MCIB
Marine Casualty Investigation Board

Leeson Lane, Dublin 2.
Telephone: 01-6782460.
Fax: 01-6783129.
email: info@mcib.ie
www.mcib.ie

REPORT INTO THE CAPSIZING AND SINKING OF THE "DINISH" ABOUT 170 MILES SOUTH WEST OF THE SCILLY ISLES ON 24th MAY 2006

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

REPORT No. MCIB/125

Report MCIB/125 published by The Marine Casualty Investigation Board
10th October 2008

CONTENTS

1. SYNOPSIS

1.1 The Irish flagged 25 metre stern trawler "Dinish" left the Spanish Port of Vigo on 22nd May 2006 for its first fishing campaign under its new owners. The Spanish owners had acquired the vessel about three months previously and this was its first voyage under new ownership and with a new crew of ten persons. The vessel was fully provisioned with fuel, water, food and fishing gear for a campaign that was expected to last about three months.

1.2 The vessel was headed for fishing grounds off the south west coast of Ireland, where it had been operated by its previous owners.

1.3 At about 20.00 hours (UTC 22.00 ships time) on the 24th May 2006 a call was made from the "Dinish" to La Coruna Radio saying that the vessel was taking in water. The crew reported flooding in the engine room and attempts were made by the crew to control the level of flooding, however these efforts were unsuccessful.

1.4 Two liferafts were launched from the vessel and six of the crew got in to one raft. At approximately 20.30 hours (2230 ships time) the vessel capsized and sank about 170 miles south west of the Scilly Isles.

1.5 Rescue services were tasked along with other merchant vessels close to the last known position of "Dinish". Six survivors were taken on board the merchant vessel "Stena Contest" from one of the rafts and the Skipper of the "Dinish" was taken from the water by the merchant vessel "Stolt Capability". One other crewmember was taken from the water by a rescue helicopter and pronounced dead on arrival at Cork University Hospital. A search operation was mounted, however the remaining two crewmembers are not accounted for.

2. FOREWORD

2.1 We would like to express our gratitude to the Spanish Administration and in particular the Ministerio de Fomento for their assistance in this investigation.

2.2 The Ministerio de Fomento carried out their own investigation into this casualty and provided the Marine Casualty Investigation Board with copies of the crew statements and their final conclusions.

3. FACTUAL INFORMATION

3.1 Description of the Vessel

Name of vessel:	DINISH from May 2001 (ex MASCATO - Irish flag from 1979, ex MASCATO - Spanish flag from 1973)
Official Number:	401965
Type of vessel:	Steel Stern Trawler
Owners:	Castletown Fisheries, Castletownbere, Co Cork. A wholly owned company of Pesca Baqueiro SA, Spain
Managers:	Castletown Fisheries, Castletownbere, Co Cork
Registered length:	35.35 metres
Breadth:	8.60 metres
Depth:	6.10 metres
Draught:	3.95 metres
Gross Tonnage:	379 tonnes
Registered Tonnage:	113 tonnes
Engine:	Anglo Belgian Company
Engine power:	895 kW
Vessel Built:	1973, Zumaya, Spain
Safety Equipment:	Two 16 man liferafts One rescue boat 4 lifebuoys 20 lifejackets 10 immersion suits 12 thermal protective aids
Navigational equipment:	Not ascertained
Radio Equipment:	2 search and rescue transponders 3 hand held VHF radios COSPAS-SARSAT EPIRB VHF radio installation with DSC MF radio installation with DSC INMARSAT ship earth station NAVTEX receiver

"Dinish" was a stern trawler fishing vessel (See appendices for general arrangement).

The trawl net was hauled over the stern of the vessel and the cod end was emptied onto the fishing station or processing area below, through a flush hatch on the upper deck (See figs. at Appendices 9.1 - 9.3). The fishing station was enclosed and protected from the weather.

On the fishing station the fish was sorted, gutted, iced and stowed below in one of two holds on the centreline. The holds were accessed through weathertight hatches with coamings of about 30 cms.

At the aft end of the fishing station there were large sumps, which collected water from washing down the fish and the decks (See figs. at Appendices 9.1 and 9.3). This water was pumped overboard through a pump in the engine room.

At the starboard aft end of the fishing station was the waste chute. This chute had a raised coaming and went directly overboard. It was used for discharging waste fish and guts. It had a closure on the coaming and at the ships side. The ships side closure was operated by turning a wheel with a screw thread. The ships side penetration was at or slightly below water level when the "Dinish" left Vigo in the fully loaded condition (See fig. at Appendix 9.4).

Further aft were storerooms and the steering gear, accessed through doors in the aft bulkhead. Water from these spaces was drained into the engine room bilges through a pipe. Coamings or sills on the doors prevented water from the fishing station entering the space in normal conditions.

A trunk on the starboard side allowed access to the engine room through a weathertight door. This was the normal means of access to the engine room for the engineers, as it did not involve passing through the accommodation, which was on the port side. It also gave quick access to the refrigeration compressor room.

A storeroom on the starboard side midships on the fishing station housed the refrigeration compressors. This space was also fitted with a door and coaming. The coaming height was about 90 cms and had been raised. The compressors had pipes, which entered the engine room through a deck penetration, which was not sealed watertight. The pipes most likely carried seawater for cooling.

The door to the accommodation was located on the port side forward on the fishing station and fitted with a weathertight door and coaming.

3.2 Composition and Experience of the Crew

Juan Rogelio Comedeiro Menduiña - Skipper
Spanish Certificate of Competency as deep-sea fishing vessel skipper, ships radio operator. Had previously sailed as Skipper in "Dinish" two and a half months in 2005 and in sister vessel "Dunboy" for two months

Jose Malvido Caride - Mate - Second Captain
Spanish Certificate of Competency fishing vessel skipper, ships radio operator expired. First time sailing in "Dinish".

Manuel Graña Verdeal - Chief Engineer - missing
Spanish Certificate of Competency as Chief Engineer fishing vessels. Had previously sailed as Chief in "Dinish" in 2003 and 2005 and in sister vessel "Dunboy" in 2004.

Jose Antonio Gayo Sequeiros - Second Engineer
Spanish Certificate of Competency as second engineer fishing vessel. First time sailing in "Dinish".

Jose Luis Martinez Miguez - Boatswain
No formal qualifications notified. Had previously sailed as boatswain in "Dinish" in 2004 and in 2005 for three months and in sister vessel "Dunboy".

Miguel Angel Paz Torres - Cook
No formal qualifications notified. Had previously sailed as Cook in "Dinish" in 2005 for six months.

Felix Osei - Deckhand - deceased
Spanish Certificate of Competency as fisherman. STCW familiarisation and basic safety training. First time sailing in "Dinish".

Jose Santos Fernandez Gestido - Deckhand
No formal qualifications notified. First time sailing in "Dinish".

Djua Amadu - Deckhand - missing
No formal qualifications notified. First time sailing in "Dinish".

Ousseynou Thare - Deckhand
Spanish Certificate of Competency as fisherman, STCW personal survival techniques. First time sailing in "Dinish".

4. EVENTS PRIOR TO THE INCIDENT

4.1 Vessel

4.1.1 The "Dinish" was built in Spain in 1973 and named "Mascat"'. Ownership and registration of the "Mascato" transferred to Dublin, Ireland in 1979 to Eiranova Fisheries Limited with registered offices in Dublin and principal place of business in Castletownbere, Co. Cork. At the time of registration there was no requirement for survey of the vessel other than a survey for tonnage measurement and a safety equipment inspection. The vessel was inclined on 9th September 1996 in Vigo, Spain and a stability book produced for the vessel. The stability and stability book was not checked or approved by the flag State.

4.1.2 The "Mascato" was renamed "Dinish" in 1982 and remained under the ownership of Eiranova Fisheries until 2006. Financing for the vessel came variously from Irish and Spanish banks. During the time that the "Dinish" was owned by Eiranova it was manned by Spanish crew and fished principally off the west coast of Ireland.

4.1.3 The "Dinish" was surveyed in Ireland, by flag State surveyors from the Maritime Safety Directorate, on 26th July 2004 under the provisions of the Fishing Vessel (Safety Provisions) Regulations, 2002 for the issue of a Fishing Vessel Safety Certificate of Compliance. Eleven deficiencies were noted at this time and a declaration for the issue of a certificate was issued the same day. The survey carried out was primarily in respect of safety equipment. The vessel was maintained in class with Lloyds Register and the Classification Certificate was taken as satisfying the requirements of the Fishing Vessel (Safety Provisions) Regulations for survey of hull and machinery. The Classification Certificate was valid until 28th June 2008 having been assigned on 29th June 2003. Annual classification surveys would have been due every year between the dates 29th March - 27th September.

4.1.4 The stability book was verified as being on board at this time and it was verified that it showed compliance with the stability criteria of the Torremolinos Protocol in a sufficient number of load conditions to cover the work cycle of the vessel and that there was sufficient information to allow the Skipper to maintain adequate stability. This was sufficient to comply with the Safety, Health and Welfare at Work (Fishing Vessels) Regulations, 1999.

4.1.5 The nature of survey carried out by the flag State was based on negative reporting - deficiencies were noted and advised to the master or owner, however a positive record of items checked or verified was not required to be kept other than a record of safety equipment for the vessel. Among the deficiencies noted was a failure to record emergency drills in the logbook.

4.1.6 The Fishing Vessel (Safety Provisions) Regulations, 2002 implement Council Directive 97/70/EC as amended setting up a harmonised safety regime for fishing vessels of 24 metres in length and over.

4.1.7 These regulations revoked and replaced the Fishing Vessel (Safety Provisions) Regulations, 1998 also implementing Council Directive 97/70/EC. Council Directive 97/70/EC requires all existing fishing vessels over 24 metres to comply with the relevant requirements of the Annex to the Torremolinos Protocol not later than 1st July 1999 and to have on board a Certificate of Compliance.

4.1.8 The Certificate of Compliance for "Dinish" was issued on 18th August 2004 and a periodical survey by the flag State was due on 25th July 2006. Normally a three-month 'window' is allowed either side of the anniversary date and the survey should have been carried out anytime between 25th April 2006 and 24th October 2006.

4.1.9 Between 27th September 2005 and 7th October 2005 Lloyds Register carried out docking, annual and intermediate surveys for classification. No excessive readings were noted on the propeller shaft clearances and a memorandum for the hull required salt-water ballast tanks to be examined annually.

4.1.10 The "Dinish" was sold on 10th February 2006 to Castletown Fisheries Limited with registered offices in Dublin and principal place of business in Castletownbere. Castletown Fisheries Limited is wholly owned by the Spanish company Pesca Baqueiro. The vessel remained on the Irish register following the sale.

4.1.11 Following the sale of the "Dinish" in 2006 it was brought to Vigo, Spain. An underwater examination of the hull was conducted, for the owners by a local commercial diver on 21st March 2006 and his report states that he did not see any defects.

4.1.12 The vessel underwent extensive repairs to the vessel, machinery and fishing gear during April and May 2006. No application for survey was made and therefore these repairs were not overseen or surveyed by Lloyds Register, with which the vessel was classed, or surveyors from the vessels flag State, Ireland. Repairs of this nature are usually required to be surveyed by the flag State and classification society in order to maintain the validity of Statutory certificates and classification certificates.

4.1.13 The work carried out included repairs to the fish chute door seals and closing mechanism. A weather tight cover was also fitted to the chute.

4.1.14 Modifications were also carried out to the oily water separator and bilge piping associated with this piece of equipment.

4.1.15 Towards the middle of May the vessel loaded provisions, fuel and fishing gear for a fishing campaign that was expected to last about three months. During the campaign the vessel would have been expected to land the catch in Ireland approximately every ten days and to take on limited supplies.

4.1.16 When the vessel departed Vigo it is estimated that it was full of fuel and fresh water. Although the stability book shows that in this condition, together with

the provisions and fishing gear, the vessel met the Torremolinos stability criteria, it also shows that "Dinish" had negative freeboard. The stability book gives a maximum allowable draught of 3.95m. which results in a minimum allowable freeboard of 0.050m. to the main (fishing station) deck. The actual freeboard from the fishing station deck in this condition was -0.131m. This meant that the fishing station deck was 0.131m. below the waterline.

4.1.17 Sailing with a negative freeboard meant that the fish chute shipside connection was under water.

4.2 Crew

4.2.1 On the 18th May the entire crew of 10 signed off various safety and crew agreements including a statement that they had completed a distance learning training course of thirty hours duration. Each of the crew completed a multiple choice type examination relating to general safety on board fishing vessels.

4.2.2 A sworn statement to Gardai in Cork by an employee of Castletown Fisheries based in Vigo stated that they had interviewed one of the crew (Mr. Felix Osei) on 22nd May for a position on board and that he joined the vessel that day and sailed on it. He had not sailed on this vessel before.

4.2.3 The Second Engineer also joined on the day that the vessel sailed and spent the first day at sea seasick and re-adjusting to the marine environment. He had not sailed on this vessel before.

4.2.4 It is not known what checks were carried out by the ships crew prior to departure, whether or not bilge pumping systems were checked and verified or whether watertight hatches and closures such as the fish chute door were checked.

4.2.5 It is not known whether the Skipper had access to the stability book or whether he consulted it prior to departure. It is not known if he recorded the drafts or was aware that the vessel had negative freeboard before departure.

4.2.6 The Skipper, Mate, Chief Engineer and Second Engineer each had a Spanish Certificate of Competency for the position held on board. None of the officers Certificates of Competency would have been valid for service on an Irish fishing vessel in accordance with the Fishing Vessels (Certification of Deck Officers and Engineer Officers) Regulations, 1988.

4.2.7 None of the crew had B.I.M Basic Safety Training as required by the Fishing Vessel (Basic Safety Training) Regulations, 2001.

4.2.8 On 22nd May 2006 the "Dinish" was cleared by the port Captain of Vigo and sailed in the early evening at about 18.00 hours. Crew abandon ship and fire drills were not carried out prior to departure of the vessel, nor were they carried out at sea prior to the incident. This was in contravention of the Safety, Health and Welfare at Work (Fishing Vessels) Regulations 1999 and the Merchant Shipping (Musters)(Fishing Vessel) Regulations, 1993.

4.3 At Sea

4.3.1 During the day of the 24th May 2006 the crew had been working on the fishing station of “Dinish” but had cleared away by 19.30 hours and were variously either eating in the mess room or were in their cabins.

4.3.2 The Skipper was on watch in the wheelhouse with the vessel making about 7 knots. This was less than full sea speed as the engines were not being run at full load to allow them to 'run in' following repair in Vigo. He reported feeling a slight blow to the vessel.

4.3.3 The Second Captain was due on watch from about 23.00 hours to 07.00 hours and by 19.30 hours that day he had eaten and was asleep in his cabin in preparation for his next watch.

4.3.4 The Chief Engineer was on duty from 06.00 hours to 12.00 hours and then from 18.00 hours to 23.59 hours while the Second Engineer did the opposite watch. The Second Engineer assisted the Chief to repair a pipe in the engine room a short time after his watch was completed at 18.00 hours. The repair necessitated the use of the welding equipment and the cables were taken out through the aft workshop door onto the fishing station. Following the repair the cables were left lying through the door and the door was left open. Neither man noticed any flooding on the fishing station or in the engine room at this time, which was about 19.30 ships time. The Second Engineer went to his cabin and turned in shortly after this.

4.3.5 The cook was still on duty and aware that the Chief Engineer had not eaten his evening meal. He saw the Chief Engineer at about 21.30 hours and asked if he wanted to eat. The Chief said that he would return shortly. When he returned, he ate and then was headed towards the fishing station to go below to the engine room through the starboard side entrance door.

5. THE INCIDENT

5.1 Flooding

5.1.1 The Chief Engineer returned soon after he had left the messroom and said to the cook that the fishing station was flooded and that it would have to be pumped out. He then headed off to the engine room and called the Skipper on the bridge to say that there was water in the engine room.

5.1.2 The cook went to the fishing station to see what was going on and heard alarms going off at this stage but did not think that they were related to the flooding. He saw water on the deck and told the boatswain who was in his cabin. He also roused the Second Engineer, who was off duty, in order that he could assist.

5.1.3 The time was approximately 22.00 hours ships time on 24th May 2006 and the vessel was in a position approximately 180 miles WSW of the Isles of Scilly. The weather was fair with a west south westerly wind force four to five. The sea state was moderate to rough and visibility was moderate to poor.

5.1.4 The Skipper of "Dinish" was on the bridge when he was informed by the Chief Engineer, that there was a problem in the engine-room and that water was coming in.

5.1.5 The boatswain, meanwhile, instructed the cook to close the waste/fish chute door on the ships starboard side whilst he closed the starboard engine room door. By this time water was entering the engine room through the open door each time the vessel rolled. The level of water on the fishing station would have been at or very near to the height of the door coaming.

5.1.6 As the cook tightened down the closing device he could see daylight coming into the fishing station from the aft side of the chute at the ships side. He did not attach any significance to this.

5.1.7 The Second Engineer was asleep in his cabin when he was called by the cook and told to assist the Chief Engineer. Unaware of the seriousness of the situation the Second Engineer got up slowly and whilst getting dressed he was aware that the generators were being changed over because the vessel blacked out momentarily. When he was ready he went to the engine room, entering via the port side, which was the closest entrance to his cabin. There he found that the Chief Engineer had changed over from the shaft alternator to the port side diesel alternator.

5.1.8 The Second Engineer saw water being splashed about towards the stern side of the main engine, which was running at the time and observed the level of water in the engine room to be below the level of the deck plates. The Chief Engineer told him to go and close the fish chute because the water was coming from above.

5.1.9 The cook was coming from the waste chute and told the Second Engineer that he had already closed it but to go and check. The boatswain was on the fishing station by now. The Second Engineer checked the waste/fish chute and found it shut, although the hatch at the top of the chute remained open. By this time the water on the deck was about 70 cms high, the vessel was listing to starboard and the crew were assembling on the fishing station at the port forward end.

5.1.10 The Second Engineer could see daylight clearly through a crack in the body of the fish chute at the stern side but did not attach any significance to this. He returned to the engine room and observed that the level of the water in the bilges had increased and was now above the level of the deck plates on the starboard side but below the plates on the port side even though the Chief Engineer told him that the engine room and fishing station bilge pumps were working. The Second Engineer was acting under the instructions of the Chief as he had only been on the vessel for two days and was unfamiliar with the machinery. He was not in a position to verify for himself that the pumps were operating correctly.

5.1.11 The Second Engineer returned to the fishing station and observed that the water level was continuing to rise on the deck and that the vessel was listing to starboard. He also noted that the door to the aft storeroom was open and that the door to the starboard side compressor room was open and water was flooding both spaces. Water would shortly reach the port side accommodation doorsill and overflow. He did not close the aft store door because there were welding cables running through it and the starboard side compressor room door was inaccessible by this time.

5.1.12 Water was already seen flooding into the engine room from the starboard forward area where pipes were routed from the refrigeration compressors to the engine room. Water also entered the engine room from the aft end where the storeroom drained to the engine bilges.

5.1.13 The Boatswain, realising that the flooding was serious went to the bridge to inform the Skipper of the situation and then returned to the fishing station. He returned to the bridge to tell the Skipper and to say that he should come and see what was happening and left again.

5.1.14 The Skipper went below to inspect the situation and met with the boatswain on the way down. Both men went down to the engine room through the port side entrance door and found a large amount of water in the engine-room, which appeared to be streaming up from the floor plates to the deck head with considerable force. The Chief Engineer was in the engine room at that time.

5.1.15 When the Second Engineer returned to the engine room for the third time the Skipper and boatswain were there but left to raise the alarm and prepare to abandon ship. The time was about 22.15 hours. At this point the Chief stopped the main engine and immediately the water being splashed up by the flywheel stopped. The Second Engineer left the engine room to prepare to abandon ship but returned again shortly afterwards to tell the Chief that it was time to go.

5.2 Abandon Ship

5.2.1 The Skipper, realising that the engine room was flooding and that water was spreading to other parts of the vessel, returned to the bridge to notify La Coruna radio and the crew of the situation. Whilst on the bridge he started to put on his survival suit.

5.2.2 La Coruna radio advised that they were going to call out the rescue services and the Skipper agreed.

5.2.3 Meanwhile the second captain, boatswain, cook and a sailor had started to launch the liferafts, starting with the one on the port side. Due to the list it was not possible to enter the port side raft and the starboard liferaft was launched.

5.2.4 The boatswain, cook and one sailor got straight into this liferaft and the second captain returned to the bridge to collect a lifejacket and immersion suit which he had to cut out of its packaging. He told the Skipper that the crew were abandoning ship and then left the vessel from the starboard side jumping into the water. The liferaft was about six metres away at this stage and he managed to catch hold of the painter and haul himself towards the raft. The three crew in the liferaft pulled him aboard.

5.2.5 The second captain, the second engineer and several other crew members saw the Chief Engineer in the centre of the vessel during this time but he did not have a lifejacket on. They also saw two crew on the deck of the “Dinish” and both were wearing lifejackets.

5.2.6 The second engineer was on deck holding the painter for the liferaft. Afraid that the crew in the liferaft would cut the painter he jumped into the water, swam to the raft and was hauled aboard. A third man, one of the sailors, was also pulled from the water. The two remaining crew were seen to enter the water and later on were heard to shout.

5.2.7 The people in the liferaft, afraid that the “Dinish” would capsize on top of them, tried to row away from the vessel with little success, however the wind brought them clear as the “Dinish” rolled over. The oars provided in the raft were not long enough to reach the water unless the rower leaned bodily over the side of the raft.

5.2.8 The rescue boat was not launched during the abandon ship nor were any lifebuoys thrown over the side.

5.2.9 None of the officers or crew in the liferaft collected the portable VHF radios, the Search and Rescue Transponder or the flares from the bridge before abandoning ship.

5.2.10 The Skipper was one of the last to leave the vessel and having realised that the bridge was almost in the water he left the wheelhouse and stepped into the

water. Fearing that the vessel could turn over on top of him he swam away from it. He could see the liferaft about 30 metres away with people in it and could also see the empty raft. He was wearing an immersion suit but no lifejacket. The immersion suit was not fully zipped up and let water in. The time was about 22.25 hours.

5.2.11 The Chief Engineer was seen in the water by the Skipper and the boatswain as were two of the sailors, however they could not say if the Chief Engineer was wearing a lifejacket or not, although the Skipper had seen him with one on before he abandoned ship. The Skipper signalled to the people in the water to try to reach the liferaft, however it was being blown away from them.

A piece of net was floating about and he and one of the sailors managed to grab hold of this and it gave them something to help keep them afloat and together. The two men in the net could hear their colleagues but as night fell they lost contact. Some of the lifebuoys also floated to the surface, however to reach these meant that the men would have had to let go of the net to swim towards them.

5.2.12 The EPIRB, located on the wheelhouse roof, floated free of the vessel and activated automatically as the vessel capsized. Its first signal was received at 20.29 UTC, 22.29 ships time in the RCC Kinloss.

5.3 Communications

5.3.1 Ships time was on Central European Time adjusted for daylight saving which meant that it was two hours ahead of UTC and one hour ahead of local time in Ireland.

5.3.2 At 20.25 UTC (22.25 ships time) Valentia Coastguard Radio intercepted a call from “Dinish” to La Coruna radio in Spain saying that they were taking water in position 4826N 01023W.

5.3.3 At 20.29 UTC (22.29 ships time) RCC Kinloss picked up an EPIRB distress alert from the “Dinish” and advised MRCC Dublin as this was an Irish vessel.

5.3.4 At 21.11 UTC Stena Contest advised Falmouth Coastguard that they were 10 miles from the distress position and proceeding to assist with rescue.

5.3.5 At 21.15 UTC (23.15 ships time) Las Palmas radio was heard calling “Dinish” but did not receive a reply and did not respond to Valentia Radio when called.

5.3.6 At 21.35 UTC (23.35 ships time) MRCC Falmouth was unable to establish communications with “Dinish”.

5.3.7 Following the EPIRB alert there was no further communication with “Dinish”. Several vessels in the area also tried to make contact with “Dinish” without success.

5.3.8 A search and rescue operation was put in place involving ships in the area at the time, two helicopters and a search aircraft from the United Kingdom.

