frequent heavy showers with a north-north-west to north-west force 8 to 9 wind. There was a heavy swell running and the sea was described as very rough.

*Pescalanza*'s trawl gear was rigged in the traditional side-winder method, but on her port side instead of the more traditional starboard side. Prior to hauling her fishing gear, both warps were released from the towing block aft so that the vessel could come round to place the prevailing weather on to the port side. This is the normal procedure in side winder trawlers, and means that the warps and trawl are always leading away from the vessel so that she will not be blown or drift down on to the fishing gear.

With the weather on the port beam, *Pescalanza*'s crew began heaving on the trawl warps with the main winch until the trawl boards were close up to the fore and aft gallows. While this was going on, the vessel was rolling heavily in the very rough sea conditions.

As the crew were about to secure the trawl boards to the gallows, with the trawl and sweeps still outboard, *Pescalanza* shipped a heavy sea and heeled over to port. The main deck flooded. Before she could recover, the vessel was struck by another heavy sea. She rose up on the sea and, because of the entrapped water on the main deck and the weight of the trawl gear, the list increased until she was on her beam ends. Sea water then began flooding into the after part of the vessel which caused her stern to become partially submerged. Just as the fishing skipper was calling on VHF Channel 13 for help from nearby fishing vessels, a third large wave struck *Pescalanza*, and she began to sink.

The skipper and the fishing skipper managed to get out of the wheelhouse and on to the starboard bridge wing. From there they could see that the crew members were clinging on to the exposed part of the vessel. At that stage the port liferaft was under the water and could not be reached. They managed to release the starboard liferaft, but it inflated upside down. The fishing skipper then saw a fishing vessel approaching them and threw a lifebuoy with smoke float attached into the sea.

*Pescalanza* continued to sink and when the water had reached chest level the liferaft painter was cut and the liferaft started moving away from *Pescalanza*. Realising that their only hope of rescue was to reach the liferaft, the skippers and the rest of the crew swam towards it. After three of them had reached the raft they tried to right it, but it was impossible in the wind and sea. Eventually six of them made it and hung on to the upturned liferaft. One person was swept away by a wave but managed to grab the lifebuoy which had been thrown into the water earlier; the others were able to climb on to the liferaft. There they huddled together, desperately hanging on and trying to



keep warm, until they were rescued by *Agorreta*, another fishing vessel. The person holding on to the lifebuoy was also rescued by *Agorreta*.

## **1.5 Weather and wave heights**

The weather in the area where *Pescalanza* was lost was north-north-west to north-west force 8 to 9 winds with intermittent heavy rain showers. The sea was said to have been rough to very rough at the time and the search and rescue aircraft estimated the seas were 3 to 4 metres high. However, wave heights recorded by Marathon Petroleum (Ireland) Limited at Kinsale gas field (51° 22.25'N 07° 56.7'W), some 132 miles east-north-east of *Pescalanza's* last position, reached a maximum of 8.6 metres at 1400 on 2 November. The significant wave height reached a maximum of 5.7 metres at 1600 that day.

## **1.6 Search and Rescue**

### **1.6.1 Fishing vessels**

*Agorreta's* skipper had been fishing in the same general area as *Pescalanza*. At about 1130 *Agorreta* had turned to proceed at half speed in a south-easterly direction towards 50° 22' N 11° 01'W. During this passage *Pescalanza* was seen on the starboard side; the two skippers had previously spoken to each other on VHF Channel 13.

At 1230 when *Agorreta* was in position 50° 20.75'N 10° 54'W, her skipper heard a weak and broken-up distress call from *Pescalanza* on VHF Channel 13. He acknowledged the call and told *Pescalanza's* skipper that *Agorreta* was on her way to help. The skipper altered course towards *Pescalanza*, which was about 4 miles south-west of *Agorreta*, and increased to full speed. At the same time he informed other fishing boats in the vicinity on VHF Channel 13, and asked them to inform the Coastguard at Valentia. He also told them to request a rescue helicopter.

By the time *Agorreta* reached *Pescalanza* at 1307 her preparations for rescuing the crew were completed. The skipper and crew could see that *Pescalanza* was partially submerged and listing heavily to port side with the stern completely submerged. When *Agorreta* arrived, her skipper and crew found three, apparently lifeless, bodies in the water, two crew members still on board and right forward, and five more on an upturned liferaft.

