MARINE ACCIDENT

INVESTIGATION BRANCH

Summary of Investigations No 3/90

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This summary contains facts which have been determined up to the time of issue. This information is published to inform the shipping industry and the public of the general circumstances of accidents and must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

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INTRODUCTION

In the Introduction to the first Summary of Investigations it was pointed out that the recommendations resulting from an investigation are reflected in the "Comment" section which forms a part of each summary. Obviously the investigation which follows an accident and the associated recommendations can be very varied and in a number of cases the recommendations are not new. They will have been made in the past but unfortunately are not always heeded. One important way in which recommendations are passed on to the industry is through the system of Merchant Shipping Notices, or as they are more often referred to, M. Notices. These are addressed to various sectors of the industry, depending on the subject content of each Notice, and there is a statutory requirement for them to be carried on most United Kingdom registered vessels. They are issued only after most careful research and, if applicable, studies of accident trends. Some M. Notices were issued many years ago, however they are kept constantly under review.

It will be noted that in a number of the summaries in this publication attention is drawn to a variety of M. Notices covering such diverse subjects as the keeping of a safe navigational watch on board fishing vessels to the health hazards and precautions associated with asbestos. If more attention had been paid to the extremely valuable recommendations and information contained in the Notices referred to in these summaries some of the accidents would not have taken place. The important message is that it serves no useful purpose to require that copies of M. Notices are carried on board if they are not read and followed where applicable.

Summary of Investigations No 1/90 contained summaries which referred to prosecutions under the Merchant Shipping Acts. The purpose was to emphasise that the circumstances of some accidents do merit prosecutions and that disciplinary action or prosecution can be a recommendation arising from the investigation of an accident. The question has been asked whether it is right or indeed fair of us to include this information in the summaries. Disciplinary action can range from a confidential verbal reprimand by the appropriate authority to action being taken against an offender's certificate of competency or service or to prosecution of the shore based management. It is of course only considered when there has been a clear breach of the Merchant Shipping Acts or, perhaps, local bye-laws. As disciplinary action can be so wide ranging and is a very personal matter for those concerned it has been decided that this information will not be included in the summaries in future. However it must always be borne in mind when reading the summaries that, where appropriate, disciplinary action will have been taken and that individuals will be suffering the consequences of their actions or inactions.

Although there is no requirement under the Merchant Shipping (Accident Investigation) Regulations 1989 for accidents to or on pleasure craft to be reported to MAIB, the details of a number of such accidents do reach us and some of these require investigation. The summary of our investigation into such an accident is included in this publication and it concerns the use of a heater fuelled by liquified petroleum gas. What is important about this incident is that the lessons to be learned are just as important to other seafarers, as well as owners and users of pleasure craft. The same goes for many of the accidents included in these summaries and just because they concern a particular type or size of vessel must not be viewed in the light, "that does not concern me". We can all learn from the mistakes and misfortunes of others and that is why it is hoped that this publication will be read by as many people as possible who are concerned with ships and the sea, whether for business or for pleasure.

Chief Inspector of Marine Accidents
September 1990

1. ENGINE ROOM FIRE

Narrative

A general cargo ship of 985 gross registered tonnage was on passage off Lands End with a cargo of stone. At 2317 hours in calm weather, a fire broke out in the engine room which fortunately was quickly seen by the Engineer Officer on watch. He reported it to the Master, who informed the Coastguards and then co-ordinated the mustering of the crew, the closing down of all air inlets and outlets to the engine room, the discharging of the engine room CO2 gas smothering system and the running out of the ship's fire-fighting equipment. The crew moved to the forward end of the ship because there were fears of a possible engine room explosion. During this period it was not possible to use the VHF communication on the bridge. When it was considered safe to return to the bridge, the Master requested from the Coastguards expert advice to establish if it was safe to enter the engine room. A Royal Navy helicopter was scrambled and, in conjunction with the Fire Brigade and the Coastguards, the local 'Fire-fighting at Sea Plan' was activated, resulting in a team of three fire-fighters being landed on the ship. The team made regular surveys of the engine room surrounding structures and, when it was considered safe to do so, entered the engine room wearing breathing apparatus and with a fire hose. When the fire was out and after venting the engine room it was discovered that the cause of the fire was the failure of a compression joint on the lubricating oil system, causing oil to spray under pressure onto a hot exhaust manifold which ignited the oil.