6. EVENTS AFTER THE INCIDENT

6.1 A number of vessels were in the area at the time and assisted with the search and rescue operation. These were:

"Stolt Capability" 24625 GT	Chemical/Oil Products Tanker
"Stena Contest" 27357 GT	Chemical Tanker
"Jag Pahel" 27627 GT	Crude Oil Tanker

6.2 At 21.25 hours UTC "Stena Contest" was requested by Valentia Coastguard Radio to try to contact "Dinish" on VHF Ch 16. "Stena Contest" tried without success.

6.3 At 21.44 hours UTC "Jag Pahel" reported seeing a hand held flare and shortly after this "Stena Contest" had two radar targets at about 1.5 miles away in position 482634N 0102023W.

6.4 Whilst in the liferaft the crew located the parachute flares and hand held flares. They were aware that there were seasickness tablets in the raft but did not use them even though some of the crew were being sick due to the motion of the raft. They managed to stream the drogues and attempted to row the raft, using the oars, towards the men in the water that they could hear shouting.

6.5 "Stena Contest" identified the targets as liferafts and by 22.10 hours UTC had the first raft alongside and found it to be empty.

6.6 The second liferaft was alongside the vessel by 22.37 hours UTC with 6 persons onboard. All the survivors were wearing lifejackets but not immersion suits, except the Second Captain. They were taken on board "Stena Contest" and eventually landed ashore at Wilhelmshaven, Germany from where they were repatriated to Spain. They were the Mate, Second Engineer, Boatswain, Cook and two deckhands. None of the six spoke English sufficiently well to communicate with the crew of "Stena Contest", however a satellite telephone linkup with a translator helped them to communicate to "Stena Contest" that there were four persons still in the water.

6.7 The three vessels continued searching the area as it became apparent that there were four persons still in the water. It was reported that all four were wearing lifejackets but only the Skipper was wearing an immersion suit.

6.8 "Jag Pahel" reports that they can hear shouting and at 00.13 hours UTC on 25th May 2006 two persons are sighted in the water by "Stolt Capability". One person was wearing a lifejacket and the other an immersion suit. "Stolt Capability" managed to recover one person wearing an immersion suit and the other person was recovered from the water by helicopter.

6.9 The Skipper, who was wearing the immersion suit, was landed ashore at Horta, The Azores from where he was repatriated to Spain.

6.10 The deckhand recovered from the water by helicopter was brought to Cork Airport and was pronounced dead.

6.11 A search continued for the Chief Engineer and one of the deckhands until 05.55 hours when it was called off due to reduced visibility. It was reported that they were wearing lifejackets. These two crew remain unaccounted for.

7. CONCLUSIONS

7.1 "Dinish" flooded, capsized and sank at approximately 20.30 hours UTC 180 miles west south west of the Scilly Isles in position 4826N 01023W. Water entered the vessels main deck / fishing station due to failure of the ships side connection of the fish chute. The main deck drain sumps flooded first and as the vessel trimmed by the stern progressive flooding took place first into the engine room through an open door.

When the flooding onto the deck and into the engine room was noticed the engine room door was closed and flooding increased on the main deck until water started to enter the aft storerooms and the compressor room. Water then started to flood the engine room again through drains and pipe penetrations.

As the vessel settled into the water stability started to decrease and the water level on the main deck rose above the hatch coamings and flooded into the centre and forward holds.

As flooding progressed the stability of the "Dinish" decreased until capsize occurred.

Capsize occurred about 1 hour after flooding first started and about 30 minutes after flooding was first noticed by the crew. (See Appendix 9.5).

7.2 The time taken for flooding and capsize to occur could have been affected by a number of factors:

- Computer modelling shows that if all the weather tight doors and hatches in the fishing station had been closed when flooding was first noticed the time taken to capsize would have increased by about 50 minutes.

- Computer modelling shows that if all the weather tight doors and hatches on the fishing station had been closed before flooding first occurred the time take to capsize would have increased by about 2 hours.

7.3 It was routine to check the refrigeration compressors several times during the watch and it is likely that the door to this space was normally left open, along with the other weathertight doors in the fishing station. Good seamanship and housekeeping would have meant that these doors were kept closed and although "Dinish" would still have sank in this situation there would have been more time available to summon assistance and abandon ship. Indeed there may even have been sufficient time to systematically assess the problem and effect temporary repairs, which would have prevented the vessel sinking.

7.4 The stability book for "Dinish" showed several conditions where the vessel had negative freeboard these were:

- **Condition 7** Depart Port
  All tanks full plus 60 tonnes of ice. Minimum freeboard required 0.050m, actual freeboard minus 0.131m.

- **Condition 8** Arrival at the fishing grounds.
  Most tanks full, limited consumption of fuels, lubes and supplies plus 59 tonnes ice. Minimum freeboard required 0.050m, actual freeboard minus 0.075m.

- **Condition 9** Depart the fishing grounds for first discharge in Ireland.
  Most tanks full, some consumption of fuels, lubes and supplies. 48 tonnes of ice and 35 tonnes of fish. Minimum freeboard required 0.050m, actual freeboard minus 0.064m.

  The negative freeboard departing Vigo meant that the main deck of “Dinish” was under water and that any failure of a shipside connection in this region would result in flooding of the main deck.

7.5 The stability book for "Dinish" was not approved by either the flag State or Lloyds Register as classification society. It was not required to be approved and the information that it contained satisfied the requirements of the Safety, Health and Welfare at Work (Fishing Vessels) Regulations, 1999.

7.6 The owners and crew did not pay sufficient attention to the condition of the fish chute and its connection with the ships side. Fish chutes are subject to abnormal wear and tear as they are continually wet and dry and also used to discharge abrasive waste from the trawl nets - stones, flotsam etc.

7.7 An immersion suit was provided for every crewmember on board. This was in excess of the flag State requirements, however the immersion suits were still in the delivery bags when “Dinish” departed Vigo and the crew were not exercised in donning them. It is likely that at least one of the three deceased / missing crewmembers would have survived if he had been wearing an immersion suit.

7.8 The abandon ship was not carried out in an orderly fashion. The crew were not assembled and did not abandon ship together. This resulted in four of the crew being left behind on “Dinish” after the liferafts had been launched.

7.9 There was a failure by the Master of the vessel to comply with the Merchant Shipping (Musters)(Fishing Vessel) Regulations, 1993 and the Safety, Health and Welfare at Work (Fishing Vessels) Regulations 1999 in carrying out drills. A fire and abandon ship drill held before departure of the “Dinish” may have helped to make the crew aware of the location of the immersion suits, lifejackets and donning procedures. It may also have helped in ensuring a more orderly abandon ship.

7.10 There was a failure by the master and company to comply with the Fishing Vessel (Basic Safety Training) Regulations, 2001 in ensuring that all crewmembers had undergone the basic safety training required. The crew had, however, had some personal survival training.

7.11 There was a failure by the company to comply with the Fishing Vessels (Certification of Deck Officers and Engineer Officers) Regulations, 1988 in ensuring that all the officers had Irish Certificates of Competency or equivalent Certificates of Competency. It is unlikely that failure to comply with these regulations affected the cause or outcome of the incident, however, Irish

Certificates of Competency are conducted through the English language and competency in English would have helped communications with the rescuers.

7.12 There was a failure by the company to allow sufficient familiarisation time on the vessel especially for new crew. The Second Engineer was not sufficiently familiar with the arrangements on board "Dinish" to be of any significant assistance to the Chief Engineer during this incident.

7.13 No attempt was made to stop the ingress of water through the crack in the fish chute other than trying to close the shipside connection. It is likely that excessive force used to close the fish chute door had the effect of opening up the crack even more and allowing more water into the vessel.

7.14 The Chief Engineer collected a lifejacket from the bridge and had it on when he was last seen on board by the master. A lifejacket should have been available in the engine room for just such an eventuality as this. All the other crew were reported to have been wearing lifejackets when they abandoned ship. In spite of a search of the area the Chief Engineer and one crewman were not located although their bodies should have been kept afloat for at least 24 hours by the lifejackets. It is possible that their lifejackets were not fastened securely and came off in the water.

7.15 The rescue boat was not launched. A pre departure drill had not been carried out and the crew would have been unfamiliar with the launching of the rescue boat because of this. Had they been familiar with the launching procedure, and had the rescue boat been launched they may have been able to locate and rescue the four men in the water and also retrieve the liferaft that drifted away.

7.16 Lifebuoys and other flotsam were not thrown overboard. An approved lifebuoy is tested to be capable of supporting two persons in the water. If the lifebuoys were used they might have increased the chances of survival of the men in the water by giving them something to cling to.

7.17 The crew failed to take the SARTS and portable VHF radios with them when they abandoned ship. These items would have assisted search vessels to locate the crew. The muster list is required to be prepared before proceeding to sea and among other things should designate crewmembers to prepare the liferafts and equip them with these items.

7.18 "Dinish" was due, but not overdue, for intermediate survey for the Certificate of Compliance whilst undergoing repairs in Vigo. It would have been prudent of the owners to invite the flag State and classification society to Vigo to carry out annual and intermediate surveys prior to the first fishing campaign. The flag State and classification society should have been notified of the repairs being carried out in any event.

7.19 A negative reporting system is used by the State when carrying out its surveys on fishing vessels. There is no positive record required to be kept of what has been surveyed. A list is usually produced advising the owner of deficiencies that require to be rectified within a given time frame, however it is normally the

case that every part of the vessel is surveyed and in this instance there is no reason to suspect that this was not the case. The extent of the flag State survey exceeded the requirements for the issue of a Certificate of Compliance.

7.20 The rescue operation was carried out in a professional and seamanlike manner by both the shore coordinators and the search and rescue aircraft and vessels tasked to the event.

8. RECOMMENDATIONS

8.1 There are few lessons to be learned from this incident that have not already been highlighted in other similar reports and in Marine Notices. The conclusions relating to the loss of “Dinish” and the subsequent loss of life are self explanatory and centre on the adequacy of the company procedures for checking the structural integrity of the vessel, crew familiarisation, the Masters failure to ensure that emergency drills were carried out prior to departure and the initial sailing conditions allowed in the stability book (See stability book at Appendix 9.6).

Owners, operators, Masters and crew should make every effort to ensure that all personnel on board are trained in safety procedures, familiar with the vessel, have the latest safety information available to them and that they comply with the legislation. All parts of the vessel that could reasonably be expected to lead to flooding should be inspected frequently for damage and effective operation.

Stability books should not contain sailing conditions which fail to meet minimum criteria or such conditions should be clearly marked to the effect that they are not sea-going conditions.

Owners and skippers should 'sign-off' on the stability book agreeing that the sailing conditions contained in the book reflect the actual work cycle of the vessel.

8.2 The State should review the effectiveness of its marine safety information promulgation, as the safety message does not seem to be penetrating into the fishing industry regarding ship familiarisation, safety training, and emergency preparedness.

8.3 A number of national regulations were broken and had they been observed the outcome of this incident might have been different.

The State should review the effectiveness of its enforcement of marine safety legislation. Stronger enforcement of the legislation may lead to a greater awareness and understanding of the requirements.

8.4 The State should review, update and amend its 'Guidelines for Survey of Fishing Vessels of 24m Length and Over' including comprehensive checklists and survey requirements to cover all applicable legislation, marine notices and recommendations.

8.5 The State should review its policy of acceptance of classification certificates as evidence of compliance with structural standards without having in place formal agreements.

8.6 The State should review the adequacy of the safety legislation applying to existing fishing vessels of greater than 24m with a view to more prescriptive requirements for the hull, machinery, safety equipment and stability.

9. LIST OF APPENDICES

9.1 Profile of the "Dinish"

9.2 Plan at Upper Deck

9.3 Plans at Main Deck and below Main Deck

9.4 Diagram of waste chute

9.5 Diagrams illustrating the sequence of events

9.6 Trim and Stability Book

Appendix 9.1: Profile of the "Dinish"

APPENDIX 9.1

PROFILE

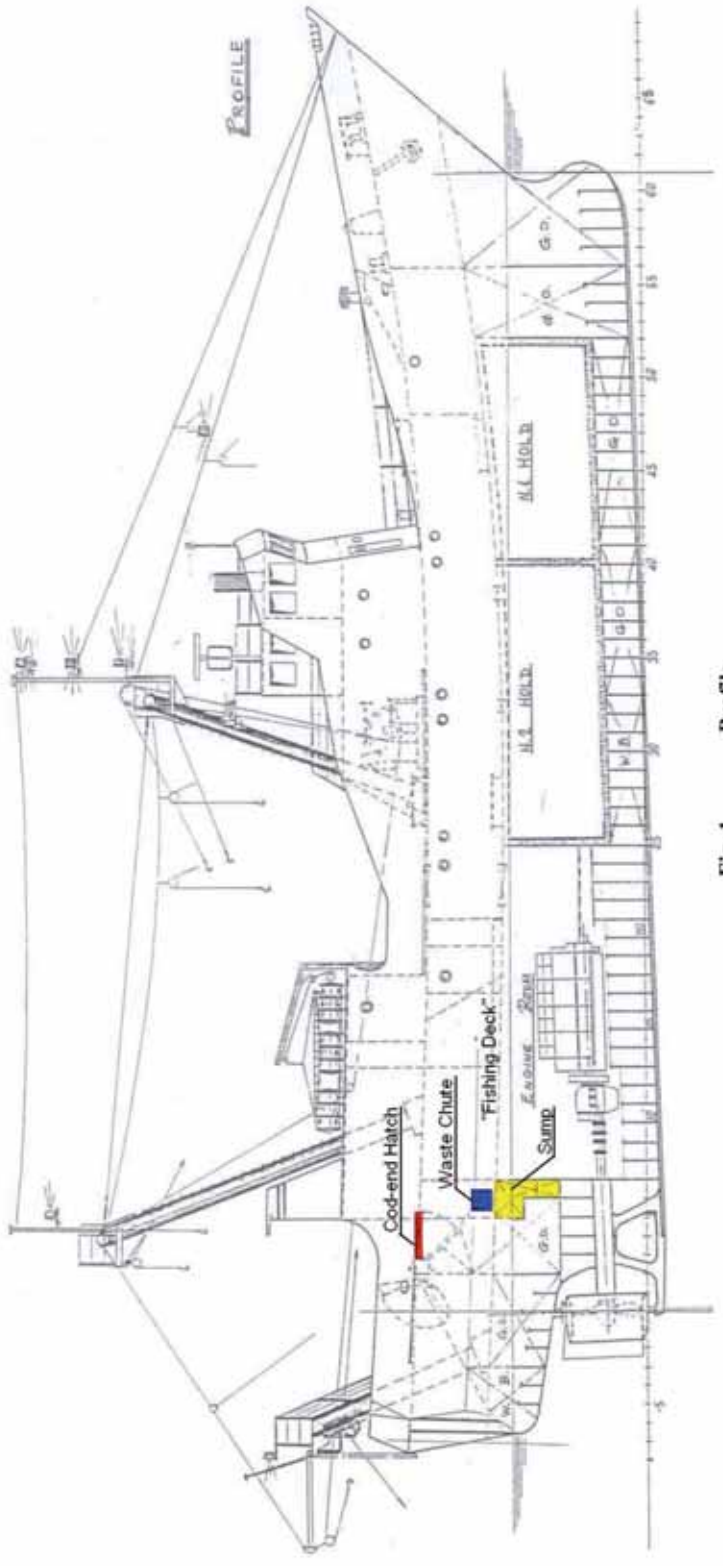


Fig. 1 Profile

24

Appendix 9.2: Plan at Upper Deck

APPENDIX 9.2

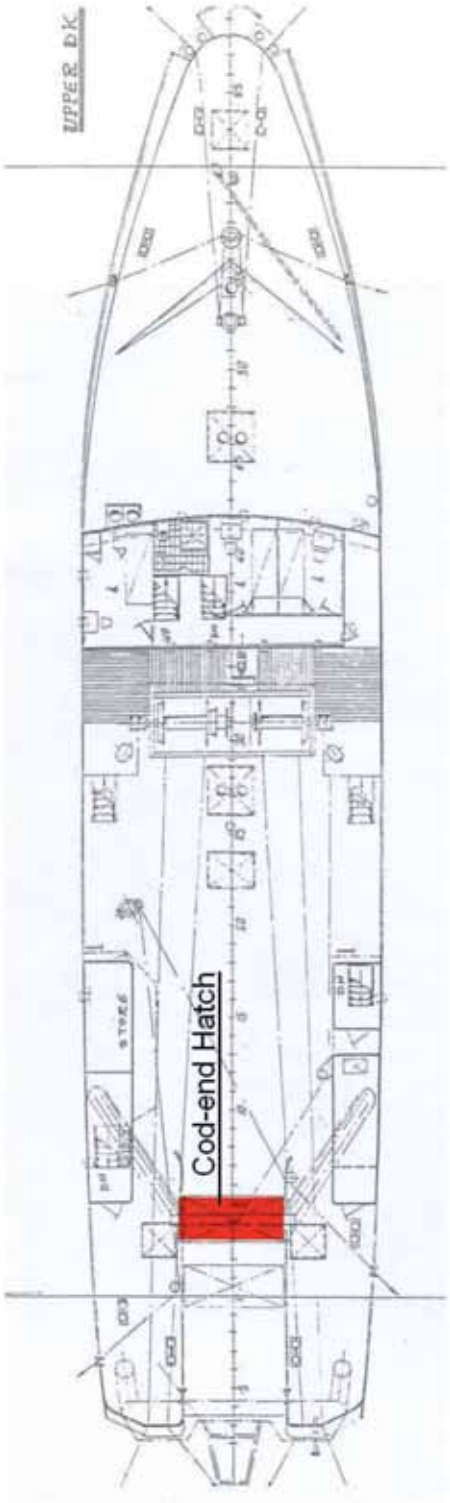


Fig. 2 Plan at Upper Deck

25

Appendix 9.3: Plans at Main Deck and below Main Deck

APPENDIX 9.3

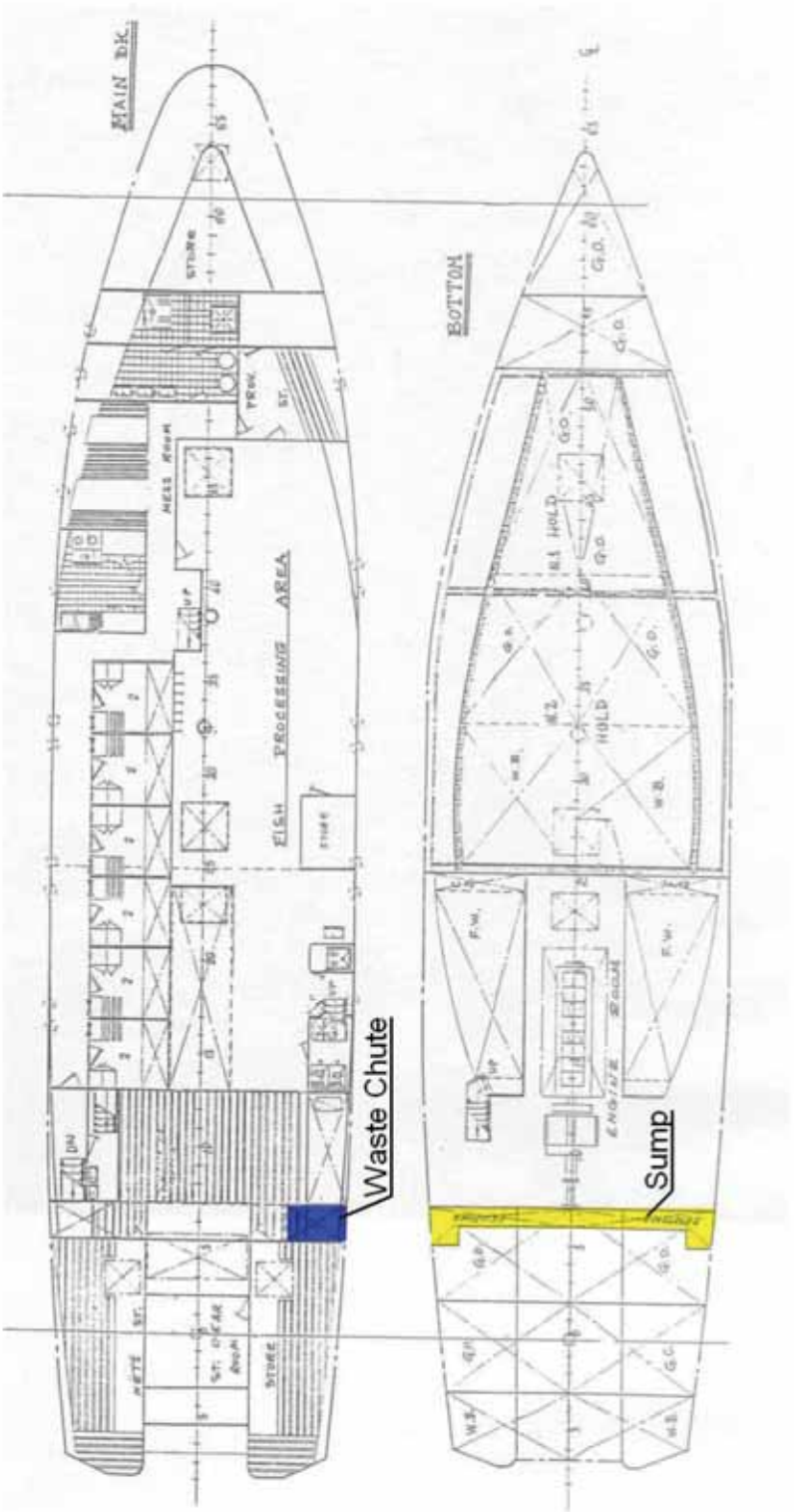


Fig. 3 Plans at Main Deck & below Main Deck

26

Appendix 9.4: Diagram of waste chute

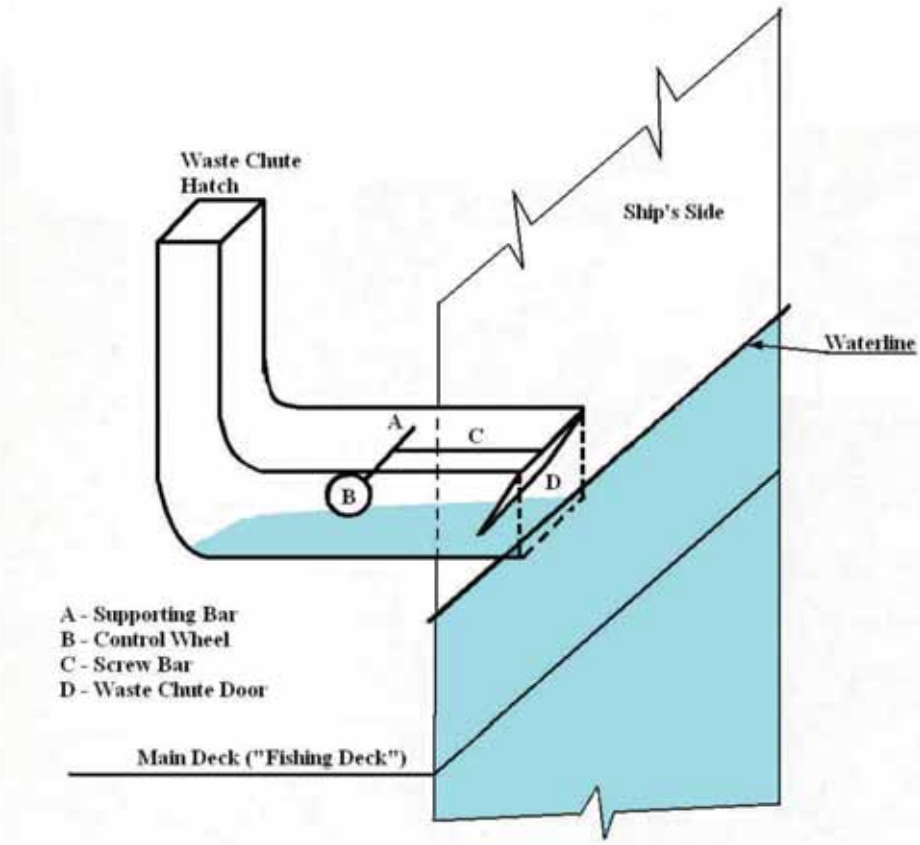


Fig. 4 Diagram of Waste Chute

A computer simulation was carried out in order to verify the conclusion that the sinking of the vessel was due to water flooding the fishing station and engine room via a crack in the welding where the waste chute was connected to the shell.