As *Agorreta* approached *Pescalanza* her skipper was made aware that a man was in the water ahead of them, clinging to a lifebuoy. The skipper decided to rescue him first as he seemed to be the only one in the water who was definitely alive. Despite the very high seas, the strong force 8 to 9 winds and the close proximity of *Pescalanza*, which was only a few metres away, the skipper managed to manoeuvre *Agorreta* close to the man and recover him from the sea.

During this initial rescue operation, *Pescalanza's* rate of sinking increased, until only the bow was visible. One of the two crew remaining on board was washed off, but the other became trapped by some trawling tackle. *Pescalanza's* bow lifted

momentarily and then sank, taking the trapped crewman with her. A second body which was floating nearby was also seen to be dragged down by *Pescalanza* as she sank in water about 300 metres deep.

*Agorreta's* skipper continued searching for signs of life in the water, and managed to recover one other person on board but, despite attempts at resuscitation and cardiac massage, he failed to respond. As there appeared to be no further survivors, the skipper then decided to rescue those who were occupying the liferaft. This was successful and all five were taken on board *Agorreta* at about 1330. After a further search, three more bodies were recovered from the sea.

The search for the remaining two men who had gone down with *Pescalanza* continued until the visibility made it impossible. With six survivors and four bodies on board, *Agorreta* headed back to Marin in Spain at 1823 that evening.

During the rescue operations, *Agorreta's* skipper was in continuous contact with other fishing vessels in the area, including *Monte Allerro* and *Resolution*, and also with the rescue services.

### **1.6.2 Search and Rescue (SAR) Services**

At 1239 on 2 November 1998 the Irish Marine Emergency Service (IMES) coastal radio station at Valentia picked up a weak emergency call on MF 2182kHz from the fishing vessel *Meaban*, requesting immediate assistance for *Pescalanza* which was sinking in position 50° 18' N 10° 56' W. Although this position is in the UK Coastguard search and rescue region, Valentia provided SAR communications throughout the incident.

MRCC Dublin immediately alerted Falmouth Coastguard who was responsible for co-ordinating the SAR response. MRCC Dublin also tasked the IMES helicopter, R115, based in Shannon. Valentia Radio broadcast "Mayday relay" to alert ships at sea. An Irish Air Corps Maritime Patrol aircraft, R01, was diverted from the north-west of Ireland, and the Royal Air Force tasked a Nimrod aircraft (R12) from Kinloss in Scotland to assist in the search for survivors.

*Agorreta* kept Valentia Radio informed of progress with her search and rescue, and when helicopter R115 arrived on scene at 1457 it started a search for the two missing crew immediately.

Extensive aerial searches were carried out by R01, R12, and R115 until they went off task to refuel at Castletownbere and/or Cork. They were relieved by a Royal Navy Sea King helicopter (R193) from Culdrose in Cornwall and an RAF Nimrod R13.

Surface searching, by several vessels, continued until 2100 that same day but no further bodies were found.

On 3 November RAF fixed wing aerial searches were resumed but were terminated at 1800 the same day by Falmouth Coastguard.

Although *Pescalanza* carried a Kannad 406F EPIRB serial number 487, COSPAS/SARSAT number 33255 which had been registered with the UK Coastguard, no transmissions were detected.

## SECTION 2 ANALYSIS

### 2.1 *Pescalanza*

*Pescalanza's* last Fishing Vessel Certificate of Registry had been issued by the Department of Transport on 5 February 1996, but she had been sailing under the UK flag since 1982.

*Pescalanza's* last UK Fishing Vessel Certificate was issued by the Marine Safety Agency in Plymouth on 24 July 1997 and was valid until 25 March 1999, subject to the vessel remaining in class and undergoing the periodical inspection in accordance with the Fishing Vessels (Safety Provisions) Rules 1975.

*Pescalanza* had been fishing for 30 years and there is nothing to suggest that she was other than a well-found vessel, operated by an experienced skipper and crew.

As a "side-winder", *Pescalanza* was always most vulnerable when hauling her nets. Unlike stern trawlers, on this type of vessel the trawl is towed from gantries on the side of the vessel, and it is necessary to turn the vessel beam on to the sea and weather when hauling nets, to prevent the vessel riding over the top of the trawl gear. The catch is landed on one side of the main deck.

During heavy weather when "side-winders" come beam on to the sea they are susceptible to heavy rolling and therefore to some water on deck. In this particular case *Pescalanza* was struck by one large wave and then a second, just as she was recovering her trawl gear. She took on a heavy port list.