Observations

1. This is not an unusual type of accident. Badly fitted compression joints and unsupported pipework systems are among some of the more common causes of serious fires in ships' engine rooms.

2. In this case, fortunately, there were no injuries to persons on board, but the ship was put out of operation for a few weeks during which extensive repairs to the engine room were found necesssary.

3. Following discovery of the fire, the ship's crew, some of whom had previously attended fire-fighting courses, all acted in a calm, professional manner. The value of attending courses was demonstrated.

4. Although not required, the ship had a spare set of life-jackets at the muster station (the bridge) which was over and above those in Merchant Shipping Notice No M.1238. This provision proved itself by saving time and avoiding re-entry to the accommodation deck.

Comment

1. This accident illustrates the importance of good workmanship in the fitting of pipework and regular maintenance which should include inspection of all piping particularly where subject to vibration and/or where fitted in spaces containing hot surfaces.

2. Merchant Shipping Notice No M.1229 highlights some causes of fires and recommends precautions to be taken to reduce the risk of fire in machinery spaces.

2. GROUNDING OF A RO-RO PAPER CARRIER

Narrative

A partly laden 4,929 gross registered tonnage ro-ro paper carrier grounded near the port of discharge in Finland, whilst under pilotage on passage through an archipelago.

An alteration of the rudder angle by the helmsman, from hard a-port to port 10, contrary to the Pilot's instructions, caused the ship to override the next leading line. This occurred during a manoeuvre which involved a large alteration of course to port in an area of restricted sea room.

The helm was returned to hard a-port in an attempt to regain the leading line, so as to pass between two shallow patches close ahead, and was then put hard a-starboard to counteract the port swing. However, the bow closed shoal water north of the channel, and then swung rapidly to starboard causing the ship to cross the leading line. Although attempts were made to correct her course and to decelerate the forward motion, the ship grounded in an area to the south of the channel.

Observations

1. The wind was east by south force 6 with clear daylight visibility and a slight choppy sea.

2. The ship was proceeding at approximately 12.5 to 13 knots with a trim of 25cms. by the head.

3. The bridge was manned by the Master, Pilot, Second Officer and a seaman who was steering by hand to the Pilot's instructions.

4. All the bridge equipment in use was operating satisfactorily immediately before, and at the time of, the grounding.

Comment

1. The rudder indicator was not being properly monitored, resulting in a delay in the detection of a rudder position contrary to the Pilot's instructions.

2. The ship passed close to the shallow water north of the channel as a result of a delayed instruction to the helmsman to apply starboard helm.

3. When the bow of the ship began to swing to starboard, the rate of the swing was enhanced by the effect of the large rudder angle applied, the high speed, and by the resultant "channel effect" caused by the close proximity of the port side of the bow to the ground.

4. The passage might have been safely undertaken had the ship been trimmed to provide maximum manoeuvrability and conducted at an appropriate speed.

3. SINKING OF A HARBOUR TUG

Narrative

A general cargo coaster of 497 gross registered tonnage (grt) set sail despite very bad weather which was forecast. At the time of the incident the wind was south-westerly force 7/8 with a 1-1.5 metres sea in the lee of the land. It was a dark night with good visibility.

A tug (of 57 grt) was hired to assist the coaster, which was having engine trouble due to contaminated fuel, enter harbour. Whilst manoeuvring to pass up a tow rope at the bow of the coaster, the tug was turned across her bow by the forces of interaction and subsequently sunk.

The coaster had just taken on the Pilot and was making a speed of between 3 and 4 knots. The tug, under the command of an experienced tug Skipper, was being manoeuvred towards the starboard bow. The interactive forces caused by the pressure wave at the coaster's bow canted the tug across the stem which struck the tug just aft of midships. The tug was rolled heavily to starboard and pushed down by the stern. The sea entered the engine room through an open hatch and the tug sank by the stern.