The flow rate of the water into the fishing station was adjusted to match as closely as possible the timing of events as described by the witnesses.

The initial condition of the vessel was assumed to be Arrival Grounds #1 taken from the stability book. This condition is given in Appendix 2

Figure 5 shows the openings through which the initial flooding took place. Initial flooding was through a crack at the waste chute (A), which would have flooded on to the fishing station. Water on the fishing station normally drains in to sumps at the aft end of the deck and is pumped overboard by dedicated pumps. As these pumps were not running at the time the water would have accumulated in the sumps and eventually overflowed onto the fishing station. This would have continued until the water reached the engine room access door (B) and then started to flood in to the engine room.

27

Appendix 9.4

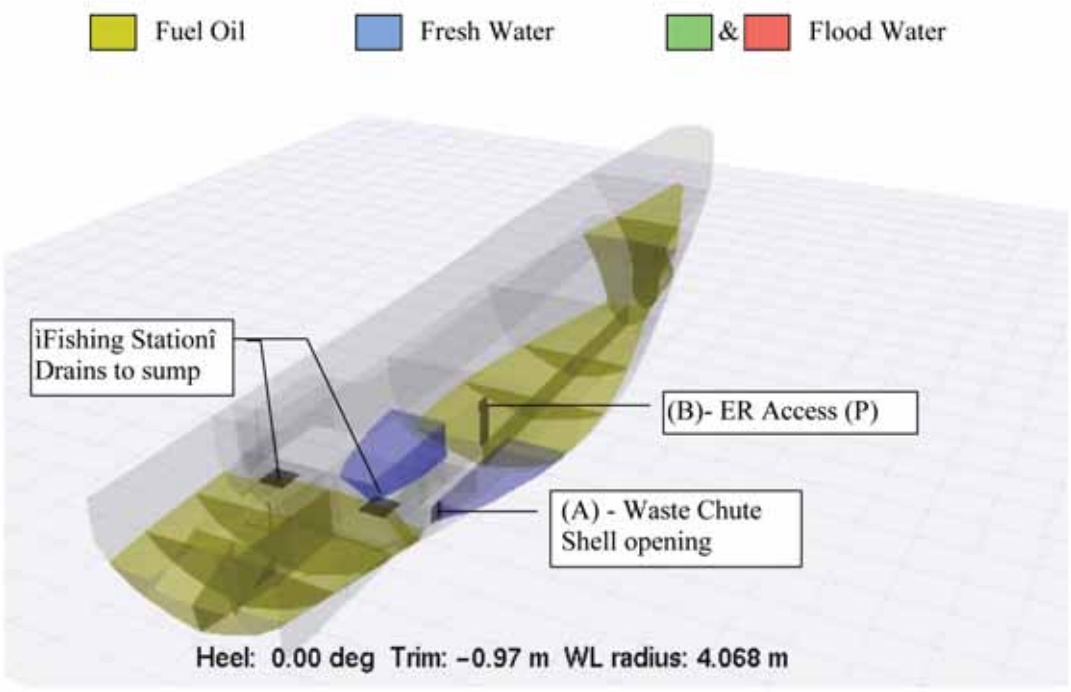


Fig.5

28

Appendix 9.4

Although door (B) to the engine room was closed when the water in the fishing station and engine room was discovered, a number of other doors and hatches were still open which allowed progressive flooding to occur. These openings are shown in Figure 6.

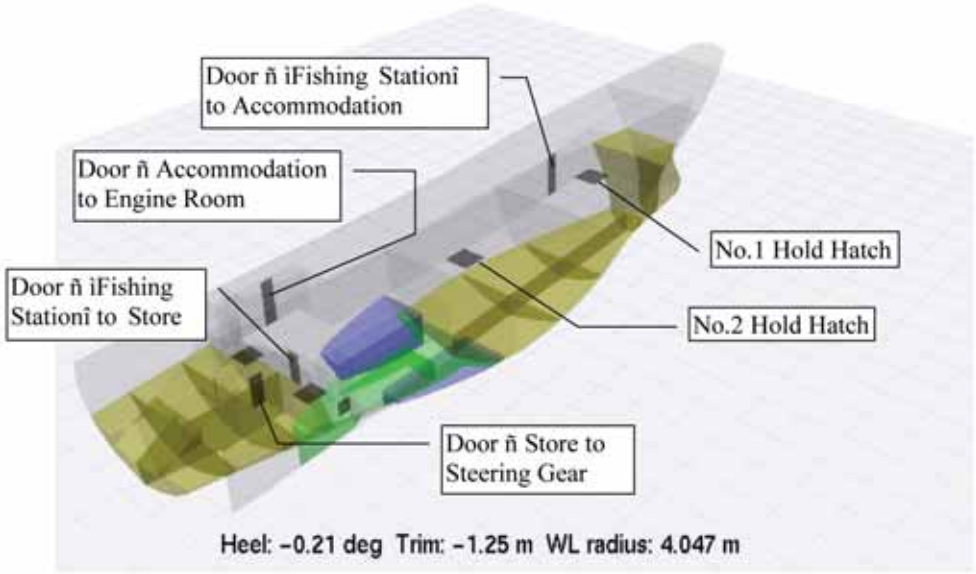


Fig.6

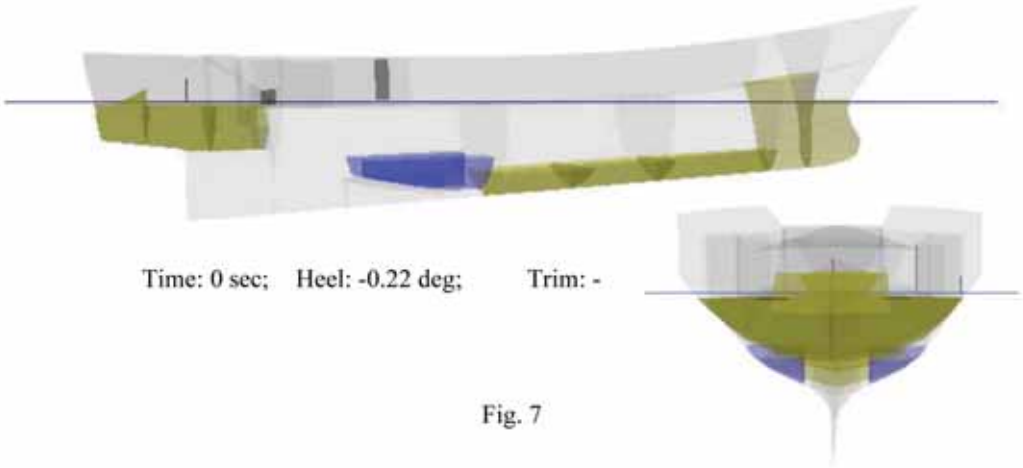
29

Appendix 9.5: Diagrams illustrating the sequence of events

APPENDIX 9.5

The following figures illustrate the sequence of events which led to the capsize and sinking of the vessel:

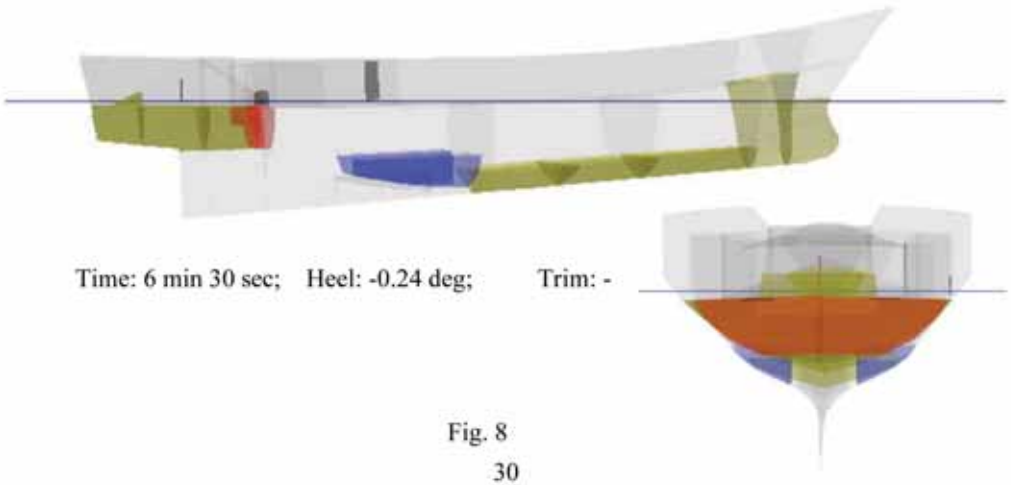
Fig. 7 Vessel in the initial intact condition, Arrival Grounds #1, just before the water started to enter the fishing station.



Time: 0 sec; Heel: -0.22 deg; Trim: -

Fig. 7

Fig. 8 The fishing station drain sumps are filled and just about to overflow on to the fishing station.



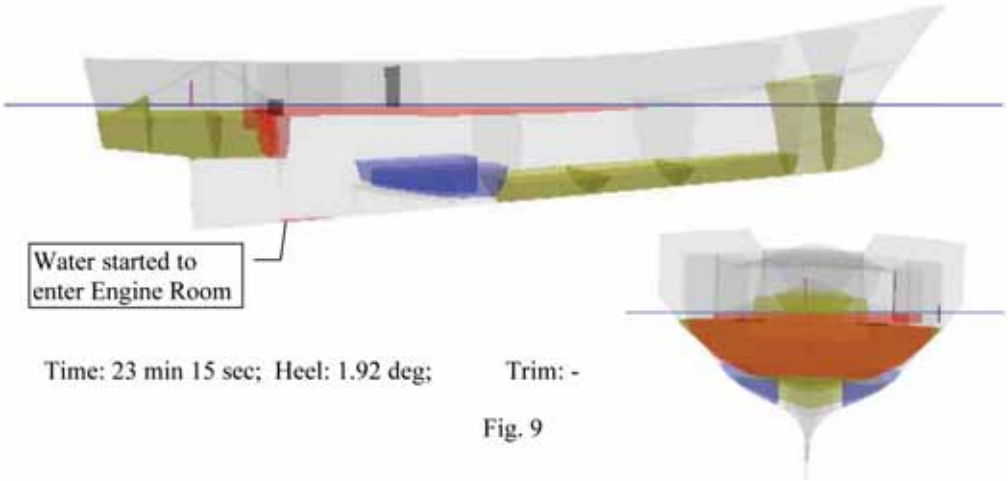
Time: 6 min 30 sec; Heel: -0.24 deg; Trim: -

Fig. 8

30

Appendix 9.5

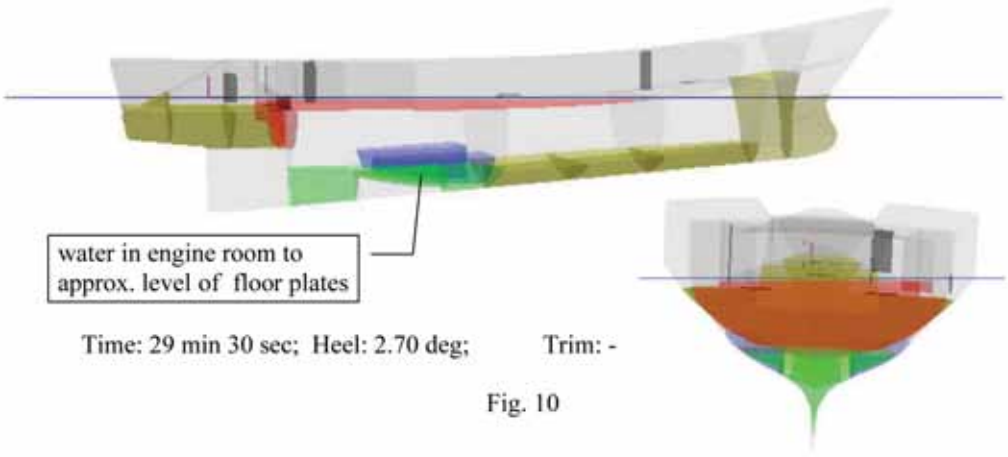
Fig. 9 Water has flooded on to fishing station to the level of the starboard engine room door and has just started to flood down in to the engine room. Vessel now has a slight heel to starboard.



Time: 23 min 15 sec; Heel: 1.92 deg; Trim: -

Fig. 9

Fig. 10 The water level in the engine room has reached approximately the level of the floor plates. This is approximately the time when the flooding was first discovered and when the starboard engine room door was closed.



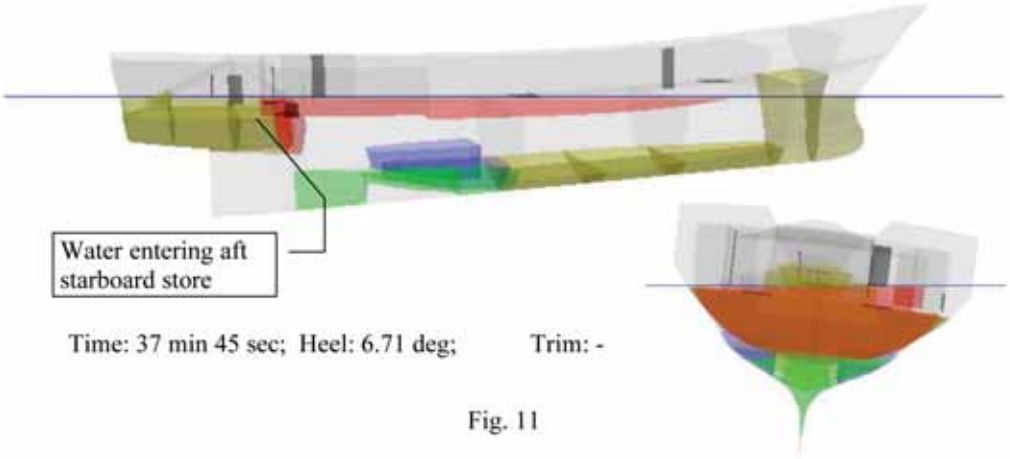
Time: 29 min 30 sec; Heel: 2.70 deg; Trim: -

Fig. 10

31

Appendix 9.5

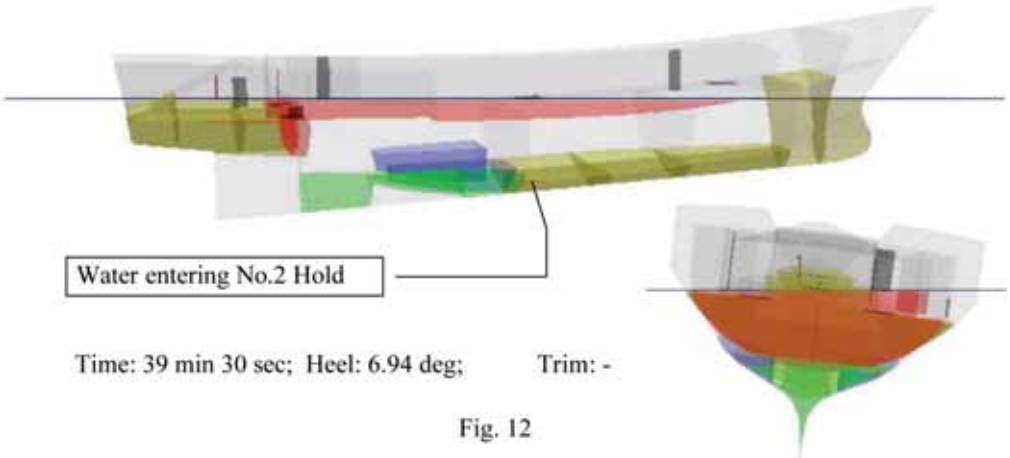
Fig. 11 Water in fishing station has reached the level of the top of the coaming at the door to the aft starboard store and has started to flood the store.



Time: 37 min 45 sec; Heel: 6.71 deg; Trim: -

Fig. 11

Fig. 12 Water level in fishing station has now reached the hatch to No.2 Hold and it is assumed that No.2 Hold will start to flood.



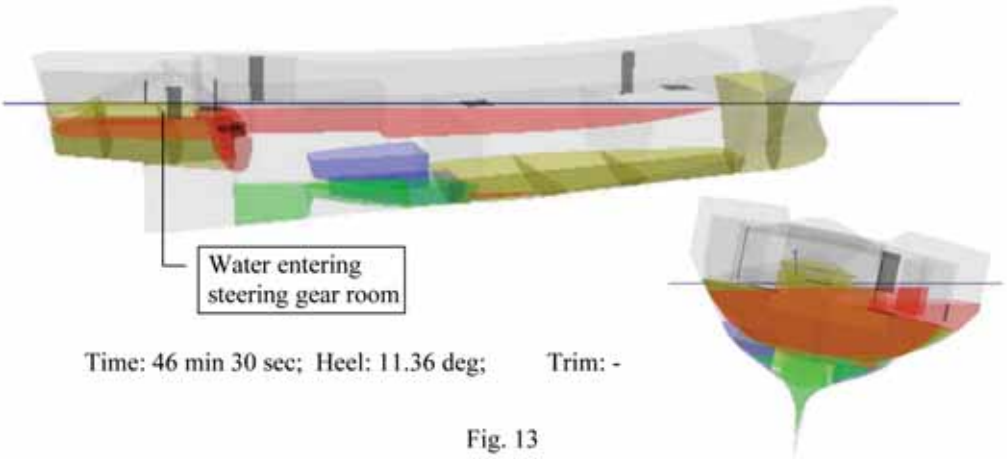
Time: 39 min 30 sec; Heel: 6.94 deg; Trim: -

Fig. 12

32

Appendix 9.5

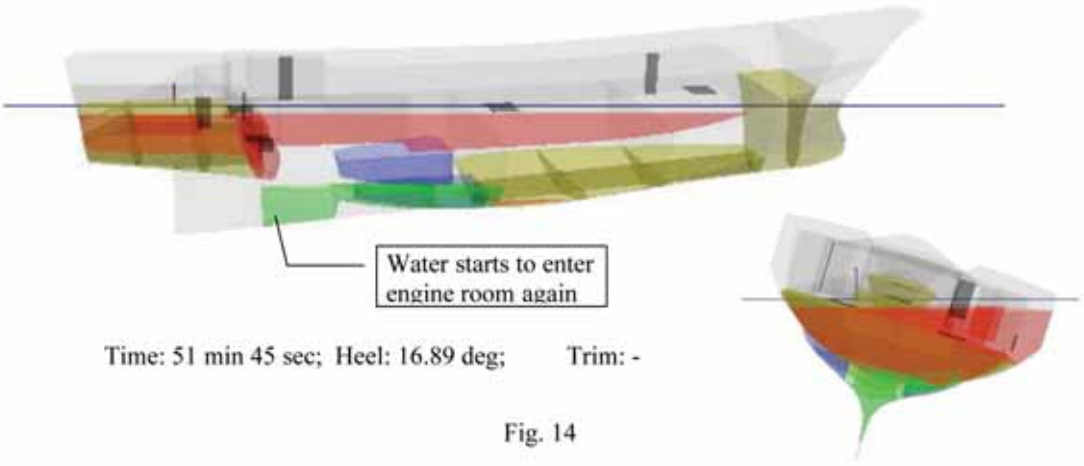
Fig.13 Water in aft starboard store is now at the level of the coaming at the steering gear room door and is starting to flood the steering gear room.



Time: 46 min 30 sec; Heel: 11.36 deg; Trim: -

Fig. 13

Fig. 14 Water is now flooding through a drain from the steering gear room into the engine room bilge. It is probably about this time or shortly after that the crew started to abandon ship.



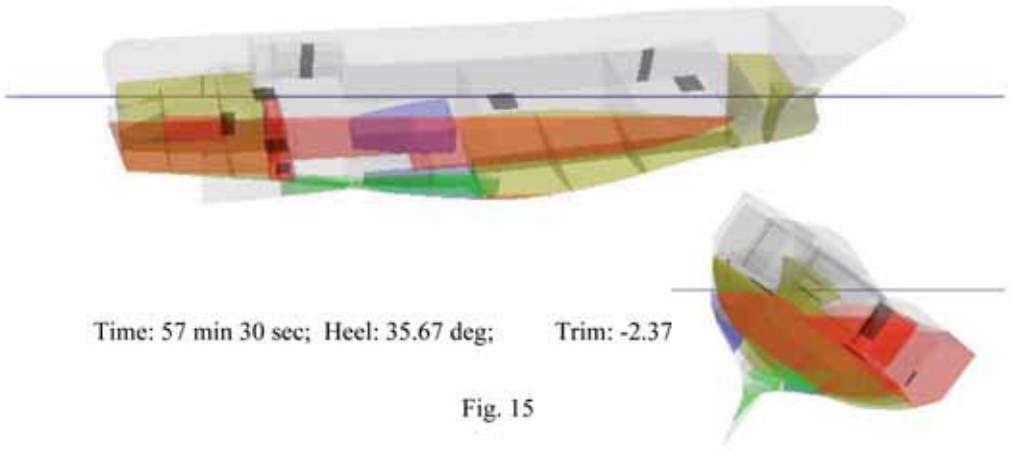
Time: 51 min 45 sec; Heel: 16.89 deg; Trim: -

Fig. 14

33

Appendix 9.5

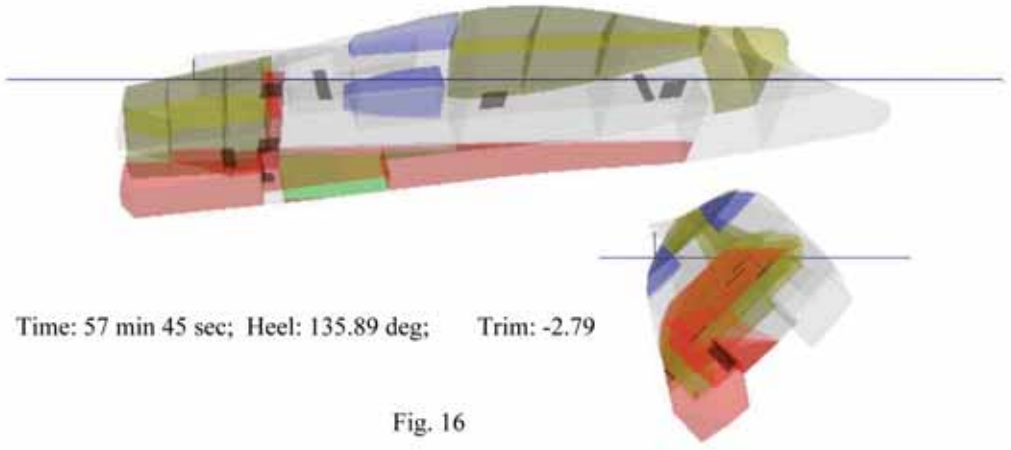
Fig. 15 Vessel continues to flood until it reaches an angle of approximately 36 and then capsizes.



Time: 57 min 30 sec; Heel: 35.67 deg; Trim: -2.37

Fig. 15

Fig. 16 Vessel has capsized and lies at an angle of approximately 136. Simulation stops shortly after this point but vessel will continue to progressively flood until it sinks.