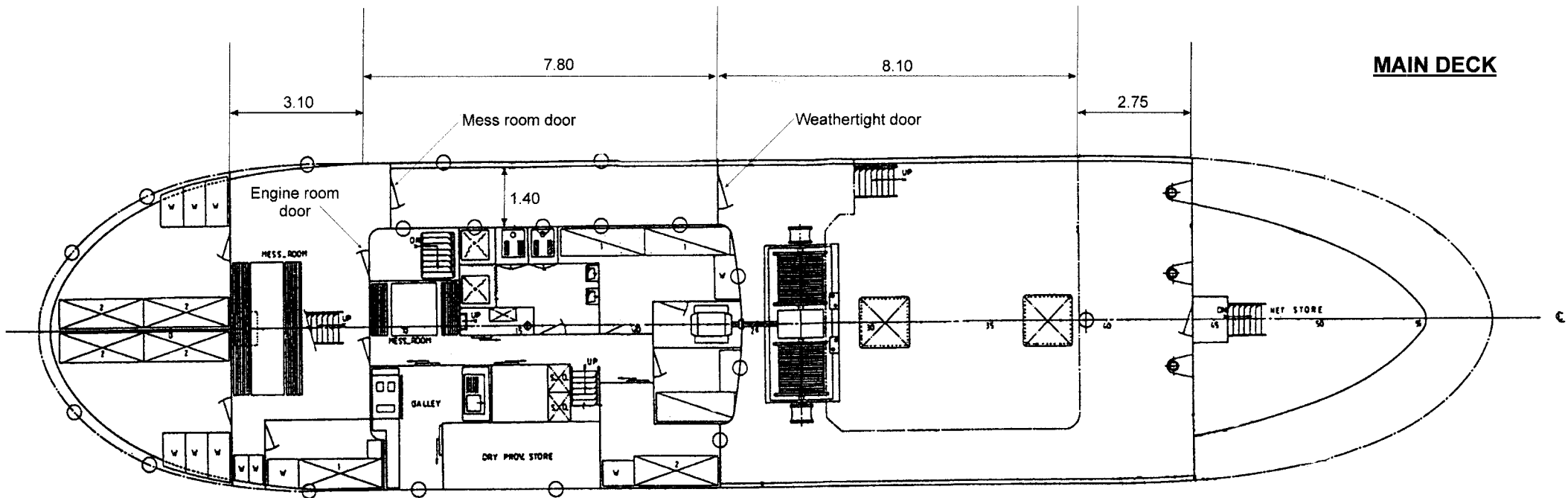
Under normal circumstances an accumulation of water on deck will run off through the vessel's freeing ports on the main deck. Weathertight doors and hatches will, if properly secured, ensure that water does not get inside.

There is insufficient evidence available to the MAIB to identify precisely how water entered *Pescalanza* but it is obvious she shipped a substantial quantity very quickly. As there is no report of structural damage from eye-witnesses, it is reasonable to suppose water entered through the weathertight door protecting the shelter from the main deck area which had been left open while recovering the trawl gear.

This would allow water to flow into the shelter. Not only did *Pescalanza* list heavily to port, but she also took up a stern trim and this is indicative of the doors to the mess room and the engine room also having been left open, allowing sea water to enter and downflood. (Figure 2)

The third large wave to hit *Pescalanza* exacerbated the situation, and she was unable to recover.

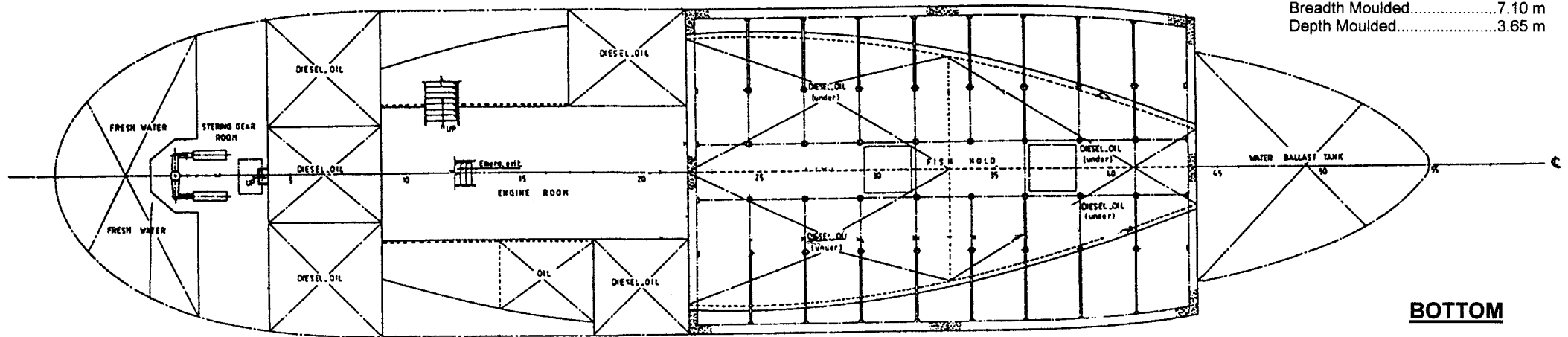
The volume between the main deck and the shelter deck aft of the bridge front was included in the zone used in calculating stability. Allowing water into this space would have an adverse effect on the vessel's stability, and this is clearly noted in *Pescalanza's* Stability Booklet which was approved by the Marine Safety Agency on