Time: 57 min 45 sec; Heel: 135.89 deg; Trim: -2.79

Fig. 16

34

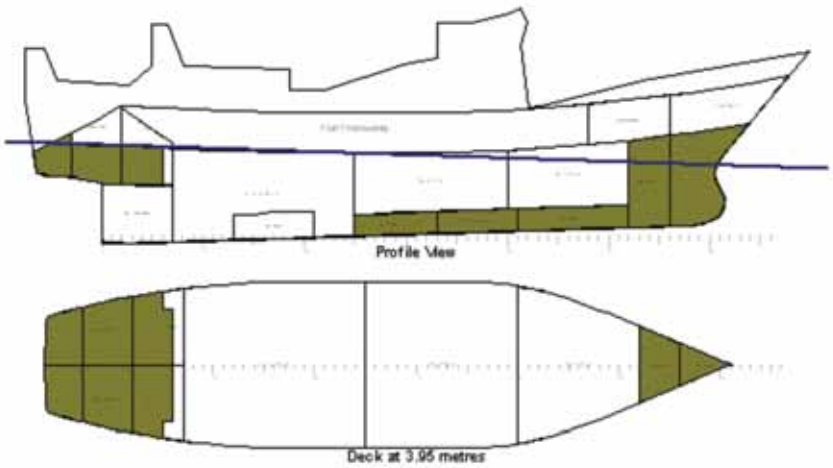
Appendix 9.6: Trim and Stability Book

APPENDIX 9.6

Dinish

Trim & Stability Book

Intact State: Arrival Grounds #1



Key

Key	Name	Density (t/m3)
	FW	1.0000
	GO	0.8350

35

Appendix 9.6

Intact State

Intact State

Title	Frames	Cargo	% full	SG (t/m3)	Weight (t)	LCG (m)	TCG (m)	VCG (m)	FSM (t-m)	S M
Gas Oil										
No.1 Gas Oil	56-64	GO	50.0	0.835	5.9	30.47	0.00	2.12	2.5	
No.2 Gas Oil	52-56	GO	100.0	0.835	17.9	28.27	0.00	3.13	0.0	
No.4 Gas Oil (P)	41-52	GO	100.0	0.835	6.3	24.06	-0.74	0.93	0.0	
No.5 Gas Oil (S)	41-52	GO	100.0	0.835	6.3	24.06	0.74	0.93	0.0	
No.6 Gas Oil (P)	33-41	GO	100.0	0.835	7.0	19.36	-1.14	0.81	0.0	
No.7 Gas Oil (S)	33-41	GO	100.0	0.835	7.0	19.36	1.14	0.81	0.0	
No.8 Gas Oil (P)	25-33	GO	100.0	0.835	7.6	15.26	-1.26	0.68	0.0	
No.9 Gas Oil (S)	25-33	GO	100.0	0.835	7.6	15.26	1.26	0.68	0.0	
No.12 Gas Oil (P)	2-6	GO	100.0	0.835	9.7	2.10	-1.53	3.56	0.0	
No.13 Gas Oil (S)	2-6	GO	100.0	0.835	9.7	2.10	1.53	3.56	0.0	
No.14 Gas Oil (P)	-3-2	GO	100.0	0.835	10.0	-0.20	-1.42	3.77	0.0	
No.15 Gas Oil (S)	-3-2	GO	100.0	0.835	10.0	-0.20	1.42	3.77	0.0	
No.16 Gas Oil (P)	-7--3	GO	100.0	0.835	5.9	-2.43	-1.27	4.03	0.0	
No.17 Gas Oil (S)	-7--3	GO	100.0	0.835	5.9	-2.43	1.27	4.03	0.0	
Total Gas Oil					**116.8**	**12.84**	**0.00**	**2.52**	**2.5**	
Fresh Water										
No.10 F.W. (P)	14-24	FW	100.0	1.000	8.7	10.56	-2.22	1.40	0.0	
No.11 F.W. S)	14-24	FW	90.0	1.000	7.8	10.60	2.20	1.35	4.7	
Total Fresh Water					**16.5**	**10.58**	**-0.13**	**1.37**	**4.7**	
Arrival Grounds #1										
Crew & Effects					2.4	15.00	0.00	5.55	0.0	
Fishing Gear					15.0	7.00	0.00	6.00	0.0	
Stores					2.9	20.00	0.00	5.70	0.0	
G.O. Day tank					1.5	7.51	0.00	4.90	0.0	
Lub Oil Tk.18					4.4	5.59	0.00	3.42	0.0	
3500 fish boxes					17.5	20.00	0.00	4.50	0.0	
Ice Hold 1					22.0	23.60	0.00	2.43	0.0	
Ice Hold 2					37.0	17.00	0.00	1.98	0.0	
Total Arrival Grounds #1					**102.7**	**16.87**	**0.00**	**3.38**	**0.0**	
Lightweight					**427.4**	**12.84**	**0.00**	**4.43**	**0.0**	
Deadweight					**236.1**	**14.43**	**-0.01**	**2.81**	**7.2**	
Total Displacement					**663.5**	**13.41**	**-0.00**	**3.85**	**7.2**	
Buoyancy					**663.4**	**13.37**	**-0.01**	**2.62**	**1344.0**	
Total Buoyancy					**663.4**	**13.37**	**-0.01**	**2.62**	**1344.0**	

36

Appendix 9.6

Intact State

Drafts at equilibrium angle

Draft at LCF	4.185 metres
Draft aft at marks	4.593 metres
Draft fwd at marks	3.408 metres
Draft at AP	4.593 metres
Draft at FP	3.408 metres
Mean draft at midships	4.001 metres

Hydrostatics at equilibrium angle

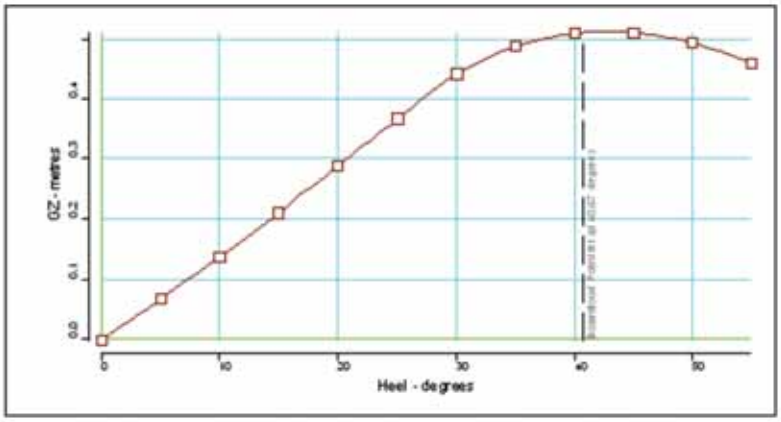
Density of water	1.0250	tonnes/cu.m
Heel to port	0.24	degrees
Trim by the stern	1.185	metres
KG	3.853	metres
FSC	0.011	metres
KGf	3.864	metres
GMt	0.788	metres
BMt	2.026	metres
BMl	29.126	metres
Waterplane area	247.81	sq.metres
LCG	13.408	metres
LCB	13.366	metres
TCB	-0.008	metres
LCF	12.024	metres
TCF	-0.020	metres
TPC	2.540	tonnes/cm
MTC	5.466	tonnes-m/cm
Shell thickness	10.000	mm

37

Appendix 9.6

Intact State

Arrival Grounds #1: Intact State



Righting Lever (GZ) Curve

Heel to Port (deg)	GZ (m)	Slope (m/rad)	Trim (m)	WLrad (m)	Freeboard (m)	Unprotected (m)
0.00	-0.0032	0.7862	-1.185	3.999	-0.24[6]	2.62[0]
5.00	0.0664	0.7983	-1.176	3.982	-0.60[7]	2.33[1]
10.00	0.1372	0.8136	-1.150	3.930	-0.96[7]	2.02[1]
15.00	0.2099	0.8511	-1.109	3.844	-1.30[7]	1.71[1]
20.00	0.2865	0.9024	-1.053	3.722	-1.62[7]	1.39[1]
25.00	0.3664	0.9630	-0.981	3.562	-1.91[9]	1.06[1]
30.00	0.4408	0.7020	-0.909	3.373	-2.21[9]	0.73[1]
35.00	0.4879	0.3818	-0.861	3.163	-2.49[9]	0.40[1]
40.00	0.5096	0.1167	-0.832	2.936	-2.77[9]	0.05[1]
45.00	0.5104	-0.1058	-0.819	2.693	-3.04[9]	-0.31[1]
50.00	0.4929	-0.3038	-0.825	2.434	-3.30[9]	-0.67[1]
55.00	0.4592	-0.4710	-0.854	2.162	-3.54[9]	-1.02[1]

Appendix 9.6

Intact State

Torremolinos

#	Criterion	Actual Value	Critical Value	Int.cr. KGf	Int.cr. GMf
1	Area under GZ curve up to 30 degrees > 0.055	0.112	0.055	4.291	0.359
2	Area under GZ curve from 30 to 40 deg. or downflood > 0.03	0.084	0.030	4.408	0.242
3	Area under GZ curve up to 40 deg. or downflood > 0.09	0.197	0.090	4.320	0.330
4	Maximum GZ to be at least 0.20 metre at 30 degrees or above	0.441	0.200	4.346	0.304
5	Maximum GZ to be at an angle > 25 degrees	42.745	25.000	4.744	-0.094
6	Initial GM to be at least 0.35 metres	0.786	0.350	4.300	0.350
	Critical			**4.291**	**0.359**
	Actual			**3.864**	**0.786**

Condition complies with the regulations

Intact State

Immersion Particulars

State of Openings = X-ray: Normal condition

Unprotected Openings

Point #	X position (m)	Y position (m)	Z position (m)	Ht. above WL (m)	Flood Angle (deg)	Downflood Compartment
0	18.375	3.250	6.600	2.635	Not immersed	Accom
1	18.375	-3.250	6.600	2.608	40.669	Accom
2	19.425	4.000	8.700	4.772	Not immersed	Accom
3	19.425	-4.000	8.700	4.739	51.252	Accom

Appendix 9.6

Intact State

Immersion Particulars

Deck Edge

Point #	X position (m)	Y position (m)	Z position (m)	Ht. above WL (m)	Flood Angle (deg)
0	-3.500	2.810	4.600	-0.098	0.000
1	-3.500	-2.810	4.600	-0.121	0.000
2	0.000	3.730	4.410	-0.167	0.000
3	0.000	-3.730	4.410	-0.198	0.000
4	3.200	4.020	4.260	-0.209	0.000
5	3.200	-4.020	4.260	-0.242	0.000
6	6.400	4.240	4.140	-0.221	0.000
7	6.400	-4.240	4.140	-0.256	0.000
8	9.600	4.300	4.070	-0.183	0.000
9	9.600	-4.300	4.070	-0.219	0.000
10	14.400	4.300	4.000	-0.093	0.000
11	14.400	-4.300	4.000	-0.128	0.000
12	16.000	4.300	4.000	-0.039	0.000
13	16.000	-4.300	4.000	-0.074	0.000
14	17.600	4.300	4.010	0.025	Not immersed
15	17.600	-4.300	4.010	-0.011	0.085
16	20.800	4.150	4.130	0.251	Not immersed
17	20.800	-4.150	4.130	0.217	3.279
18	24.000	3.490	4.360	0.585	Not immersed
19	24.000	-3.490	4.360	0.557	9.390
20	27.200	2.460	4.700	1.028	Not immersed
21	27.200	-2.460	4.700	1.008	23.232
22	30.400	1.320	5.140	1.570	Not immersed
23	30.400	-1.320	5.140	1.559	Not immersed
24	33.400	0.200	5.680	2.206	Not immersed
25	33.400	-0.200	5.680	2.204	Not immersed

10. LIST OF CORRESPONDENCE RECEIVED

10.1 Lloyd's Register 12th February 2008

10.2 Castletown Fisheries, 10th March 2008

10.3 MCIB Response to correspondence from Castletown Fisheries

10.1 Lloyd's Register 12th February 2008

Lloyd's Register

Lloyd's Register EMEA

71 Fenchurch Street
London
EC3M 4BS

Telephone +44 (0)207 709 9166
Direct line +44 (0)207 423 2457
Facsimile
Email classificationgroup@lr.org

http:\\www.lr.org

Date 12 February 2008
Your ref MCIB
Our ref MCIB - CPR 2008/01

MCIB
Marine Casualty Investigation Branch
Leeson Lane
Dublin 2
Ireland

Dear Mr O'Donnell

MCIB report on the investigation into the sinking and capsizing of the fishing vessel; DINISH - LR 7303645 - May 2006

Thank you for your letter and attachment on the above casualty, dated the 18th January, and for the opportunity presented to Lloyd's Register to comment on the draft report.

The recommendations and report content are noted and in particular the EVENTS PRIOR TO THE INCIDENT, Sections 4 .1.12 & 4.1.16, appear to indicate a non-compliance with our Rule requirements in each area.

Lloyd's Register's Rules, Part 1, Chapter 2, Section 3.4.1 states;

All repairs to hull, equipment and machinery which may be required in order that a ship may retain her class, (see 1.1.5), are to be carried out to the satisfaction of LR's Surveyors. When repairs are effected at a port, terminal or location where the services of a Surveyor to LR are not available, the repairs are to be surveyed by one of LR's Surveyors at the earliest opportunity.

and Part 1, Chapter 2, Section 3.8.7 states;

When any ship proceeds to sea with less freeboard than that approved by the Committee, or when the freeboard marks are placed higher on the sides of the ship than the position assigned or approved by the Committee, or, in cases of ships where freeboards are not assigned, the draught is greater than that approved by the Committee, the class will be liable to be withdrawn or suspended.

Whilst this applies to Convention ships, it is understood the equivalences under the Torremolinos Convention, in respect of Stability and Associated Seaworthiness, are applicable and as such the overloading as reported in 4.1.16, as revised, is of particular concern to Lloyd's Register .

Lloyd's Register, in considering this matter would wish to offer our assistance to investigate/cooperate further, with yourselves or the Ireland Marine Survey Office, in any areas where you believe we could collectively strengthen the applicable class and safety requirements.

Yours sincerely

Colin P Ratcliffe
Head of Classification Services
colin.ratcliffe@lr.org

cc JW/ADM/ Classification Group/Dublin

MCIB RESPONSE

The MCIB notes the contents of this letter.

10.1 Lloyd's Register 12th February 2008

Lloyd's Register

Certificate no:
VGO 0300081

Page 1 of 3

Certificate of Class

This certificate is issued to the "DINISH"
LR Number 7303645
Date of Build 1973
Port of Registry DUBLIN
Gross tons 266

to confirm that having been surveyed by Lloyd's Register of Shipping and having been found in compliance with the Rules and Regulations for the Classification of Ships, the aforesaid ship has been assigned the class

100 A 1 STERN TRAWLER
LMC

Date Special Survey Assigned 29 June 2003
This Certificate is valid until* 28 June 2008

* Unless extended after completion of a Special Survey (see page 3) or in accordance with Part 1, Chapter 2, Section 3.5.9 of the Rules and Regulations (see page 3) and is subject to surveys as prescribed (see page 2) being satisfactorily completed. (See notes 1 to 4, page 3)

Issued at VIGO on 29 June 2003

J.C.MOSCOSO
Surveyor to Lloyd's Register of Shipping

A member of the Lloyd's Register Group

Note: 1. To establish the classification status of this ship, the ClassDirect Live web site and the Interim Certificates issued on completion of classification surveys should be consulted in addition to this certificate. Access to ClassDirect Live is available via http://www.cdlive.lr.org.

Form 1717 (2003.06)

10.1 Lloyd's Register 12th February 2008

Lloyd's Register

Certificate no:
VGO 0300081

Page 2 of 3

Ships Name "DINISH" LR number 7303645

Annual/Intermediate survey endorsements

1st Annual Survey endorsement

Signed:

LLOYD'S REGISTER EMEA
VIGO

Place of Survey Vigo, Spain
Date 4.09.04

2nd Annual Survey / Intermediate Survey* endorsement

Signed:

Place of Survey
Date

3rd Annual Survey / Intermediate Survey* endorsement

Signed:

Place of Survey
Date

4th Annual Survey endorsement

Signed:

Place of Survey
Date

* Delete as appropriate
Form 1717 (2003.0b)

10.1 Lloyd's Register 12th February 2008

Lloyd's Register

Certificate no:
VGO 0300081

Page 3 of 3

Ships Name "DINISH" LR number 7303645

Extension of special survey completion date

In accordance with the Rules and Regulations for the Classification of ships this certificate is extended until (see note 2)

Place of survey
Date

Signed: _____

Special survey completion

This Special Survey having been completed, this certificate is extended until

Place of survey
Date

Signed: _____

Notes
1 In accordance with the Rules and Regulations for the Classification of Ship's, class will be automatically suspended and this certificate becomes invalid if not endorsed annually within three months of the due date of the Annual or Intermediate Surveys.
2 This certificate expires on the due date of the Special Survey. Consideration can be given at the discretion of the Committee to any exceptional circumstances justifying an extension to the Special Survey completion date for a maximum period of three months beyond the validity of this certificate.
3 Prior to the endorsement of this certificate all overdue hull and machinery surveys should be dealt with or postponed by agreement.
4 In normal circumstances the Annual or Intermediate Survey is to be held in conjunction with the Periodical Load Line Inspection and the Safety Construction Annual Survey.

Form 1717 (2005.08)

10.1 Lloyd's Register 12th February 2008

Lloyd's Register

INTERIM CERTIFICATE
PROVISIONAL ISSUE

Ship's Name: DINISH
LR/IMO Number: 7303645

Port of Survey: VIGO

Date of Build: 01/1973
Port of Registry: Dublin
Gross Tons: 379

Certificate Number: VGO 300081
First Visit: 24/06/03
Last Visit: 29/06/03

I have carried out the surveys listed below. All recommendations made by me have been dealt with to my satisfaction. I am recommending that class be maintained with new records as follows.

	SURVEYS HELD	STATUS	NEW RECORD
	MACHINERY		
CSM	Continuous - Machinery	COMPLETED	06/03
MCHY	Electrical Equipment	COMPLETE	
	HULL		
SS	Special	COMPLETED	27/06/03
AS	Annual	COMPLETE	27/06/03 Certificate Endorsed

MACHINERY DETAILS

ITEMS CREDITED FOR 'CSM'

0936 AUXILIARY ELECTRICAL EQUIPMENT (in entirety)

HULL DETAILS

ITEMS CREDITED FOR 'SS'

HULL GIRDER THICKNESS MEASUREMENT
2349 DECK PLATING - FINAL REPORT
2363 SIDE SHELL PLATING - FINAL REPORT
2387 BOTTOM SHELL PLATING FINAL REPORT
2406 TRANSVERSE SECTIONS - FINAL REPORT
1308 AFT PORT DECK HOUSE/S
1315 AFT STARBOARD DECK HOUSE/S
1634 PORT AFT ENGINE ROOM SANITARY WATER TANK (in entirety)
1665 STARBOARD AFT ENGINE ROOM SANITARY WATER TANK (in entirety)

(contd ... 2)

The above recommendation is made subject to any outstanding conditions of class being dealt with as previously recommended.

Signed:
J.C.MOSCOSO
Surveyor(s) to Lloyd's Register of Shipping
A member of the Lloyd's Register Group.

Date: 29/06/2003

10.1 Lloyd's Register 12th February 2008

INTERIM CERTIFICATE

PROVISIONAL ISSUE

Ship's Name: DINISH
LR/IMO Number: 7303645 *Certificate Number:* VGO 300081

HULL DETAILS (contd.)

ITEMS CREDITED FOR 'SS' (contd.)

	PORT W.B. STERN TANK
1834	TEST
1841	THICKNESS MEASUREMENT
1858	PROTECTIVE COATING
	STARBOARD W.B. STERN TANK
1889	TEST
1896	THICKNESS MEASUREMENT
1908	PROTECTIVE COATING
	PORT W.B. NO.3 DOUBLE BOTTOM TANK
1939	TEST
1946	THICKNESS MEASUREMENT
1953	PROTECTIVE COATING
	STARBOARD W.B. NO.3 DOUBLE BOTTOM TANK
1984	TEST
1991	THICKNESS MEASUREMENT
2006	PROTECTIVE COATING
2068	CABLES
2082	AUXILIARY STEERING GEAR
2099	SOUNDING PIPES AND DOUBLINGS UNDER
2194	HELM INDICATOR
2206	W.T. DOORS
2213	HATCHWAYS AND CLOSING APPLIANCES

*** END ***

10.2 Castletown Fisheries, 10th March 2008

Castletown
fisheries

Mediterranean House
Castletownbere
Co Cork. Ireland

Tel 00 353 (027) 70104
Fax. 00 353 (027) 70348

Ms. Bridie Cullinae
Secretary
Marine Casulty Investigation Board
Leeson Lane
Dublin 2

Castletown 10 March 2008

Dear Sirs,

Re: Draft report of the investigation into the sinking and capsizing of the fishing vessel "Dinish" on 24 May 2006

We refer to your letter dated 18 January 2008 with regard to the investigation carried out into the incident involving the sinking and capsizing of the fishing vessel "Dinish" on the 24 May 2006 by the Marine Survey Office of the Department of Transport. We also refer to your letter dated 15th February 2008 by which an extension of a further twenty eight days was granted to us in accordance with Section 36 of the Merchant Shipping Act 2000.

Please find attached our observations to the Draft report. We would really appreciate if you could consider said observations when producing the final report.

As requested please note that we would like that our observations being reproduced anyway as appendice to the final report.

Yours sincerely,

CASTLETOWN FISHERIES LIMITED
SHIPOWNERS

Juan Manuel Baqueiro Carballo
Director
Castletown Fisheries Limited

1

10.2 Castletown Fisheries, 10th March 2008

castletown fisheries

Mediterranean House
Castletownbere
Co Cork Ireland

Tel 00 353 (027) 70104
Fax 00 353 (027) 70348

OBSERVATIONS TO THE MCIB INQUIRY REPORT ISSUED UPON THE CAPSIZING AND SINKING OF THE IRISH FLAGGED FISHING VESSEL "DINISH".

1.- The stern trawler fishing vessel, "DINISH" was built in Zumaya, Spain in 1975 under the name of MASCATO and according to Lloyds Register regulations of hull and machinery; the vessel had sailed under an Irish flag since 1979 until her sinking on May, 24th. 2006, and she was kept in class with the Lloyds Register Classification Society until her sinking.

The vessel "DINISH" was owned by Eiranova Fisheries Ltd. (with registered offices in Dublin and with its main place of business in Castletownbere, Co. Cork) since 1979 until February 10th, 2006, when she was sold to Castletown Fisheries Ltd. (with registered offices in Dublin and its main place of business in Castletownbere, Co. Cork), which is wholly owned by the Spanish company Pesca Baqueiro SA. The vessel remained in the Irish Register after this transaction.

Pesca Baqueiro SA is a Spanish company with more than fifty (50) years of experience in owning and operating fishing vessels. At present Pesca Baqueiro SA operates five (5) fishing vessels, all of them being stern trawlers with dimensions between 30 and 67 metres in length and between 300 and 1819 GT. They operate in seas all over the world, from the South Atlantic to the North Atlantic including the Grand Sole zone and, though most of their vessels are Spanish registered, one of their vessels is registered under Irish flag.

At the time of sale of the "DINISH" to Castletown Fisheries Limited, the vessel was carrying out her fishing activity-with the necessary documentation including certificates, flag statuaries and class certificates. They had been been approved and renewed timely and only expired on June 28th, 2008 (having been renewed on June 29th, 2003). An annual survey was to be made every year between March 29th. and September 27th. These facts (that the vessel had catch allocations and valid certificates) were the main and determining reasons for the interest of Castletown Fisheries Limited in buying a vessel aged more-than-thirty-years-old.

The fact that the aforementioned certificates were valid with an expiry date in June' 2008 primarily proves that the vessel had successfully passed all the required surveys: this is to say, safety surveys, hull and machinery surveys; and that all official documents, such as her stability booklet, had been approved. If the vessel had–any substantial alteration made before her sale this would have been recorded in her certificates and official documents and whatever substantial alteration made after her sale

Castletown Fisheries, Limited IN Dublin n° 393083 Vat n° IE 6413083 L

10.2 Castletown Fisheries, 10th March 2008

Castletown
fisheries

Mediterranean House
Castletownbere
Co Cork Ireland

Tel 00 353 (027) 70104
Fax 00 353 (027) 70348

would have required a special survey and an updating of the documents with the corresponding amendments.

2. After the vessel's ownership was transferred to Castletown Fisheries Limited and before the vessel had set sail for trawling (this being possible as all the certificates and official documents were valid until September 27th. 2006, when an annual survey was due), the new owners, Castletown Fisheries Ltd., met with their surveyors and **ordered a thorough survey of the vessel**:

- A local expert commercial diver surveyed the hull at a wet dock in Vigo (Spain), and his report showed that no defects had been observed. As the vessel had been docked between September and October 2005, for an intermediate and an annual survey by the Lloyds Register Classification Society and bearing also in mind that only five (5) months had elapsed since her last docking, the diver's inspections and report were considered sufficient and it was decided not to subject the vessel to re-docking. The Lloyds Registry would not require a docking survey with the next special survey, until 28th June 2008 (the Lloyds Registry normally requires a dock survey with special and intermediate surveys, provided always that no more than 36 months elapses between vessel dockings).

- Machinery, hull outfits, vessel services and fishing gear were inspected underwater in Vigo during April and May 2006. All these works were reparations but no substantial alteration of the ship was undertaken. No new machinery was installed on board and no hull structures were altered; only works carried out, as shown on the enclosed invoice, were done as **maintenance** to get the equipment into the best operating condition. Although permission is not required for doing usual and normal maintenance, for the sake of "best practice", and according to international regulations and conventions, permission to perform these works was applied for at the Spanish Ports Authority in Vigo *(Capitania Marítima de Vigo)* as shown in the enclosed document.

Some of these repairs included:

- Repair of the existing on board trawl doors.
- Repairing and the maintenance of the stern defences.
- Repair of the aluminium gangway, used to get on board.

Castletown Fisheries, Limited IN Dublin nº 393083 Vat nº IE 6413083 L

10.2 Castletown Fisheries, 10th March 2008

Castletown fisheries

Mediterranean House
Castletownbere
Co Cork, Ireland

Tel 00 353 (027) 70104
Fax 00 353 (027) 70348

- Repair of the rails along the exposed decks.
- Repair of the rescue boat foundation and the crane to place the rescue boat afloat.
- Repair of the bilge separator, its pipes and reception tank was performed. It was moved from the forward to the stern in the engine room.
- Repair and changing of the location of the CO_2 bottles doing new pipes for this service.
- Repairing of the hits on the bulkwards were carried out.
- Repairing watertight closes of the doors, hatches and others, changing rubbers, seals and other worn parts.
- Repair of the overflow pipe in each side was carried out.
- Repairing the fish factory trunk, changing seals and rubber lining in order to obtain water tightness. New seals were put in and accessories were made in stainless steel.
- Repairing some levels of tanks.
- Repairing and maintaining the main engine, auxiliary engine and pumps. The pistons, heads, exhaust and inlet valves were repaired. The joint, the rings, gaskets and other part of the engine, which are heavily susceptible of wear and tear were replaced, in order to keep the engine running smoothly.

All these works were carried out by adequate and professional workshops with the help of the vessel's crew on board in order for them to become acquainted with the vessel they would sail on soon afterwards.

3. All officers were **experienced officers** with more than ten years experience on this or other vessels that sail in Grand Sole area: the Skipper reports in his statement to the Spanish Authorities that he has 22 year experience as a skipper in the sailing area and that he has sailed on board the DINISH and her sister vessel DUMBOY several times when the vessels were owned by EIRANOVA. The Chief Engineer had also sailed on the aforementioned vessel during the years 2003, 2004 and 2005. Boatswain, Mr. Martinez Miguez stated in his declaration that he had been working for EIRANOVA for seven years and that he knew the vessel because she was one of the EIRANOVA's fleet and he had worked on board on many occasions. Only the deckhand had reported that it was

Castletown Fisheries, Limited IN Dublin nº 393083 Vat nº IE 6413083 L

10.2 Castletown Fisheries, 10th March 2008

Castletown
Fisheries

Mediterranean House
Castletownbere
Co Cork Ireland

Tel 00 353 (027) 70104
Fax 00 353 (027) 70348

his first time voyage on the DINISH, but all the officers knew the vessel perfectly and had sailed on her many times before the accident and her sinking.

All the officers and crew had Spanish Certificates of Competence. Their standards of education and training, as well as profession experience, were in our view, adequate to qualify for service in the vessel. Spanish' standards of competency are considered as being equivalent to those required in most of the EU countries. Furthermore some of the officers had been serving in other Irish vessels for many years.

The crew also completed the mandatory safety courses as per their Certificate of Competence and the company also required that a course on safety and health on board fishing vessels were passed (it is not a distance learning training as stated in the draft report in 4.2.1.) by all the crew members before joining the vessel.

All the crew members assisted with the loading of provisions for the fishing campaign and were working onboard since at least the 18th May 2006. The Second Engineer started working on the vessel on the 8th May 2006 and the Skipper had access to the vessel, her equipment and documents well prior to the departure.

4. With regard to the sailing to fishing grounds, just before departing from Vigo on May 22nd. 2006, the vessel **underwent sea trials** for about four or five hours in the Vigo bay area on this day, during the afternoon until 18:00 hours, when she departed to the fishing grounds with provisions, fishing gear, crew and all consumables (fuel-oil, fresh water, lubricated oil, etc) on board for a trip of about ten days (and not three months as stated in 4.1.15 of the draft report).

Drafts at departure were according with the stability booklet and weights were in their position; therefore the stability values complied with the EC rules on the safety for the fishing vessel. We have referred to the EC rules because the Directive is slightly different from the Torremolinos Rules (We do not refer to the aforementioned Torremolinos Rules as that regulation does not apply to the vessel as her length was less than 45 metres), although both regulations coincide about the freeboard. There are no international freeboard regulations for Fishing vessels. International Load Lines 1966 and the new Protocol of 1998 (LLCC 66/98) do not apply to the fishing vessel as is well known, and only some countries, like Spain, have national freeboard regulations for fishing vessels and a Plinson disk is marked in both hull sides of Spanish registered fishing vessels. Neither the EC nor Torremolinos Regulations (charter III, rule1 to rule 14) provides rules to calculate freeboard on the vessel, these safety and construction regulations only refer to a vessels' stability and buoyancy and rule 13 provides that "The Authorities will approve a maximum service draft which in the corresponding load cargo fulfils all criteria laid down in the present chapter and in the prescriptions of chapter II and VI". Chapter II of Torremolinos lays down the freeboard assignments (hatch and doors coamings, portholes, pipes,

Castletown Fisheries, Limited IN Dublin n° 393083 Vat n° IE 6413083 L

10.2 Castletown Fisheries, 10th March 2008

castletown
fisheries

Mediterranean House
Castletownbere
Co Cork Ireland

Tel 00 353 (027) 70104
Fax. 00 353 (027) 70348

etc) but does not mention what the required minimum freeboard is. To comply with Rule VI/3, this figure (the minimum freeboard) can only be deducted or calculated from the Rule 8 of ANNEX 3 (Minimum distance between the maximum service water line and the lower point of the working deck, bow height). International LLCC –which does not apply to the fishing vessel as previously stated- provides in the third point of Rule 3 that the freeboard deck will be the complete upper deck exposed to the wind and sea, equipped with permanent means to close all openings, over and under the exposed deck.

According to this, and if the scantling draft of the vessel was enough (We suppose it was as the Classification Society, Lloyds Register, would not have issued any certificates after 1996, should it have been otherwise), the vessel could sail in whatever condition shown in her stability booklet. All these kinds of vessels, with two (2) complete decks along the length, normally have freeboard referring to the upper deck and one has to be careful with these two matters: one matter is that the openings under or over the upper deck, like the trunk of fish factory (fish chute shipside) must be placed in such a way that only heel angles greater than 20° degrees can cause the progressive flooding of the vessel as IMO RES A.749 (intact stability for all types of vessels) and as the Torremolinos Rules require (all these openings must be watertight closed and in the particular case of chute shipside this must have two closing means. The DINISH complied with this according to her stability booklet); the other matter is that the valves must be above the maximum water line if that is possible but all of them must be "closed and automatic, not return valve" (should valves be in a good maintained condition, should they all have been annually surveyed and not been damaged, they will not allow water to come into the vessel although sometimes during the trip, they may be placed under the waterline). Portholes, air pipes, ventilation conducts, coamings of doors, hatchets and whatever other freeboard assignments usually have positions and heights according to the rules for fishing vessels which are slightly different from the requirements of the LLCC 66/98.

In the U.K., the freeboards corresponding to sailing conditions have been calculated in accordance with the Merchant Shipping Notice No. M-9-75. Pursuant to that rule we can obtain a minimum bow height and a minimum stern height measured at the perpendiculars from the working deck to the water line. Therefore both figures provide us with the maximum draft admissible at the perpendiculars. Throughout all sailing conditions the vessel's water line shall not go beyond these drafts. No water line of the vessel throughout the sailing conditions can surpassed this drafts. For the DINISH, the minimum bow height calculated according to MSN –9-75 would be 2.21 m. in the forward perpendicular and 1.478 m. in the aft perpendicular, both being measured form the upper deck (working deck). With those figures the maximum admissible drafts would be 5243 m. at forward perpendicular (to base line) and in the aft perpendicular (also to base line) maximum draft will be 4940 m. The corresponding water line joining both points leaves the lower deck under water, but this is admissible if the scantling draft is equal or greater than that

Castletown Fisheries, Limited IN Dublin nº 393083 Vat nº IE 6413083 L

10.2 Castletown Fisheries, 10th March 2008

castletown
fisheries

Mediterranean House
Castletownbere
Co Cork Ireland

Tel 00 353 (027) 70104
Fax 00 353 (027) 70348

corresponding to the resultant mean draft, provided always that all openings comply with freeboard assignments as aforementioned.

The water line at the departure from the Port in Vigo, according to the stability booklet is shown in the enclosed sketch (where the corresponding MSN-975 drafts are also marked). The fish chute shipside is not under the water line, then we cannot accept that the vessel was sailing from Vigo to grounds with negative freeboard.

5. With regard to the accident; it might have been caused as described in the MCIB report, or by some other causes with similar effects.

The accident as it is described in the MCIB report does not refer the crew's statements to the Spanish Authorities. Statements made by the skipper, Mr. Juan R. Comedero, and Boatswain, Mr. José L. Martinez, report that the fish chute shipside was closed, was revised twice and it was closed; in addition, both reported that water was coming into the vessel with force into the engine room, in the starboard side at stern of main engine. The fish chute shipside was repaired and maintained when the vessel stopped in Vigo (before her departure); closes, rubber gaskets and other structural parts were adapted to bring them into a good operating condition. The chute's location and structural dimensions were kept as they were originally and it had two means for closing, one operated by a drive wheel that was near the hull side, and the other at the top of the trunk that was a watertight cover with four lash. It is our opinion that it is difficult that flooding came through the chute.

Should the accident have been between frame 6 and 7 where the sump of factory is located and should cracking be caused by a hit to the bow, then we'll have on one hand flooding of the engine room and on the other, flooding of the fishing deck; the latter caused by water coming into this space through the wells of the sump placed at each side of the vessel. As at port side the crew spaces are placed above the lower deck, with a longitudinal watertight bulkhead, from frame 13 to forward, water on lower deck will run towards the starboard side and the vessel will heel towards this side at the same time that flooding in both spaces is taking place. The final effect will be the same that is described in the MCIB report, this is to say, the vessel will capsize and sink. From our point of view this incident was more likely as stated above, that although the chute was closed, the cracking under the water line placed beside the sump situation would cause, primarily, flooding of the sump, and perhaps engine room flooding in the event that the cracking was long enough to forward (greater than 550 mm.); and after the initial flooding of the sump, it overflowed into the lower deck, water would have accumulated on that deck and the vessel would heel, capsize and, finally, sink.

6. In conclusion and after having carefully considered the MCIB draft report on the sinking of fishing vessel DINISH that occurred about 170 miles South West of the Sicily Islands on 24th may 2006, we consider that the

Castletown Fisheries, Limited IN Dublin nº 393083 Vat nº IE 6413083 I

10.2 Castletown Fisheries, 10th March 2008

castletown fisheries

Mediterranean House
Castletownbere
Co Cork Ireland

Tel 00 353 (027) 70104
Fax 00 353 (027) 70348

performance of Castletown Fisheries Ltd. was professional and in the best way for the vessel to be operated. After the transfer of the ownership of the vessel, which was sailing and trawling at the moment of the sale with all valid certificates and documents to do so, we spent time and money in revising and maintenance of the vessel before sailing again for thr fishing grounds. When the vessel departed to trawl again the officers were all experienced sailors and all of them had been working onboard this or sister vessel, under EIRANOVA ownership, on more than two or three occasions. Repairs done in Vigo (Spain) were usual maintenance works without alterations to the ship's weight. They were communicated to the Spanish Authorities at the Port of Vigo and the vessel departed for trawling as this kind of work did not need any other special permission. If the vessel's lightship were affected –thought not to be the case-, a new inclining test would have had to be performed as it occurred at the end of 2002 and the beginning of 2003, when rebuild works were authorised on this vessel to replace the winch trawl and remove the forward fishing mast. After those works a lightship check was carried out on 15th January 2003 with positive results in terms of the stability criteria requirements. Therefore the stability booklet produced in 1996 was still valid for the vessel to sail for a new period of ten (10) years in accordance with the EC Regulations for fishing vessels (Directive 97/70 EC, 2002/35 EC and subsequent ones).

The following annex lists the aforementioned documents that are attached.

ANNEX:

- Certificate of Registry for an Irish Fishing Boat.
- Fishing Vessel Safety Compliance Certificate.
- Certificate of Class by Lloyds Register.
- Note to the Spanish Authorities of the repairs to be carried out on the vessel DINISH dated 17/03/2006.
- Invoice from the workshops "TALLERES VINACAL,S.A." and "TALLERES ABC, S.L." regarding the repairs and maintenances performed on DINISH.
- Application for permission to carry out works on F/V DINISH performed in December of 2002 to the Spanish Authorities. In this case, the change of winch trawl and the removal of the centre bi mast could change the weights of the vessel.

Castletown Fisheries, Limited IN Dublin nº 393083 Vat nº IE 6413083 L

10.2 Castletown Fisheries, 10th March 2008

castle-town
fisheries

Mediterranean House
Castletownbere
Co Cork Ireland

Tel 00 353 (027) 70104
Fax 00 353 (027) 70348

- Permission from the Spanish Authorities to carry out the abovementioned works as requested, and lightship checks undertaken by a naval architect in his capacity as "works director".

- Sketch of the buoyancy at departure from port according to the approved stability booklet and with the maximum permissible drafts according with the MSN Nº.9-75. (According to the Torremolinos Rules minimum bow height must be 2.0 m.).

Castletownbere, Cork, 9 March 2008

9

10.2 Castletown Fisheries, 10th March 2008

Certificate of Registry of an Irish Fishing Boat

Vessel Details:

Name of Vessel:	DINISH
Internal Number:	IRL000I11508
Port of Registry:	DUBLIN
Port Letter(s) & Number:	D 558
Gross Tonnes:	379
Int. Radio Call Sign:	EITG
Overall Length:	40.75 metres
Registered Length:	35.35 metres
Breadth:	8.6 metres Depth: 6.1 metres
Engine Make & Model:	ABC (ANGLO-BELGIAN CO)
Engine Power:	895 kW
Date of Entry into Service:	18/07/1991
Date of Registration:	10/04/2006

Owner Details:

CASTLETOWN FISHERIES LIMITED, C/O LK SHEILDS SOLICITORS, 39/40 UPPER MOUNT ST, DUBLIN 2, IRELAND

WARNING:
ANY PERSONS OR BODY OF PERSONS FAILING TO OBSERVE THESE REQUIREMENTS RENDER THEMSELVES LIABLE TO PROSECUTION

THIS CERTIFICATE OF REGISTRY WAS ISSUED ON 10/04/2006 BY

THE REGISTRAR GENERAL OF FISHING BOATS
DEPT OF COMMUNICATIONS MARINE &
NATURAL RESOURCES
LEESON LANE
DUBLIN 2

TELEPHONE: 01 – 6782000

Department of Communications Marine And Natural Resources
Official Stamp
Roinn Cumarsáide Mara agus Acmhainní Nádúrtha

10.2 Castletown Fisheries, 10th March 2008

IF YOU ARE AN OWNER OR SKIPPER OF AN IRISH FISHING BOAT, YOU SHOULD READ THE FOLLOWING REQUIREMENTS:

- This Certificate of Registry should be kept on board at all times, except when surrendered for amendment
- On change of ownership, the owner should return this Certificate to the Registrar General of Fishing Boats for cancellation, and the new owner should apply to register the vessel
- If a registered vessel is lost or ceases to be an Irish Fishing Vessel, occasionally or exclusively fishing for profit, the owner should notify the Registrar General of Fishing Boats immediately
- Owners and Skippers are responsible for having their vessels properly and effectively marked with its name, port of registry and port letter(s) and number. These carvings and markings should not be effaced, altered, made illegible, covered or concealed in any manner
- If any of the details entered on this Certificate change the owner should inform the Registrar General of Fishing Boats immediately
- Any modification to the vessel resulting in a change of details **must** be approved in advance by the Department
- Every Irish Fishing Vessel, occasionally or exclusively fishing for profit, is required to be lettered and numbered, and to have a Certificate of Registry.
- This Certificate is not proof of ownership. Please contact the Registrar General of Fishing Boats for verification of details.
- If this Certificate is lost or becomes illegible, the owner(s) should make immediate application for a duplicate Certificate of Registry

10.2 Castletown Fisheries, 10th March 2008

25/08/2004 11:46 71819 BRENDAN MINEHANE PAGE 06

Seol aon fhreagra chun:- An Phríomh Shuirbhéir

(Address any reply to:- The Chief Surveyor)

+353 (0) 1 874 4900/874 3325/878 8463
+353 (0) 1 872 4491
mso@dcmnr.gov.ie
www.dcmnr.gov.ie/mso

An Roinn Cumarsáide, Mara agus Acmhainní Nádúrtha

Department of Communications, Marine and Natural Resources

Oifig an tSuirbhéara Mhuirí
(Marine Surveyors' Office)
26-27, Cé Eden
(26-27 Eden Quay)
Baile Átha Cliath, 1
(Dublin 1)

18th August 2004.

25 AUG 2004

Mr. Brendan Minehane
Eiranova Fisheries Ltd.,
Dinish Island,
Castletownbere,
Co. Cork.

Dear Mr. Minehane,

M.F.V. "Dinish"
Certificates

Enclosed, please find the following certificates:

1. Fishing Vessel Safety – Certificate of Compliance (2 copies).
2. Fishing Vessel Safety – Record of Equipment (2 copies).

One of each of these certificates is to be placed on board the vessel at the earliest opportunity. They should be kept with the ship's papers and be available for inspection at all times.

As the Certificate of Compliance has periodical and intermediate survey requirements in order for it to remain valid, the following are details of when these surveys are to be carried out:

- Every year for Radio Survey (within ± 3 months of 25th July)
- After two years for safety equipment, hull, machinery, etc. (within ± 3 months of 25th July)
- After four years for renewal of the Certificate of Compliance (within ± 3 months of 25th July 2008)

Please note that it is the Owner's responsibility to ensure that timely application for survey is made in the order that the surveys can be carried out by the due dates.

Regards,

Marine Survey Office.

10.2 Castletown Fisheries, 10th March 2008

25/08/2004 11:46 71819 BRENDAN MINEHANE PAGE 07

IRELAND

FISHING VESSEL SAFETY CERTIFICATE OF COMPLIANCE

This certificate of compliance shall be supplemented by a record of equipment

for an existing fishing vessel

Issued under the provisions of the Fishing Vessel (Safety Provisions) Regulations, 2002 and confirming compliancy of the vessel named hereafter with the provisions of Council Directive 97/70/EC setting up a harmonised safety regime for fishing vessels of 24 metres in length and over,

under the authority of the Government of Ireland

by The Department of Communications, Marine and Natural Resources.

Name of Ship	Fishing Letters & Numbers	Official & IMO Numbers	Port of Registry	Sea areas in which ship is certified to operate	Length (2)
Dinish	D 558	O.N. 401965 IMO 7303645	Dublin	A1 & A2	35.35

Date of build or major conversion contract (3)
Date on which the keel was laid or ship was at a similar stage of construction (3) 1973
Date of delivery or completion of major contract (3)

Initial Survey

THIS IS TO CERTIFY:

1. that the ship has been surveyed in accordance with Regulation I/6(1)(a) of the Annex to the Torremolinos Protocol of 1993;

2. that the survey showed that:
   1. the ship fully complies with the requirements of Council Directive 97/70/EC; and
   2. the maximum permissible operating draught associated with each operating condition for the vessel is contained in the approved stability booklet dated 26/07/04.

3. that an Exemption Certificate has not been issued.

This Certificate is valid until 25th July 2008 subject to surveys in accordance with Regulation I/6(1)(b)(ii) and (iii) and (c).

Issued at Dublin (place of issue of Certificate) 18th August 2004 (date of issue)

(seal or stamp of issuing authority) Dept. of Communications Marine & Natural Resources Ireland

(signed) _____
An authorised officer of the Department of Communications, Marine and Natural Resources.

(2) Length as defined in Article 2(6)
(3) In accordance with the definitions of Article 2(2)

1

10.2 Castletown Fisheries, 10th March 2008

25/08/2004 11:48 71819 BRENDAN MINEHANE PAGE 08

Endorsement for periodical surveys

Equipment survey

THIS IS TO CERTIFY that, at a survey as required by Regulation I/6(1)(b)(ii), the vessel was found to comply with the relevant requirements.

Signed:
(An authorised officer of the Department of Communications, Marine and Natural Resources.)

Place: _____

Date: _____

(seal or stamp of issuing authority)

Radio surveys

THIS IS TO CERTIFY that, at a survey as required by Regulation I/6(1)(b)(iii), the vessel was found to comply with the relevant requirements.

First periodical radio survey:

Signed:
(An authorised officer of the Department of Communications, Marine and Natural Resources.)

Place: _____

Date: _____

(seal or stamp of issuing authority)

3

10.2 Castletown Fisheries, 10th March 2008

25/08/2004 11:46 71819 BRENDAN MINEHANE PAGE 09

IRELAND

FISHING VESSEL SAFETY RECORD OF EQUIPMENT

for the certificate of compliance

This record shall be permanently attached to the certificate of compliance

Record of equipment for compliance with Council Directive 97/70/EC setting up a harmonised safety regime for fishing vessels with a length of 24 metres and over.

1. Particulars of the vessel:

Name of Ship	Fishing Letters & Numbers	Official & IMO Numbers	Port of Registry	Sea areas in which ship is certified to operate	Length (1)
Dinish	D 558	O.N. 401965 IMO 7303645	Dublin	A1 & A2	35.35

2. Details of life-saving appliances:

1.	Total number of persons for whom life-saving appliances are approved	16	
		Port	Starboard
2.	Total number of lifeboats	"	"
2.1	Total number of persons accommodated by them	"	"
2.2	Number of partially enclosed lifeboats (Regulation VII/18)	"	"
2.3	Number of totally enclosed lifeboats (Regulation VII/19)	"	"
3.	Number of rescue boats	1	
3.1	Number of boats which are included in the total number of lifeboats shown above.	"	
4.	Liferafts:		
4.1	Those for which approved launching appliances are required		
4.1.1	Number of liferafts	"	
4.1.2	Number of persons accommodated by them	"	
4.2	Those for which approved launching appliances are not required:		
4.2.1	Number of liferafts	2	
4.2.2	Number of persons accommodated by them	32	
5.	Number of lifebuoys	4	
6.	Number of lifejackets	20	
7.	Immersion suits:		
7.1	Total number	3	
7.2	Number of suits complying with the requirements for lifejackets	"	
8.	Number of thermal protective aids (2)	12	
9.	Radio installations used in life-saving appliances:		
9.1	Number of radar transponders	2	
9.2	Number of two-way VHF radiotelephone apparatus	3	

(1) Length as defined in Article 2(6)
(2) Excluding those required by Regulations VII/17(8)(xxxi), VII/20(5)(a)(xxiv), and VII/23(2)(b)(xiii)

1

10.2 Castletown Fisheries, 10th March 2008

25/08/2004 11:46 71819 BRENDAN MINEHANE PAGE 10

3. Details of radio facilities:

	Item	Actual provision
1.	Primary systems	
1.1	VHF radio installation:	
1.1.1	DSC encoder	SHIPMATE RS 400
1.1.2	DSC watch receiver	ICS DCS 2
1.1.3	Radiotelephony	COMBINED
1.2	MF radio installation:	
1.2.1	DSC encoder	ICS DCS 2
1.2.2	DSC watch receiver	ICOM IC 710
1.2.3	Radiotelephony	ICOM IC 710
1.3	MF/HF radio installation:	
1.3.1	DSC encoder	::
1.3.2	DSC watch receiver	::
1.3.3	Radiotelephony	::
1.3.4	Direct-printing radiotelegraphy	N/A
1.4	Inmarsat ship earth station	FURUNO FELCOM 12
2.	Secondary means of alerting	EPIRB
3.	Facilities for reception of maritime safety information:	
3.1	NAVTEX receiver	ICS NAV 5
3.2	EGC receiver	::
3.3	HF direct-printing radiotelegraph receiver	::
4.	Satellite EPIRB:	
4.1	COSPAS-SARSAT	KANAD 406 WH
4.2	Inmarsat	::
5.	VHF EPIRB	::
6.	Vessel's radar transponder	MC MURDO RT 9-3

4. Methods used to ensure availability of radio facilities (Regulation IX/14)

4.1	Duplication of equipment	NO
4.2	Shore based maintenance	YES
4.3	At-sea maintenance capability	NO

THIS IS TO CERTIFY that this Record is correct in all respects

Issued at Dublin (place of issue of Certificate)

(seal or stamp of issuing authority)

(signed) _____

An authorised officer of the Department of Communications, Marine and Natural Resources.