**MAIN DECK**

**MAIN CHARACTERISTICS**

Length Overall.....32.30 m  
 Length Breadth PP.....27.50 m  
 Breadth Moulded.....7.10 m  
 Depth Moulded.....3.65 m



**BOTTOM**

Figure 2 - FV Pescalanza PZ-744

15 February 1996. One of the working instructions contained in that booklet deals with watertight integrity and states "The levels of stability ... are entirely dependent upon water being excluded from the hull below the trawl deck. Open doorways, hatchways etc. breach this watertight integrity leaving the vessel vulnerable when suddenly heeled, or when taking the sea on board."

## **2.2 Fishing in severe weather conditions**

For United Kingdom fishing vessels of *Pescalanza*'s size, operating in the Unlimited area, it is a requirement that holders of First Class and Second Class Deck Officer Fishing Vessel Certificates of Competency, or their equivalents, are carried. Although the skipper, fishing skipper and mate did not hold any United Kingdom Certificates of Equivalence, they were experienced fishermen and were familiar with the dangers of associated with trawling in bad weather.

When severe weather such as that of 2 November 1998 is experienced, a prudent skipper would be expected to stop fishing and to dodge the weather. What motivated *Pescalanza*'s skipper to continue fishing is unknown; but it is not unusual for Spanish and Spanish manned fishing vessels to fish in extreme conditions.

The reality is that *Pescalanza* was fishing in a high sea state, had intentionally come beam on to the sea to recover her trawl gear, had been hit by a succession of large waves and had sunk with the loss of six people. In the MAIB's opinion, the decision to continue fishing in the prevailing weather and sea state was marginal.

## **2.3 Weather and wave heights**

The tendency for waves to form groups, characterised by sequences of relatively high crests separated by areas of comparative calm, is a well established feature of the sea. It is highly likely that the group of three waves which struck *Pescalanza* were considerably higher than expected, caught *Pescalanza* at her most vulnerable stage and allowed a significant quantity of water to become entrapped, resulting in a loss of stability and eventual capsizing.

## **2.4 Search and rescue**

The *Agorreta*'s skipper, on hearing the weak distress call from *Pescalanza*, acted promptly and effectively. It is probable that, but for his and his crew's skill, more people would have died or been lost.

On hearing *Meaban*'s emergency call, the IMES coastal radio station in Shannon alerted MRCC Dublin, who in turn alerted Falmouth Coastguard. The international and intranational co-operation in the SAR operation was exemplary.

## **SECTION 3 CONCLUSIONS**

### **3.1 Findings**

1. The fishing vessel *Pescalanza* capsized and sank in about 300 metres of water, in position 50° 18'N 10° 59'W, 82 miles south-west of Mizen Head in Ireland, at about 1230 UTC on 2 November 1998.
2. The vessel, a "side-winder", was beam on to the sea and weather, and was hauling nets at the time of the accident.
3. The vessel was hit by a succession of three large waves and took a significant amount of water on board.
4. The vessel heeled over to port and sank by the stern.

### **3.2 Causes**

1. The fundamental cause of the sinking of the fishing vessel *Pescalanza* was the entrapment of water on board during net retrieval operations when the vessel was most vulnerable and beam on to the sea.
2. It is probable that water was trapped between the shelter deck and the main deck on the port side and downflooded through an open door to the engine room.

## **SECTION 4 RECOMMENDATIONS**

**Ledbeam Limited** is recommended to:

1. advise all skippers of fishing vessels under its management of the importance of keeping weathertight doors closed, except when used for access, and point out that vessels, where the buoyancy effects of shelters have been considered when assessing stability, may not comply with stability requirements if certain weathertight doors are left open when at sea.

**Marine Accident Investigation Branch  
April 1999**