18th August 2004 (date of issue)

2

10.2 Castletown Fisheries, 10th March 2008

25/08/2004 11:46 71819 BRENDAN MINEHANE PAGE 09

IRELAND

FISHING VESSEL SAFETY RECORD OF EQUIPMENT

for the certificate of compliance

This record shall be permanently attached to the certificate of compliance

Record of equipment for compliance with Council Directive 97/70/EC setting up a harmonised safety regime for fishing vessels with a length of 24 metres and over.

1. Particulars of the vessel:

Name of Ship	Fishing Letters & Numbers	Official & IMO Numbers	Port of Registry	Sea areas in which ship is certified to operate	Length (1)
Dinish	D 558	O.N. 401965 IMO 7303645	Dublin	A1 & A2	35.35

2. Details of life-saving appliances:

1.	Total number of persons for whom life-saving appliances are approved	16	
		Port	Starboard
2.	Total number of lifeboats	"	"
2.1	Total number of persons accommodated by them	"	"
2.2	Number of partially enclosed lifeboats (Regulation VII/18)	"	"
2.3	Number of totally enclosed lifeboats (Regulation VII/19)	"	"
3.	Number of rescue boats	1	
3.1	Number of boats which are included in the total number of lifeboats shown above.	"	
4.	Liferafts:		
4.1	Those for which approved launching appliances are required		
4.1.1	Number of liferafts	"	
4.1.2	Number of persons accommodated by them	"	
4.2	Those for which approved launching appliances are not required:		
4.2.1	Number of liferafts	2	
4.2.2	Number of persons accommodated by them	32	
5.	Number of lifebuoys	4	
6.	Number of lifejackets	20	
7.	Immersion suits:		
7.1	Total number	3	
7.2	Number of suits complying with the requirements for lifejackets	"	
8.	Number of thermal protective aids (2)	12	
9.	Radio installations used in life-saving appliances:		
9.1	Number of radar transponders	2	
9.2	Number of two-way VHF radiotelephone apparatus	3	

(1) Length as defined in Article 2(6)
(2) Excluding those required by Regulations VII/17(8)(xxxi), VII/20(5)(a)(xxiv), and VII/23(2)(b)(xiii)

1

10.2 Castletown Fisheries, 10th March 2008

25/08/2004 11:46 71819 BRENDAN MINEHANE PAGE 10

3. Details of radio facilities:

	Item	Actual provision
1.	Primary systems	
1.1	VHF radio installation:	
1.1.1	DSC encoder	SHIPMATE RS 400
1.1.2	DSC watch receiver	ICS DCS 2
1.1.3	Radiotelephony	COMBINED
1.2	MF radio installation:	
1.2.1	DSC encoder	ICS DCS 2
1.2.2	DSC watch receiver	ICOM IC 710
1.2.3	Radiotelephony	ICOM IC 710
1.3	MF/HF radio installation:	
1.3.1	DSC encoder	::
1.3.2	DSC watch receiver	::
1.3.3	Radiotelephony	::
1.3.4	Direct-printing radiotelegraphy	N/A
1.4	Inmarsat ship earth station	FURUNO FELCOM 12
2.	Secondary means of alerting	EPIRB
3.	Facilities for reception of maritime safety information:	
3.1	NAVTEX receiver	ICS NAV 5
3.2	EGC receiver	::
3.3	HF direct-printing radiotelegraph receiver	::
4.	Satellite EPIRB:	
4.1	COSPAS-SARSAT	KANAD 406 WH
4.2	Inmarsat	::
5.	VHF EPIRB	::
6.	Vessel's radar transponder	MC MURDO RT 9-3

4. Methods used to ensure availability of radio facilities (Regulation IX/14)

4.1	Duplication of equipment	NO
4.2	Shore based maintenance	YES
4.3	At-sea maintenance capability	NO

THIS IS TO CERTIFY that this Record is correct in all respects

Issued at Dublin (place of issue of Certificate)

18th August 2004 (date of issue)

(signed) _____

An authorised officer of the Department of Communications, Marine and Natural Resources.

(seal or stamp of issuing authority)

Dept. of Communications, Marine & Natural Resources Ireland

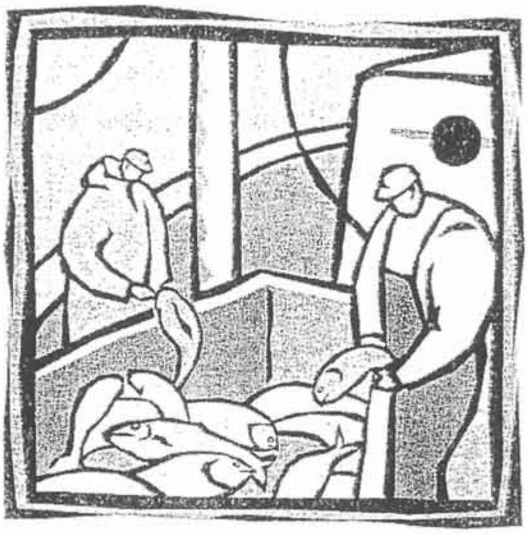
2

10.2 Castletown Fisheries, 10th March 2008

CURSO DE FORMACIÓN PARA TRABAJADORES

MODALIDAD A DISTANCIA

SERVICIO DE PREVENCIÓN
DE
RIESGOS LABORALES



TRABAJOS A BORDO BUQUES ARRASTREROS

mutua gallega

Servicio de Prevención

D.: José [illegible]

con D.N.I.: [illegible]

Declara haber recibido y estudiado el presente curso "a distancia", compuesto de cuarenta y seis páginas, facilitado por Mutua Gallega, a fin de adquirir los conocimientos necesarios para superar el examen del mismo y optar al certificado de dicha entidad justificativo de estar al tanto de los riesgos de mi puesto de trabajo en la mar.

Vigo, a [illegible] de [illegible] de [illegible]

Fdo.: [illegible]

10.2 Castletown Fisheries, 10th March 2008

SERVICE FOR THE PREVENTION
OF
WORK-RELATED RISKS

TRAINING COURSE FOR WORKERS
-DISTANCE LEARNING -

[image included here]

WORK ON BOARD TRAWLER VESSELS

Mutua gallega
Prevention service

I, Don *José Malvido Caride,*
National Identity Document no 35 280 [number illegible] 16 A,

declare that I have received and studied this distance-learning course which was facilitated by *Mutua Gallega* and comprises forty-six pages. The objective is to gain the required knowledge in order to pass the course exam and to apply for the certificate of said entity, all of this being warranted by the risks posed by my job at sea.

Vigo, 18th May, 2006

10.2 Castletown Fisheries, 10th March 2008

A LA CAPITANIA MARÍTIMA DE VIGO: Anexo I-B

NOTIFICACIÓN DE REALIZACIÓN DE TRABAJOS A BORDO

Solicitante					
Empresa:	CASTLETOWN FISHERIES LTD			CIF	IE6413083L
Domicilio	MUELLE DE BOUZAS,71 36208 VIGO			Teléfono	986458022
Buque	DINISH	Matrícula	D558	Tipo	Pesquero
Atracado en	DARSENA 1 ATRAQUE 407				
Persona de contacto: SALVADOR JUNCAL OGANDO			Tfno. EMERGENCIAS: 609820443		
Observaciones:					

Clasificación de las operaciones	
B2	Reparaciones sin incremento de riesgo: • Sin trabajos en caliente realizados sucesiva ó simultáneamente, en la misma zona o área de influencia, trabajos con pintura, revestimientos, manipulación de combustible, atmósferas explosivas. o Sustitución o reparación de piezas en maquinas, motores y aparatos, aunque conlleven pequeñas soldaduras o fuentes moderadas de calor o Sustitución o reparación de aparatos e instalaciones eléctricas, inclusive si existe soldadura de estaño o fuentes moderadas de calor. o Sustitución o reparación de tuberías aunque se utilicen fuentes moderadas de calor Se entenderá por fuente moderada de calor .....

Trabajos a realizar		
Empresa contratada	Operaciones	Zona trabajo
TALLERES NAVALES VINACAL,S.A.	MANTENIMIENTO BARANDILLAS	CUBIERTA SUPERIOR
TALLERES NAVALES VINACAL,S.A.	MANTENIMIENTO AMURADAS	CUBIERTA SUPERIOR

Medios de PREVENCIÓN *(marcar con una x)*	Si	No
Intercambio de información y comunicaciones entre las empresas concurrentes	X	
Reuniones Periódicas de seguridad	X	
Impartición de instrucciones	X	
Establecimiento conjunto de medidas específicas de prevención de riesgos	X	

Documentación que se adjunta
Relación de personal, nº seguridad social, fotocopia DNI, cursos de prevención, TC1, TC2, certificación negativa de descubiertos a la AEAT, a la Seguridad Social y a la Xunta; póliza de Responsabilidad Civil, Seguro de Accidentes, Contrato de prevención de riesgos laborales y evaluación de riesgos laborales

VIGO N Reg:4922
Nº Doc: 200647004238 F Reg: 17/03/2006 12:03
Nº Exp: 200647003732 Dest: 470/T51
D.G.M.M

10.2 Castletown Fisheries, 10th March 2008

Factura

Talleres avales VI CAL, S.A.

Muelle de Reparaciones de Bouzas, nave 8, 36208 VIGO
Telf.: 986 21 42 08 - Fax: 986 21 42 09
C/Ramiro Pascual, 18 - Nave C, 36213 Vigo
Telf./Fax: 986 46 52 59
E-mail: vinacal@vinacal.com
Apdo.: 2067 - 36208 VIGO

CASTLETOWN FISHERIES LTD.
MEDITERRANEAN HOUSE CASTLETOWNBERE

00000 - CO.CORK, IRELAND

Fecha.: 31/05/2006 Factura..: 060152 NIF: IE 6413083L
Provee: Su pedido: DINISH

Inscrita en el Registro Mercantil de Pontevedra en el Folio 173 del Libro 2521 - Inscripción 2ª de la Hoja nº PO - 26619 - C.I.F.: A-36875607

Núm OF	Albaran	Descripción	Importe
		TOTAL MATERIALES	72,59
D 0028	018026	28.REPARAR PUERTAS ARRASTRE Descargar dos puertas de arrastre que entregan en nuestros talleres para reparar las mismas s/sus indicacciones: Arquear redondos de refuerzos de quillas y repasar cortes. Se les colocan a las quillas nuevos antidesgastes con chapa Hardox-400 de 30mm, de 460x140 y 190x140mm, redondos de refuerzo corrugado de 32mm, montar adaptar acoplar y soldar. Colocar nuevos casquillos en zonas de enganche de grilletes con barra ST-52 de 45x25mm, mecanizados, acoplar soldar y cargar puertas en camion de Casa Armadora para su traslado al buque.	
		TOTAL MANO DE OBRA	989,40
		TOTAL MATERIALES	911,96
DS120000	018027	GASES	1.000,68
		CHORREO	120,70
		GALVANIZADO	39,77
		PORTES	1.076,66
		ALQUILERES	338,78

talleres

avales

Bruto	%DTO	Importe DTO	Base IVA	%IVA	Importe IVA	Total Factura	Moneda
34.423,87			34.423,87			34.423,87	EUR

CONDICIONES:
Forma pago.....: GIRO 90 DIAS
Datos Bancarios: CAIXANOVA (20800058 - 1100400248B2).
Vto.: 29/08/2006
34.423,87

J31/22

COPIA Nº: 01 - Hoja: 9

10.2 Castletown Fisheries, 10th March 2008

Talleres avales VI CAL, S.A.

Muelle de Reparaciones de Bouzas, nave 8, 36208 VIGO
Telf.: 986 21 42 08 - Fax: 986 21 42 09
C/Ramiro Pascual, 18 - Nave C, 36213 Vigo
Telf./Fax: 986 46 52 59
E-mail: vinacal@vinacal.com
Aptdo.: 2067 - 36208 VIGO

Factura

CASTLETOWN FISHERIES LTD.
MEDITERRANEAN HOUSE CASTLETOWNBERE

00000 - CO.CORK, IRELAND

Fecha.: 31/05/2006 Factura..: 060152 NIF: IE 6413083L
Provee: Su pedido: DINISH

Inscrita en el Registro Mercantil de Pontevedra en el Folio 173 del Libro 2521 - Inscripción 2ª de la Hoja nº PO - 25619 - C.I.F.: A-36875607

Núm OF	Albaran	Descripción	Importe
		s/plantilla, montar acoplar y soldar. Enderezar soportes del espardel, colocar topes de refuerzo en chapa oxicortada de 210x180mm, montar adaptar acoplar y soldar.	
		TOTAL MANO DE OBRA	813,50
		TOTAL MATERIALES	401,26
DS100025	018023	25.REPARAR NORIA Llevar noria que nos entregan a nuestros talleres para reparar la misma s/sus indicaciones, desarmar componentes para comprobar su estado, suplementar arillo de apoyo del rollo de cable con llanta grana de 40x6, acoplar soldar chorrear pintar y entregar a bordo.	
		TOTAL MANO DE OBRA	94,73
		TOTAL MATERIALES	101,40
DS100026	018024	26.COLOCAR MEDIAS CAÑAS EN ESTAMPA POPA - Colocar medias cañas en estampa popa, soldar rajaduras de cables. Colocar redondos para sujeción de arneses y reparar 3 barraganetes en costado bor. Popa	
		TOTAL MANO DE OBRA	863,10
		TOTAL MATERIALES	395,83
DS100027	018025	27.REPARAR PASARELA DE ALUMINIO Descargar pasarela de embarque que entregan en nuestros talleres para reparar la misma s/sus indicacciones.Enderezar la misma, cortarle refuerzos rotos, asi como tramo del piso, repasar, colocar tramos de refuerzos nuevos, asi como piso en chapa de aluminio de 8mm, y chapa aluminio damero de 4+1,5, montar adaptar acoplar y soldar. Acoplar y soldar tinteros de anclaje de candeleros y soldarlos, asi mismo se enderezan diversos candeleros que estaban torzidos.	
		TOTAL MANO DE OBRA	254,48

COPIA Nº: 01 - Hoja: 8

10.2 Castletown Fisheries, 10th March 2008

Talleres avales VI CAL, S.A.

Muelle de Reparaciones de Bouzas, nave 8, 36208 VIGO
Telf.: 986 21 42 08 - Fax: 986 21 42 09
C/Ramiro Pascual, 18 - Nave C, 36213 Vigo
Telf./Fax: 986 46 52 59
E-mail: vinacal@vinacal.com
Aptdo.: 2067 - 36208 VIGO

Factura

CASTLETOWN FISHERIES LTD.
MEDITERRANEAN HOUSE CASTLETOWNBERE

00000 - CO.CORK, IRELAND

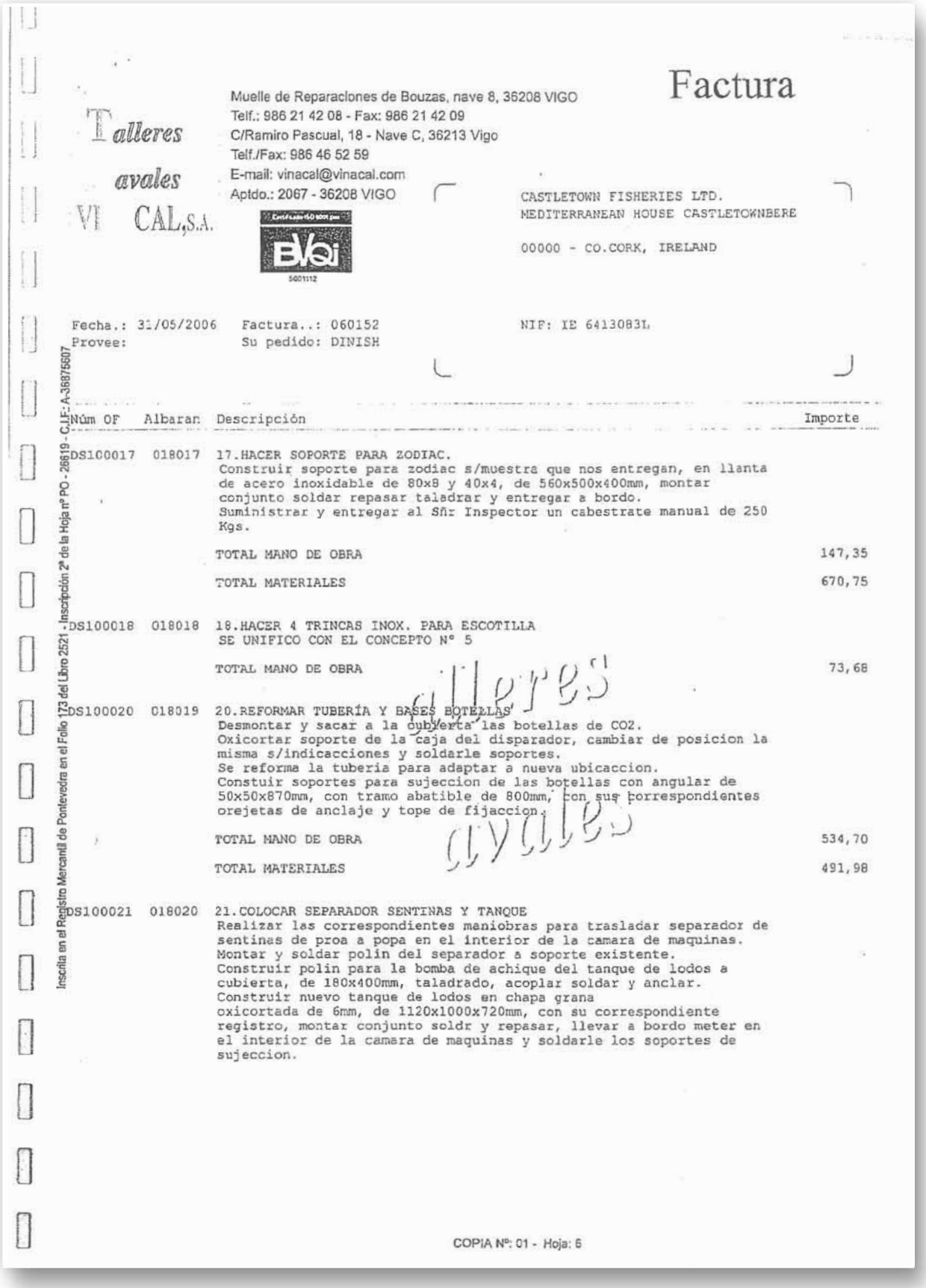
Fecha.: 31/05/2006 Factura..: 060152 NIF: IE 6413083L
Provee: Su pedido: DINISH

Inscrita en el Registro Mercantil de Pontevedra en el Folio 173 del Libro 2521 - Inscripción 2ª de la Hoja nº PO - 26619 - C.I.F.: A-36875607

Núm OF	Albaran	Descripción	Importe
		Construir lineas de tuberia desde achique de sentinas al separador, desde el separador al tanque, linea dercarga al mar desde el separador, linea desde el tanque a la bomba y linea desde la bomba hasta el guardacalor de Er, con tuberia y acesorios de 11/2" y 1", grapeando tuberias e intercalando valvulas.	
		TOTAL MANO DE OBRA	1.130,16
		TOTAL MATERIALES	721,40
DS100022	018021	22.OXICORTAR VIEJOS RODILLOS EN RAMPA Oxicortar y escarnar pastecas existentes en amuradas rampa de popa Br y Er para sustituirlas. Reformar soportes a dos pastecas que nos entrega Casa Armadora para adaptarlos a sus nuevas ubicacciones, se le colocan soportes de refuerzo en angulo grana de 100x100 y 90x90x 1100mm, bases y cartelas de refuerzo en chapa oxicortada de 10mm, montar adaptar acoplar y soldar. Colocar topes de puertas rompeolas con medios redondo grana de 60x200mm, montar acoplar y soldar. Cegar huecos de encastre de bulones de dichas puertas con discos de chapa oxicortada de D.80, acoplar y soldar.	
		TOTAL MANO DE OBRA	1.017,84
		TOTAL MATERIALES	321,13
DS100024	018022	24.REPARAR BARANDILLADO EN ESPARDEL POPA Sanear tramos en mal estado del barandillado del espardel de popa, se colocan tres candeleros nuevos construidos en llanta de 60x15x1000mm, acoplar y soldar. Colocar tramos de barandillas superiores en tubo galvanizado de 11/4" y barandillas intermedias en redondo hº de 20mm, curvar	

COPIA Nº: 01 - Hoja: 7

10.2 Castletown Fisheries, 10th March 2008



Talleres avales VI CAL, S.A.

Muelle de Reparaciones de Bouzas, nave 8, 36208 VIGO
Telf.: 986 21 42 08 - Fax: 986 21 42 09
C/Ramiro Pascual, 18 - Nave C, 36213 Vigo
Telf./Fax: 986 46 52 59
E-mail: vinacal@vinacal.com
Aptdo.: 2067 - 36208 VIGO

Factura

CASTLETOWN FISHERIES LTD.
MEDITERRANEAN HOUSE CASTLETOWNBERE

00000 - CO.CORK, IRELAND

Fecha.: 31/05/2006 Factura..: 060152 NIF: IE 6413083L
Provee: Su pedido: DINISH

Inscrita en el Registro Mercantil de Pontevedra en el Folio 173 del Libro 2521 - Inscripción 2ª de la Hoja nº PO - 26619 - C.I.F.: A-36875607

Núm OF	Albaran	Descripción	Importe
DS100017	018017	17.HACER SOPORTE PARA ZODIAC. Construir soporte para zodiac s/muestra que nos entregan, en llanta de acero inoxidable de 80x8 y 40x4, de 560x500x400mm, montar conjunto soldar repasar taladrar y entregar a bordo. Suministrar y entregar al Sñr Inspector un cabestrate manual de 250 Kgs.	
		TOTAL MANO DE OBRA	147,35
		TOTAL MATERIALES	670,75
DS100018	018018	18.HACER 4 TRINCAS INOX. PARA ESCOTILLA SE UNIFICO CON EL CONCEPTO Nº 5	
		TOTAL MANO DE OBRA	73,68
DS100020	018019	20.REFORMAR TUBERÍA Y BASES BOTELLAS Desmontar y sacar a la cubierta las botellas de CO2. Oxicortar soporte de la caja del disparador, cambiar de posicion la misma s/indicacciones y soldarle soportes. Se reforma la tuberia para adaptar a nueva ubicaccion. Constuir soportes para sujeccion de las botellas con angular de 50x50x870mm, con tramo abatible de 800mm, con sus correspondientes orejetas de anclaje y tope de fijaccion.	
		TOTAL MANO DE OBRA	534,70
		TOTAL MATERIALES	491,98
DS100021	018020	21.COLOCAR SEPARADOR SENTINAS Y TANQUE Realizar las correspondientes maniobras para trasladar separador de sentinas de proa a popa en el interior de la camara de maquinas. Montar y soldar polin del separador a soporte existente. Construir polin para la bomba de achique del tanque de lodos a cubierta, de 180x400mm, taladrado, acoplar soldar y anclar. Construir nuevo tanque de lodos en chapa grana oxicortada de 6mm, de 1120x1000x720mm, con su correspondiente registro, montar conjunto soldr y repasar, llevar a bordo meter en el interior de la camara de maquinas y soldarle los soportes de sujeccion.	

COPIA Nº: 01 - Hoja: 6

10.2 Castletown Fisheries, 10th March 2008

Talleres avales VI CAL, S.A.
Muelle de Reparaciones de Bouzas, nave 8, 36208 VIGO
Telf.: 986 21 42 08 - Fax: 986 21 42 09
C/Ramiro Pascual, 18 - Nave C, 36213 Vigo
Telf./Fax: 986 46 52 59
E-mail: vinacal@vinacal.com
Aptdo.: 2067 - 36208 VIGO

Factura

CASTLETOWN FISHERIES LTD.
MEDITERRANEAN HOUSE CASTLETOWNBERE

00000 - CO.CORK, IRELAND

Fecha.: 31/05/2006 Factura..: C60152 NIF: IE 6413083L
Provee: Su pedido: DINISH

Núm OF	Albaran	Descripción	Importe
DS100013	018013	13.REPARAR PESCANTE ZODIAC Desmontar el pescante de la zodicac existente en el espardel de popa y llevarlo a nuestros talleres para reparar. Suavizar y eligerar el mismo, colocarle nueva brida de giro torneada y mecanizada, acoplar soldar, llevar a bordo y montar.	
		TOTAL MANO DE OBRA	404,05
		TOTAL MATERIALES	249,83
DS100014	018014	14. COLOCAR NIVEL EN TANQUE REBOSE Colocar nivel en el tanque de reboses en el interior local servo, taladrar mamparo y soldarle niples de 1/2", colocar manguera de 18, con entronques laton de 16x1/2, codos latón de 1/2, valvula bola de 1/2 y abrazaderas 12-22.	
		TOTAL MANO DE OBRA	224,95
		TOTAL MATERIALES	28,69
DS100001	018015	15. Reparación de amuradas Oxicortar y sanear amuradas en ambos costados en zonas deterioradas y golpeadas, sanear barraganetes en zonas desgastadas, colocando tramos nuevos en chapa naval s/espesores primitivos, sanear tramos de tapa regala en zonas golpeadas y deterioradas.	
		TOTAL IMPORTE	2.650,00
DS100016	018016	16.HACER ESCALERA BAJADA A BODEGA GALV. Construir una escalera para bajar a la bodega, con largueros y peldaños en tubo sch 40 de 1", soportes de amarre en redondo hº de 20mm, montar conjunto soldar repasar galvanizar y entregar a bordo.	
		TOTAL MANO DE OBRA	115,78
		TOTAL MATERIALES	54,03

COPIA Nº: 01 - Hoja: 5

10.2 Castletown Fisheries, 10th March 2008

Talleres avales VI CAL, S.A.

Muelle de Reparaciones de Bouzas, nave 8, 36208 VIGO
Telf.: 986 21 42 08 - Fax: 986 21 42 09
C/Ramiro Pascual, 18 - Nave C, 36213 Vigo
Telf./Fax: 986 46 52 59
E-mail: vinacal@vinacal.com
Aptdo.: 2067 - 36208 VIGO

Factura

CASTLETOWN FISHERIES LTD.
MEDITERRANEAN HOUSE CASTLETOWNBERE

00000 - CO.CORK, IRELAND

Fecha.: 31/05/2006 Factura..: 060152 NIF: IE 6413083L
Provee: Su pedido: DINISH

Inscrita en el Registro Mercantil de Pontevedra en el Folio 173 del Libro 2521 - Inscripción 2ª de la Hoja nº PO - 26619 - C.I.F.: A-36875807

Núm OF	Albaran	Descripción	Importe
DS100010	018010	10. MODIFICAR TOMA TANQUE ACEITE EXIST. Oxicortar tuberia de llenado del tanque de aceite en cubierta Br para cambiar posicion por el interior de la casamata, cegando hueco con chapa oxicortada de 140x140mm, acoplar y soldar. Construir nueva linea de llenado con tubo sch 40 , codos std, niple y tapon de 21/2", acoplar soldar y montar con mangueton de goma de 75 y abrazaderas 85-91	
		TOTAL MANO DE OBRA	292,20
		TOTAL MATERIALES	88,13
DS100011	018011	11.REPARAR BARANDILLADO EXTERIOR EN CTA. Oxicortar tramos de barandillado en mal estado en el guardacalor de Er, colocar cartelas de refuerzo en candeleros, acoplar y soldar, colocar tramos de barandillado nuevo con tubo galvanizado y codos de 11/4", asi como barandillas intermedias en redondo hº de 20mm, montar adaptar acoplar y soldar. Colocar nuevos candeleros de soporte en barandillado de la cubierta puente Er, con llanta de 60x15x1000mm, con bases inferiores de 60x15x150mm, asi mismo se coloca tramo de barandilla intermedia en redondo hº de 20mm, montar acoplar y soldar.	
		TOTAL MANO DE OBRA	720,76
		TOTAL MATERIALES	58,18
DS100012	018012	12. CORTAR TAMBUCHO PAÑOL HILO EN PARQUE Cortar tambucho en parque pesca popa Er para eliminar el mismo y cegar hueco. Repasar cortes. Cegar hueco del tubo de desague del WC con disco de chapa oxicortada, acoplar y soldar. Colocar refuerzos de proteccion en techo del parque de pesca en zonas oxicortadas, con redondo hº de 12 y llanta grana de 70x8, montar adaptar acoplar y soldar.	
		TOTAL MANO DE OBRA	368,10
		TOTAL MATERIALES	33,68

COPIA Nº: 01 - Hoja: 4

10.2 Castletown Fisheries, 10th March 2008

Talleres avales VI CAL, S.A.

Muelle de Reparaciones de Bouzas, nave 8, 36208 VIGO
Telf.: 986 21 42 08 - Fax: 986 21 42 09
C/Ramiro Pascual, 18 - Nave C, 36213 Vigo
Telf./Fax: 986 46 52 59
E-mail: vlnacal@vlnacal.com
Aptdo.: 2067 - 36208 VIGO

Factura

CASTLETOWN FISHERIES LTD.
MEDITERRANEAN HOUSE CASTLETOWNBERE

00000 - CO.CORK, IRELAND

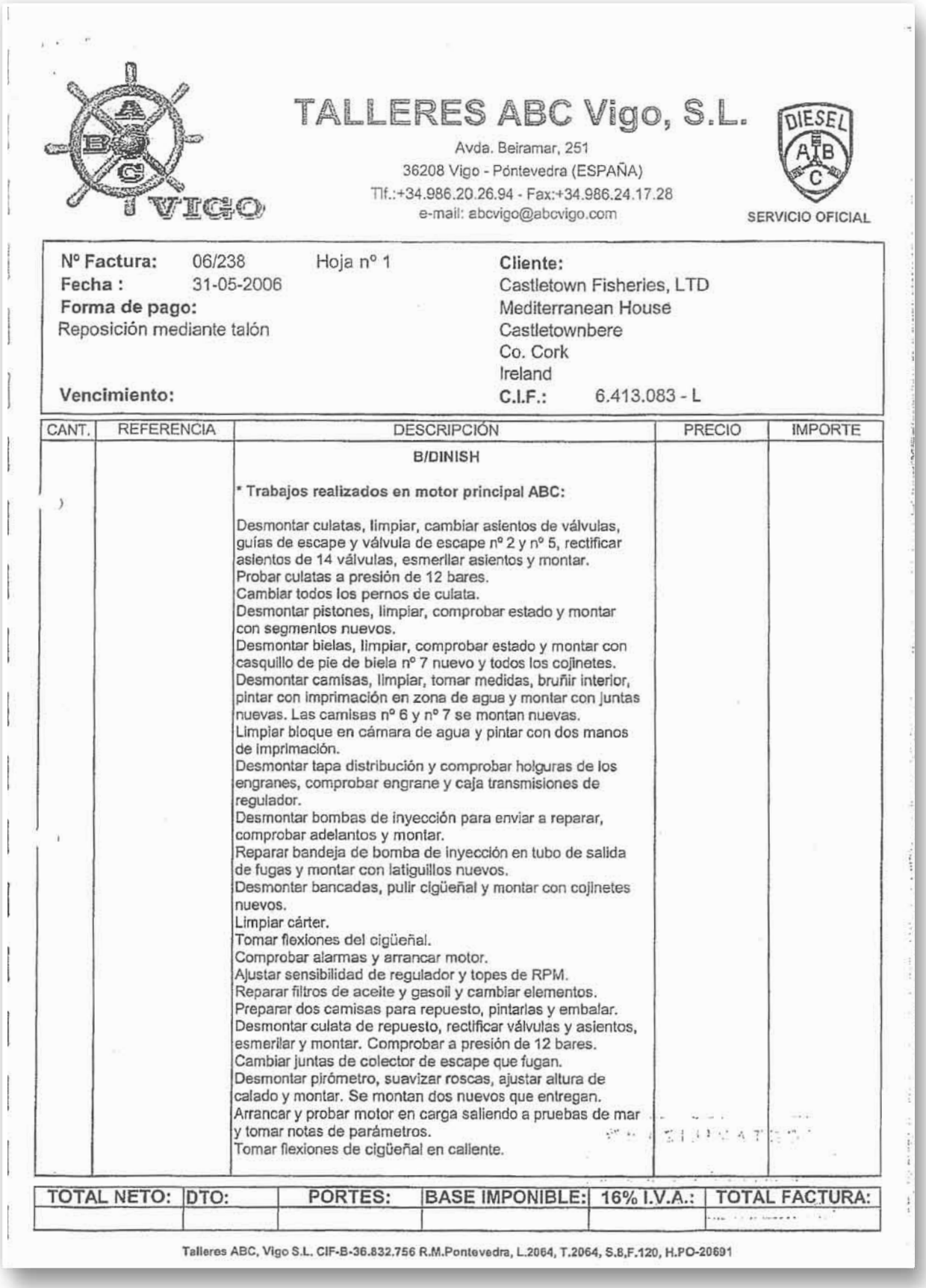
Fecha.: 31/05/2006 Factura..: 060152 NIF: IE 6413083L
Provee: Su pedido: DINISH

Inscrita en el Registro Mercantil de Pontevedra en el Folio 173 del Libro 2521 - Inscripción 2ª de la Hoja nº PO - 28619 - C.I.F.: A-36875607

Núm OF	Albaran	Descripción	Importe
		TOTAL MATERIALES	520,89
DS100007	018005	7.OXICORTAR ANTIGUAS TORRETAS MOLINETE Desmontar molinetes de maniobra de popa Br y Er para eliminar la misma, oxicortar polines de los mismos y repasar cortes. Oxicortar y escarnar pastecas y tinteros existentes en el puente zona de popa Br y Er para eliminar las mismas. Oxicortar y escarnar tramo de chapa amurada rampa de popa costado de Er y repasar cortes, colocar nuevo tramo en chapa oxicortada de 7mm, de 1100x950mm, montar adaptar acoplar y soldar. Oxicortar tramo de rompeolas en cubierta popa Er y repasar cortes, colocar tramo nuevo en chapa oxicortada de 700x400x130mm, montar acoplar y soldar.	
		TOTAL MANO DE OBRA	1.781,38
		TOTAL MATERIALES	272,63
DS100008	018006	8. COLOCAR REDONDOS EN ROMPEOLAS BOR. Colocar redondos en rompeolas Bor. y Eor. para no enganchar aparejos, con redondo hº de 20mm, en una longitud de 7000mm en el costado de Br y de 8000 en el de Er, montar adaptar acoplar y soldar. Colocar en el rompeolas de Er solapa superior de refuerzo con llanta de 100x6x3000mm, montar adaptar acoplar y soldar.	
		TOTAL MANO DE OBRA	468,72
		TOTAL MATERIALES	37,56
DS100009	018009	9. PASAR ESCALERA SUBIDA PUENTE BOR. Desmontar tanque de aceite existente en la cubierta Br al lado de la maquinilla de pesca. Reparar escaleras de acceso al puente y parque de pesca, colocando peldaños nuevos en chapa estriada en zonas gastadas y reparar barandillas de las mismas s/indicaciones.	
		TOTAL MANO DE OBRA	58,44

COPIA Nº: 01 - Hoja: 3

10.2 Castletown Fisheries, 10th March 2008



TALLERES ABC Vigo, S.L.

Avda. Beiramar, 251
36208 Vigo - Pontevedra (ESPAÑA)
Tlf.:+34.986.20.26.94 - Fax:+34.986.24.17.28
e-mail: abcvigo@abcvigo.com

SERVICIO OFICIAL

Nº Factura: 06/238 Hoja nº 1
Fecha : 31-05-2006
Forma de pago:
Reposición mediante talón

Vencimiento:

Cliente:
Castletown Fisheries, LTD
Mediterranean House
Castletownbere
Co. Cork
Ireland
C.I.F.: 6.413.083 - L

CANT.	REFERENCIA	DESCRIPCIÓN	PRECIO	IMPORTE
		B/DINISH *** Trabajos realizados en motor principal ABC:** Desmontar culatas, limpiar, cambiar asientos de válvulas, guías de escape y válvula de escape nº 2 y nº 5, rectificar asientos de 14 válvulas, esmerilar asientos y montar. Probar culatas a presión de 12 bares. Cambiar todos los pernos de culata. Desmontar pistones, limpiar, comprobar estado y montar con segmentos nuevos. Desmontar bielas, limpiar, comprobar estado y montar con casquillo de pie de biela nº 7 nuevo y todos los cojinetes. Desmontar camisas, limpiar, tomar medidas, bruñir interior, pintar con imprimación en zona de agua y montar con juntas nuevas. Las camisas nº 6 y nº 7 se montan nuevas. Limpiar bloque en cámara de agua y pintar con dos manos de imprimación. Desmontar tapa distribución y comprobar holguras de los engranes, comprobar engrane y caja transmisiones de regulador. Desmontar bombas de inyección para enviar a reparar, comprobar adelantos y montar. Reparar bandeja de bomba de inyección en tubo de salida de fugas y montar con latiguillos nuevos. Desmontar bancadas, pulir cigüeñal y montar con cojinetes nuevos. Limpiar cárter. Tomar flexiones del cigüeñal. Comprobar alarmas y arrancar motor. Ajustar sensibilidad de regulador y topes de RPM. Reparar filtros de aceite y gasoil y cambiar elementos. Preparar dos camisas para repuesto, pintarlas y embalar. Desmontar culata de repuesto, rectificar válvulas y asientos, esmerilar y montar. Comprobar a presión de 12 bares. Cambiar juntas de colector de escape que fugan. Desmontar pirómetro, suavizar roscas, ajustar altura de calado y montar. Se montan dos nuevos que entregan. Arrancar y probar motor en carga saliendo a pruebas de mar y tomar notas de parámetros. Tomar flexiones de cigüeñal en caliente.		

TOTAL NETO:	DTO:	PORTES:	BASE IMPONIBLE:	16% I.V.A.:	TOTAL FACTURA:

Talleres ABC, Vigo S.L. CIF-B-36.832.756 R.M.Pontevedra, L.2064, T.2064, S.8,F.120, H.PO-20691

10.2 Castletown Fisheries, 10th March 2008

TALLERES ABC Vigo, S.L.
Avda. Beiramar, 251
36208 Vigo - Pontevedra (ESPAÑA)
Tlf.:+34.986.20.26.94 - Fax:+34.986.24.17.28
e-mail: abcvigo@abcvigo.com
SERVICIO OFICIAL

Nº Factura: 06/238 Hoja nº 2
Fecha : 31-05-2006
Forma de pago:
Reposición mediante talón

Vencimiento:

Cliente:
Castletown Fisheries, LTD
Mediterranean House
Castletownbere
Co. Cork
Ireland
C.I.F.: 6.413.083 - L

CANT.	REFERENCIA	DESCRIPCIÓN	PRECIO	IMPORTE
		* Materiales:		
8	610.082.1400.12	Juego juntas descamisar	329,14	2.633,12
1	610.011.1102.10	Válvula escape	431,25	431,25
14	610.011.8102.10	Asiento válvula	88,88	1.244,32
8	610.011.8104.10	Guia válvula	248,60	1.988,80
8	900.014.1200.91	Junta tapa admisión culata	1,37	10,96
3	610.011.1112.10	Presilla capuchón válvula	1,36	4,08
1	610.011.7606.10	Muelle válvula arranque	4,66	4,66
9	101.015.0280.33	Junta cobre válvula arranque	0,40	3,60
9	101.015.0260.34	Junta cobre válvula arranque	0,40	3,60
9	101.030.0030.50	Tórica válvula seguridad	0,40	3,60
9	101.015.0240.30	Junta cobre válvula seguridad	0,40	3,60
48	610.008.9021.12	Tuerca ciega perno culata	9,45	453,60
2	620.008.9007.03	Tuerca perno culata	7,40	14,80
44	610.008.1105.13	Perno culata	118,15	5.198,60
48	101.015.0260.34	Junta cobre perno culata	0,40	19,20
20	610.004.9201.10	Medio cojinete bancada	289,86	5.797,20
16	610.010.9201.10	Medio cojinete biela	343,23	5.491,68
8	610.009.9003.10	Aro de fuego	167,03	1.336,24
24	610.009.9004.10	Aro de compresión	90,72	2.177,28
8	610.009.9005.10	Aro de engrase	108,12	864,96
2	610.008.1102.10	Camisa	2.617,48	5.234,96
4	610.059.1500.10	Tubo inyección sencillo	184,32	737,28
8	610.008.1402.10	Tórica tapa registros bomba inyección	12,50	100,00
8	610.001.9006.10	Junta tapa cárter corcho	8,47	67,76
4	618.008.9003.10	Junta tapa bomba inyección	56,19	224,76
32	061.W12.1635.AH	Tornillo escape culata	0,97	31,04
32	061.130.OPRS.AO	Arandela presión escpe culata	0,08	2,56
8	061.W38.16022.AH	Tornillo tapa agua culata	0,54	4,32
8	610.059.9001.10	Latigullo rebose bomba inyección	10,21	81,68
2	100.301.0630.25	Rodamiento caja acoplamiento regulador	4,11	8,22
1	610.012.7101.11	Piñón regulador fibra	166,02	166,02
2	620.051.1107.02	Junta filtro aceite	4,93	9,86
2	610.031.1109.10	Junta goma Interior filtro aceite	4,17	8,34
		Suma y sigue.....		34.361,95

TOTAL NETO:	DTO:	PORTES:	BASE IMPONIBLE:	16% I.V.A.:	TOTAL FACTURA:

Talleres ABC, Vigo S.L. CIF-B-36.832.756 R.M.Pontevedra, L.2064, T.2064, S.8,F.120, H.PO-20691

10.2 Castletown Fisheries, 10th March 2008

c/Salvador

TALLERES ABC Vigo, S.L.

Avda. Beiramar, 251
36208 Vigo - Pontevedra (ESPAÑA)
Tlf.:+34.986.20.26.94 - Fax:+34.986.24.17.28
e-mail: abcvigo@abcvigo.com

SERVICIO OFICIAL

Nº Factura: 06/238 Hoja nº 3
Fecha : 31-05-2006
Forma de pago:
Reposición mediante talón

Vencimiento:

Cliente:
Castletown Fisheries, LTD
Mediterranean House
Castletownbere
Co. Cork
Ireland
C.I.F.: 6.413.083 - L

CANT.	REFERENCIA	DESCRIPCIÓN	PRECIO	IMPORTE
		Suma anterior.....		34.361,95
1	810020	Cordón tapa balancin	11,70	11,70
16	100.004.0140.20	Junta cobre engrase balancín	0,40	6,40
20	100.004.0140.20	Junta cobre engrase cojinete árbol de levas	0,40	8,00
24	100.004.0140.20	Junta cobre sobrante gasoil	0,40	9,60
6	100.001.0180.24	Junta cobre sobrante gasoil tapa bomba inyección	0,40	2,40
6	100.004.0140.20	Junta cobre distribución	0,40	2,40
10	061.101.5030.AA	Tornillo tapa distribución	0,45	4,50
10	061.101.5038.AE	Espárrago tapa cárter	3,37	33,70
1	610.012.9009.11	Retén eje transmisión mando cremallera	3,25	3,25
1	MATLIMP	Material de limpieza	175,20	175,20
5		Tubo sobrante gasoil	25,20	126,00
8		Tubo engrase balancin	25,20	201,60
1		Tubo engrase	13,33	13,33
2		Tubo reductora	18,00	36,00
1		Reparación 8 válvulas escape	44,88	44,88
1		Reparación 8 válvulas admisión	44,88	44,88
		MANO DE OBRA.....		9.681,39
		(Descuento 10% en materiales)		-3.444,39

Sin albarán

531/19

TOTAL NETO:	DTO:	PORTES:	BASE IMPONIBLE:	16% I.V.A.:	TOTAL FACTURA:
41.322,79			41.322,79		41.322,79 Euros

Talleres ABC, Vigo S.L. CIF-B-36.832.756 R.M.Pontevedra, L.2064, T.2064, S.8,F.120, H.PO-20691

10.2 Castletown Fisheries, 10th March 2008

ARMADA
ASTILLEROS - VARADEROS

ARMADA S.A.
Avda. Orillamar, 14
36208 VIGO
Tel. 986 29 13 00
Fax. 986 23 47 38

CONSTRUCCION Y REPARACION DE BUQUES

SR. CAPITÁN MARÍTIMO DE VIGO
Capitanía Marítima de Vigo
Muelle de Trasatlánticos
VIGO (Pontevedra)

Vigo, 28 de Noviembre de 2002

ASUNTO: Solicitud de obras de reforma en el buque " DINISH "
Puerto de matrícula: Irlanda - Folio: 558

JOSÉ MARÍA ARMADA ÁLVAREZ, como subdirector de la empresa ARMADA, S.A. Astilleros-Varaderos, con C.I.F. nº A-36.610.681 y domicilio en Avda. Orillamar, 14, 36208-VIGO, Pontevedra.

EXPONE:

Que desea hacer reformas en el buque del asunto por encargo de EIRANOVA FISHERIES LDT., con C.I.F. 9/J/58646/D y domicilio en Castletownbere-Cork - Dinish Island, Irlanda

Las obras se harán en las instalaciones de ARMADA, S.A. Astilleros-Varaderos (Se adjunta PROYECTO DE REFORMA)

Por todo ello,

SOLICITA:

Que me autorice las obras.

Por ARMADA, S.A.
ASTILLEROS-VARADEROS ARMADA S.A. Avda. Orillamar, 14 36208 VIGO
Fdo.: José María Armada Álvarez

Por EIRANOVA FISHERIES LDT.,
FISHERIES LTD * EIRANOVA
Fdo.: Gerardo Gómez Rodríguez

10.2 Castletown Fisheries, 10th March 2008

Ministerio de Fomento
Secretaría de Estado de Infraestructuras y Transportes

Capitanía Marítima de Vigo

Muelle Trasatlánticos. Edif. Estación Marítima
Ala Sur, 1ª Planta
36201 Vigo (Pontevedra)

VIGO N Reg:20386
Nº Doc: 200247020364 F Reg: 11/12/2002 11:18
Nº Exp: 200247005052 Dest: 996/000
D.G.M.M

DESTINATARIO
ASTILLEROS ARMADA, S.A.
AVDA. ORILLAMAR, 14
36208 - VIGO
PONTEVEDRA

ASUNTO : AUTORIZACION OBRAS DE REFORMA DEL BUQUE "DINISH" (Bandera Irlanda).

En relación con "Asunto", se resuelve AUTORIZAR, las obras solicitadas, debiendo cumplimentar lo siguiente :

1°.- Se tendrán en cuenta las especificaciones de Inspección, que se acompañan.

2° .- Deberá remitir, el certificado de fin de obras, especificando costes.

El expediente se remite a Inspección para su seguimiento.

Vigo, 09 de diciembre de 2002
EL CAPITAN MARITIMO DE VIGO.

Capitanía Marítima de Vigo
Ministerio de Fomento

-Juan Jose Escolar Calzón-

10.2 Castletown Fisheries, 10th March 2008

Ministerio de Fomento
Dirección General de la Marina Mercante

Capitanía Marítima de Vigo

Muelle de Trasatlánticos s/n
36201 – Vigo

tlf. 986-436285–432866-433911
fax. 986 - 435683

ASUNTO: OBRAS DE REFORMA DE BUQUE EXTRANJERO

TIPO DE BUQUE	*NOMBRE*	*Eslora L (RD1837/2000)*	*BANDERA*
Pesquero	***DINISH***	*32.0 m (aprox)*	***IRLANDA***
Taller solicitante:	*ARMADA*		

Devuelvo a Vd. el expediente del asunto, informándole de lo siguiente:

1. ***Las obras consisten en:***

   1.1. *Modificar la maniobra de pesca, eliminando el palo bípode central situado entre cuadernas 25-35, y sustitución de la maquinilla de pesca por otra de similares características.*

   1.2. *También se adaptaran los medios de protección en cámara de máquinas. (contraincendios detección, sistema fijo, inundación, etc.)*

2. *El **procedimiento** a seguir es el indicado en el art. 29 del RD 1837/2000, Reglamento de inspección y certificación de buques civiles, (BOE de 28-11-2000) modificado por resoluciones de 31-7-2001 del Mº de Fomento sobre delegación de competencias relativas a dicho RD (BOE de 11-8-2001 y BOE de 16-10-2001), así como circular C-11/90 de la DGMM. Se trata de un buque **MAYOR** de 24 m de eslora L (según RD 1837/2000).*

3. *Por ser un buque **extranjero**, las obras deberán cumplir con los reglamentos de su país de bandera, por lo que no se emite informe relativo a la normativa nacional.*

   3.1. *No obstante lo anterior, por tratarse de un buque **pesquero** de eslora L > 24m, pudiera ser de aplicación el **RD 1032/99**.*

      3.1.1. *Si el buque pretende desembarcar sus capturas en puerto español, entraría dentro del ámbito de aplicación del RD 1032/99, según su artículo 1.c). En este caso (si el buque desembarca sus capturas en territorio español) la Administración de Bandera debería certificar al buque, para así cumplir lo indicado en el artículo 3.4 del RD 1032/99.*

10.2 Castletown Fisheries, 10th March 2008

Ministerio de Fomento
Dirección General de la Marina Mercante

Capitanía Marítima de Vigo

3.1.2. Si no se cumplen los requisitos indicados en el párrafo anterior el buque no podrá desembarcar sus capturas en territorio español.

3.2. Por otro lado, en el caso de pesqueros de pabellón de un estado miembro de la Comunidad Europea, se deberá tener en cuenta la normativa común de la CE, entre la que se señalan los stes:

3.2.1. Se tendrá en cuenta lo indicado en la Directiva CE 93/103 sobre disposiciones mínimas de **Seguridad y Salud en el trabajo** a bordo de los buques de pesca (traspuesta en España a través del RD 1216/97)

3.2.2. Se tendrá en cuenta lo indicado en la Directiva CE 97/70 sobre un Régimen armonizado de Seguridad para buques **Pesqueros de eslora mayor o igual a 24 m** (traspuesta en España a través del RD 1032/99)

3.2.3. Se tendrá en cuenta lo indicado en las Directivas CE 96/98 y 98/85, traspuestas en España a través del **R.D. 809/99 sobre equipos marinos a instalar a bordo de buques** (BOE de 29-5-1999; modificado por orden de 12 de septiembre del 2001, BOE de 21-12-2001) y se acreditará documentalmente, aportando el dossier de calidad de construcción que incluya tales justificantes.

4. Con la salvedad anterior, **no hay inconveniente técnico** en que se autorice el expediente del asunto. No obstante, se tendrán en cuenta, además, las siguientes **observaciones**:

4.1. El astillero o taller deberá indicar que entidad u organismo, en representación de la Administración de Bandera, efectuará los reconocimientos y emitirá los certificados. Así mismo se indicará que certificados emitirá ese organismo en nombre de la Administración de bandera (art. 22.2).

4.1.1. En el caso de que se dé la circunstancia prevista en el art. 28.2.c) del RD 1837/2000, se aplicará el RD 1032/99, y en particular su artículo 5 (se transcribe seguidamente). Además se aplicaría lo correspondiente del RD 1216/1997.

(transcripción del art. 5 del RD 1032/1999)

Artículo 5. *Normas de diseño, construcción y mantenimiento.*
Las normas para el diseño, construcción y mantenimiento del casco, la maquinaria principal y auxiliar y las instalaciones eléctricas y automáticas de un buque serán las que estén en vigor en la fecha de su construcción, especificadas para su clasificación por una organización reconocida o empleada por una Administración.

4.1.2. Además, en este supuesto (art. 28.2.c del RD 1837/2000), en el caso de obras de gran importancia, el buque se consideraría nuevo en los

10.2 Castletown Fisheries, 10th March 2008

Ministerio de Fomento
Dirección General de la Marina Mercante

Capitanía Marítima de Vigo

aspectos objeto de la reforma, en el sentido de la regla 5 del cap I del anexo al T93+CE.

4.2. Antes del inicio de los trabajos, el astillero designará a un técnico titulado competente como director de obra (de conformidad con lo establecido en el artículo 38.8 del RD 1837/2000, el cual dirigirá el correcto desarrollo de todo el proceso en lo relativo a la seguridad marítima y a la prevención de la contaminación y expedirá, al finalizar la obra de reforma un documento (visado por el Colegio Oficial correspondiente).

*5. **Al final de las obras**, deberán cumplimentarse los siguientes puntos:*

5.1. Se revisará la información de estabilidad, actualizando lo que proceda.

5.2. Se informará de los gastos habidos, desglosados en materiales y mano de obra.

5.3. El director de obra emitirá el certificado correspondiente, visado por su colegio profesional.

5.4. Se presentarán los certificados emitidos por su país de bandera o Sociedad de Clasificación (posteriormente a la obra) que demuestren la aceptación de dicha obra.

5.4.1. Se aportará, en su caso, el certificado de Conformidad de Buque pesquero, L>24m, emitido por su Administración de bandera.

Vigo, 5 de diciembre de 2002

El Jefe de la Inspección Marítima

Jesús M Villar González

Sr. CAPITAN MARITIMO DE VIGO

reforma extranjero+24-DINISH-armada.doc 05/12/02 Página 3 de 3

10.2 Castletown Fisheries, 10th March 2008

ZELAIA PROYECTOS NAVALES
Gerardo Celaya . Dr. Ingeniero Naval
c/ Orense, 44. Portal 2, 3°B
36900 Marín
Tel°/Fax: 83 80 17

CAPITANIA MARITIMA DE VIGO
Inspección Marítima
VIGO

Fecha: 15.01 2003

ASUNTO: "DINISH".- CONDICION DE PRUEBAS / SALIDA DE PUERTO

A petición del Armador, les hacemos entrega del resultado de los cálculos de Estabilidad para la Condición de SALIDA DE PUERTO, tal como tiene previsto hacerlo en los próximos días el buque del asunto.

Como puede comprobarse, la estabilidad es satisfactoria.

Los cálculos de Comprobación del Rosca deducidos de la experiencia llevada a cabo en el Pantalán frente a casa MAR de Vigo, el pasado dia 14 del presente mes de enero, en presencia de los Inspectores de la Sociedad de Clasificación y del Ingeniero Naval Director de Obra, han dado un resultado de acuerdo con el proyecto.

Lo cual informamos a ustedes, para que tengan a bien AUTORIZAR la salida del l buque.

Aprovechamos para enviarles nuestro más cordial saludo.

Anexo: Estudio de estabilidad para la condición "Pruebas / Salida dePuerto" (3 hojas)

10.2 Castletown Fisheries, 10th March 2008

DEADWEIGHT TABLE

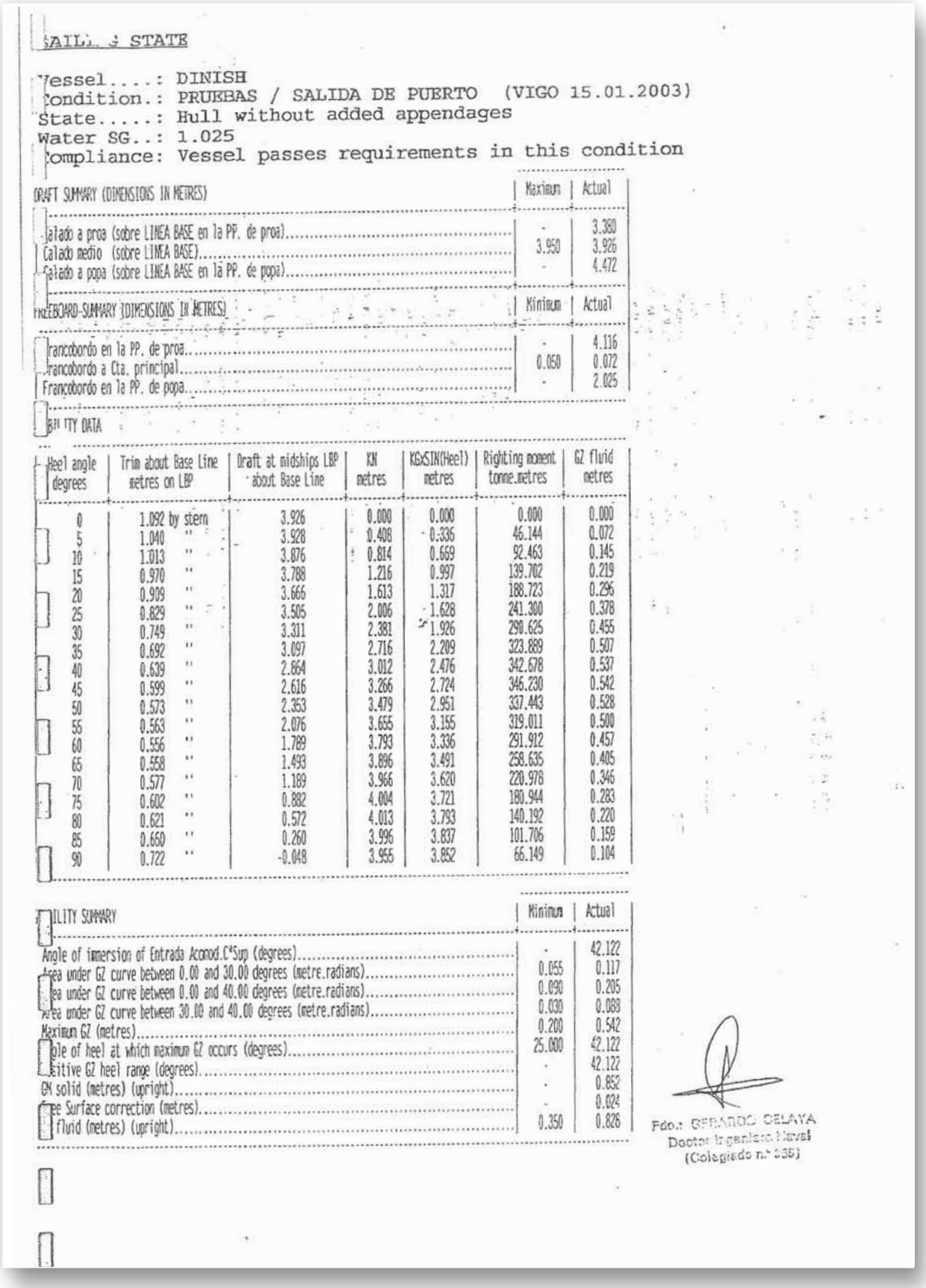
Vessel....: DINISH
Condition.: PRUEBAS / SALIDA DE PUERTO (VIGO 15.01.2003)
State.....: Hull without added appendages
Water SG..: 1.025
Compliance: Vessel passes requirements in this condition

Longitudinal dimensions about PERPENDICULAR DE POPA (-ve aft, +ve forward)
Vertical dimensions about LINEA BASE (+ve above, -ve below)

Deadweight Item	Weight tonnes	LCG metres	Longitudinal moment t.m	VCG metres	Vertical moment t.m	Free Surface moment t.m
Tripulación y efectos	2.400	15.000	36.000	5.550	13.320	-
Pertrechos pesca	11.000	7.000	77.000	6.000	66.000	-
Viveres	2.500	20.000	50.000	5.700	14.250	-
T. consumo diario G.Oil	2.100	7.510	15.771	4.900	10.290	-
Tnk nº 1 Proa G. Oil	11.768	30.540	359.395	3.396	39.964	7.821
Tnk nº 2 G. Oil	17.122	28.271	484.056	3.128	53.558	0.000
Tnk.nº 4 Babor G.Oil	6.933	24.054	166.766	0.957	6.635	0.000
Tnk.nº 5 Estribor G.Oil	6.933	24.054	166.766	0.957	6.635	0.000
Tnk. nº 6 Babor G.Oil	8.440	19.357	163.373	0.937	7.908	0.000
Tnk. nº 7 Estribor G.Oil	8.440	19.357	163.373	0.937	7.908	0.000
Tnk. nº 8 Babor G. Oil	9.557	15.251	145.905	0.811	7.759	0.000
Tnk nº 9 Estribor G.Oil	8.057	15.476	124.690	0.842	6.784	0.000
Tnk nº 12 Babor G. Oil	12.388	2.427	30.066	3.501	43.370	0.000
Tnk nº 13 Estribor G.Oil	12.388	2.427	30.066	3.501	43.370	0.000
Tnk nº 14 Babor G.Oil	8.389	-0.176	-1.476	3.688	30.939	0.000
Tnk nº15 Estribor G.Oil	8.389	-0.176	-1.476	3.688	30.939	0.000
Tnk nº 16 Babor G.Oil	6.003	-2.601	-15.614	3.952	23.724	0.000
Tnk nº 17 Estribor G.Oil	6.003	-2.601	-15.614	3.952	23.724	0.000
Tnk.nº 10 Babor A. Dulce	9.002	10.534	94.827	1.296	11.685	0.000
Tnk.nº 11 Estribor A.Dulce	9.002	10.534	94.827	1.298	11.685	4.867
Tnk nº 18 Babor Aceite Lub	4.650	5.589	25.989	3.452	16.052	2.785
cajas pescado	10.000	20.090	200.000	4.500	45.000	-
Hielo Bodega nº 1	25.000	23.600	590.000	2.430	60.750	-
DEADWEIGHT TOTAL	206.474	14.456	2984.591	2.820	582.248	15.473
LIGHTSHIP	432.162	12.837	5547.664	4.309	1862.186	-
DISPLACEMENT	638.635	13.360	8532.354	3.828	2444.434	15.473

Free Surface Correction (Total Free Surface Moment/Displacement)	0.024
VCG fluid	3.852

10.2 Castletown Fisheries, 10th March 2008



SAIL. . STATE

Vessel....: DINISH
Condition.: PRUEBAS / SALIDA DE PUERTO (VIGO 15.01.2003)
State.....: Hull without added appendages
Water SG..: 1.025
Compliance: Vessel passes requirements in this condition

DRAFT SUMMARY (DIMENSIONS IN METRES)	Maximum	Actual
Calado a proa (sobre LINEA BASE en la PP. de proa)	-	3.380
Calado medio (sobre LINEA BASE)	3.950	3.926
Calado a popa (sobre LINEA BASE en la PP. de popa)	-	4.472

FREEBOARD SUMMARY (DIMENSIONS IN METRES)	Minimum	Actual
Francobordo en la PP. de proa	-	4.116
Francobordo a Cta. principal	0.050	0.072
Francobordo en la PP. de popa	-	2.025

BILITY DATA

Heel angle degrees	Trim about Base Line metres on LBP	Draft at midships LBP about Base Line	KN metres	KGxSIN(Heel) metres	Righting moment tonne.metres	GZ fluid metres
0	1.092 by stern	3.926	0.000	0.000	0.000	0.000
5	1.040 "	3.928	0.408	0.336	46.144	0.072
10	1.013 "	3.876	0.814	0.669	92.463	0.145
15	0.970 "	3.788	1.216	0.997	139.702	0.219
20	0.909 "	3.666	1.613	1.317	188.723	0.296
25	0.829 "	3.505	2.006	1.628	241.300	0.378
30	0.749 "	3.311	2.381	1.926	298.625	0.455
35	0.692 "	3.097	2.716	2.209	323.889	0.507
40	0.639 "	2.864	3.012	2.476	342.678	0.537
45	0.599 "	2.616	3.266	2.724	346.230	0.542
50	0.573 "	2.353	3.479	2.951	337.443	0.528
55	0.563 "	2.076	3.655	3.155	319.011	0.500
60	0.556 "	1.789	3.793	3.336	291.912	0.457
65	0.558 "	1.493	3.896	3.491	258.635	0.405
70	0.577 "	1.189	3.966	3.620	220.978	0.346
75	0.602 "	0.882	4.004	3.721	180.944	0.283
80	0.621 "	0.572	4.013	3.793	140.192	0.220
85	0.660 "	0.260	3.996	3.837	101.706	0.159
90	0.722 "	-0.048	3.955	3.852	66.149	0.104

ILITY SUMMARY	Minimum	Actual
Angle of immersion of Entrada Acomod.C°Sup (degrees)	-	42.122
Area under GZ curve between 0.00 and 30.00 degrees (metre.radians)	0.055	0.117
Area under GZ curve between 0.00 and 40.00 degrees (metre.radians)	0.090	0.205
Area under GZ curve between 30.00 and 40.00 degrees (metre.radians)	0.030	0.088
Maximum GZ (metres)	0.200	0.542
Angle of heel at which maximum GZ occurs (degrees)	25.000	42.122
Positive GZ heel range (degrees)	-	42.122
GM solid (metres) (upright)	-	0.852
Free Surface correction (metres)	-	0.024
GM fluid (metres) (upright)	0.350	0.826

Fdo.: SERAFIN SELAYA
Doctor Ingeniero Naval
(Colegiado nº 635)

10.2 Castletown Fisheries, 10th March 2008

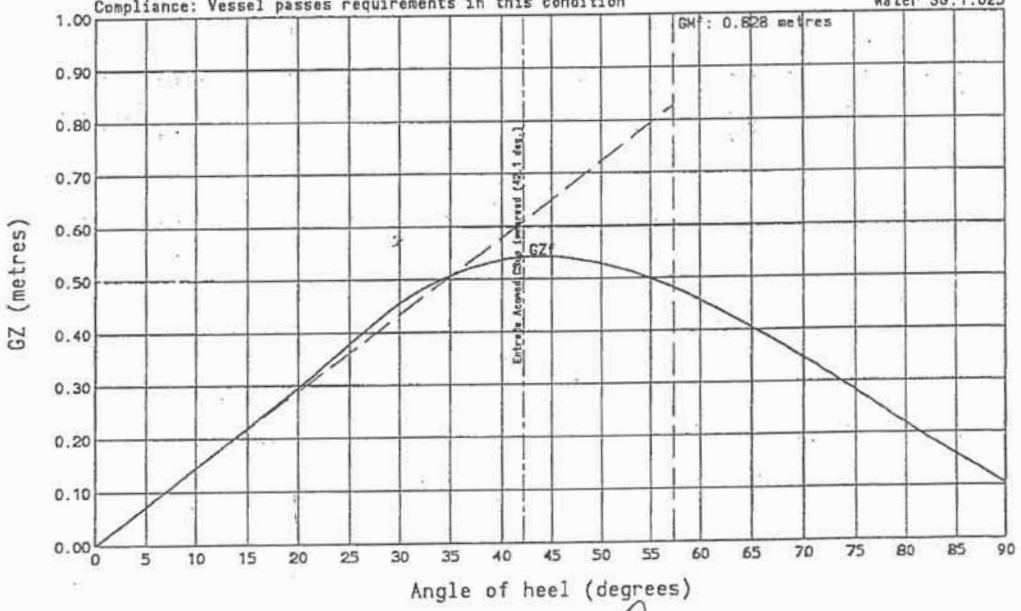
CURVA GZ

DINISH

Condition.: PRUEBAS / SALIDA DE PUERTO (VIGO 15.01.2003)
State.....: Hull without added appendages
Compliance: Vessel passes requirements in this condition

Water SG:1.025

GM : 0.828 metres



Pdo.: GERARDO DELAYA
Doctor Ingeniero Naval

MCIB RESPONSE TO CORRESPONDENCE FROM CASTLETOWN FISHERIES

1 Page 2 Paragraph 1

The Transcript of Register for “Dinish” has the words 'date keel laid' scored out and the words 'when built' handwritten underneath with the year 1973. This document was used to establish the date of build of Dinish. (draft report 4.1.1)

2 Page 5 Paragraph 2

The translation of the course details referred to in 4.2.1 referred to it as a 'Distance Learning Course'. An extract of the original and the translation is appended. (draft report 4.2.1)

3 Page 5 Paragraph 4

In the Second Engineer's statement dated 6th June 2006 he states that he joined the company in early May but the first time that they set sail for sea was Monday 22nd May in the early afternoon. He also states that as he had only spent two days on the vessel at the time of the sinking that he was unfamiliar with the vessel. It is clear from the company's response that although the Second Engineer had spent about two weeks assigned to the vessel there was no formal familiarisation procedure in place. (draft report 4.2.3, 7.12)

4 Page 5 Paragraph 4

The information relating to the length of duration of the fishing campaign was supplied to the investigator at a meeting with the company directors in Dublin on the 10th August 2006. At this meeting it was stated that “Dinish” was provisioned for a three-month fishing campaign and was expected to land every ten days in Ireland. (draft report 4.1.15)

5 Page 5 Paragraph 6

The last paragraph on page 5 of the Castletown Fisheries observations document states 'Drafts at departure were according with the stability book and weights were in their position;” The remainder of the paragraph and subsequent paragraphs on page 6 discuss freeboards in relation to EC rules, Torremolinos Rules, Load Line Rules and UK Merchant Shipping Notice M-9-75.

The annex to the comments contains an extract from a stability book for “Dinish”. This extract is for Departure from Port (Vigo 15.01.2003).

In answer to these comments the MCIB offer the following:

The report does not make mention of any rule requirements for minimum freeboard. Nor does it infer any criticism of the fact that the vessel sailed 'with a negative freeboard'. The MCIB recognises that there are no rule requirements for minimum freeboard for an existing fishing vessel. (draft report 4.1.16)

The statements referring to negative freeboard are merely to demonstrate that the waste chute would have been partially submerged at the time of the casualty. (draft report 4.1.16)

The stability book, which was given to the MSO at the time of the survey for the Certificate of Compliance, is dated September 1996 and the Lightship and the Departure from Port condition differ from those in the extract in the above-mentioned annex. The stability analysis in the report is based on the stability book dated September 1996, which was accepted in good faith as a copy of the book that was on board the vessel and which was noted by the surveyor at the time of the C.o.C. survey.

Although the Departure Condition as given in the above-mentioned annex shows an actual freeboard amidships of 72mm, which is 22mm greater than the minimum stated, the vessel has a trim of 1.092m by the stern. Using the drafts and trim from this condition it can be shown that the draft above base in way of the waste chute (3.2m forward of AP) is 4.363m and the height above base to the deck at side at 3.2m forward of AP is 4.26m. This demonstrates that, in this sailing condition, the deck in way of the waste chute would be submerged by 100mm.

6 Page 7 Paragraph 3

In his statement to the Spanish Authorities the skipper Mr Juan Comedero states that the waste chute was shut “It was shut. They told me that it was shut. I knew it was when the second Captain told me that he had gone to see how it was and he said that it was shut”.

In the Boatswains statement he says that “I gave the order to shut the stringer [fish chute]” and later that “I went to the stringer again and checked that the stringer was shut”

Neither the skipper or the Boatswain actually shut the fish chute door, however both the cook and the second engineer operated the closing mechanism for the door on separate occasions and both men testify to seeing daylight in the vicinity of the door and to seeing what appears to be an ingress of water into the vessel. (draft report 5.1.5 - 5.1.10)

7 Page 7 Paragraph 4

Whilst the boatswain and the skipper both saw a forceful stream of water in the engine room neither could say for definite whether or not this stream of water was being caused by the flood water being thrown around by the engine flywheel. The skipper states “I don't know if the ships [fly] wheel was splashing out water. I know that jet of water came in from above, there was lots of water”

The boatswain states “The stream of water that ran out was incredible. It hit against the ceiling with force”

In the second engineers statement he says that he did not see any pressurised stream of water coming into the engine room other than water coming from

the door to the engine room from the fishing station, before it was closed and water down through the pipes where the refrigeration system passed through. He also stated that when the main engine was stopped that the water being thrown around the engine room stopped. Furthermore in response to questioning as to where the water in the engine room came from the Second Engineer says “No. There was never any water leak in the engine [room]”. “That water in the engine room came from the fishing station”. (draft report 5.1.11 - 5.1.15)

8 The information supplied by the Castletown Fisheries does not, therefore, alter the conclusion of the report as to the cause of the sinking of the “Dinish”.