The pilot boat was fortunately still on scene, and very rapid and proper action by the coxswain allowed the tug's three crew to climb out of the wheelhouse window and onto the pilot boat. This feat of seamanship was made more difficult by ropes from the tug fouling one of the pilot boat's propellers and by the fact that the coxswain was alone in the boat.

Observations

1. The tug Skipper was very experienced and considered himself well aware of the dangers of interaction.

2. The pilot boat was manned only by the coxswain.

3. The Master of the coaster was alone on the bridge just prior to the accident.

Comment

1. Merchant Shipping Notice No M.930 describes the effects of interaction between ships and specifically between ships and attendant tugs.

2. Merchant Shipping Notice No M.1306 makes recommendations on the manning of pilot boats by two persons (not including the Pilot).

3. The pilot boat coxswain was commended for his action in rescuing the tug's crew.

4. It would have been more prudent to have waited until the Pilot had safety boarded and reached the bridge before attempting to make the tug fast. This would have allowed the Master to concentrate fully on each separate operation and to have had assistance on the bridge.

5. Merchant Shipping Notice No M.748 recommends that openings situated on the weather deck which provide access to spaces below the deck should be kept closed during towing operations.

4. DEFECTIVE ASBESTOS INSULATION

Narrative

An area of loose asbestos insulation was discovered in the engine room workshop of a passenger/ cargo ro-ro ferry. The shore management company were informed and promptly engaged specialist asbestos contractors to remove or seal the loose asbestos. The repairs were unsuccessful. Also, on further inspection of other engine room spaces, extensive areas of damaged asbestos insulation were found. Several attempts were made by the specialist contractors to repair the affected areas before the vessel was taken out of service so that permanent repairs could be completed and adequate precautions taken to ensure the safety of personnel.

Observations

1. Although a degree of control was exercised by ship's staff with respect to entry to the site of the repairs in progress, they did not at first fully appreciate:-

    a) the actual extent of defective asbestos within the main engine room space,

    b) the hazards associated with asbestos dust, and

    c) the recognised precautions to be taken.

2. Subsequently, when it was appreciated that the original repair had failed to permanently seal the area of defective insulation, a more conscientious approach was adopted. The ship's staff determined the extent of the defective asbestos and looked up the guidance from appropriate Merchant Shipping Notices and Statutory Instruments relating to the safety precautions to be taken.

Comment

1. It was not until the vessel was taken out of service that the repair work was undertaken in a satisfactory manner using the correct equipment and applying adequate safety precautions.

2. The management company subsequently addressed the matter by equipping its vessels with appropriate respiratory, sampling, and protective equipment and published an annex to its Fleet Regulations/Operations Book drawing attention to Merchant Shipping Notice No M.1354 and stating the procedures to be followed when dealing with asbestos.

5. ACCIDENT INVOLVING A LIQUIFIED GAS CARRIER

Narrative

A 26,802 gross registered tonnage liquified gas carrier with a cargo of Propane and Butane was proceeding under pilotage inward bound on the River Thames. (See Figure 1). The wind strength was force 7; it was cloudy with good night visibility. Approximately 20 minutes after embarking the Pilot, the ship struck Sunk Head Tower. There were no injuries but the ship sustained fractures to the hull plating which opened the Forward Deep Tank to the sea. However, the cargo containment was not affected.

Observations

1. The Master had anticipated taking the Kings Channel and the ship was in a position inward of the designated pilot boarding position; this was at the request of the pilot cutter.

2. The initial Pilot/Master exchange of information was incomplete and an adequate pilotage passage plan was not formulated.

3. Although the progress of the ship was monitored, the course was not projected ahead on the chart and, therefore, the imminent risk of collision with Sunk Head Tower was not appreciated.

4. Plotted charted positions were disregarded in favour of assessing the position of the ship by visual observation of the relative bearings of lights of buoys. The misinterpretation of the light of a distant buoy for a reported erratic flashing of the light of a closer buoy resulted in the ship being in a position different from that assumed.

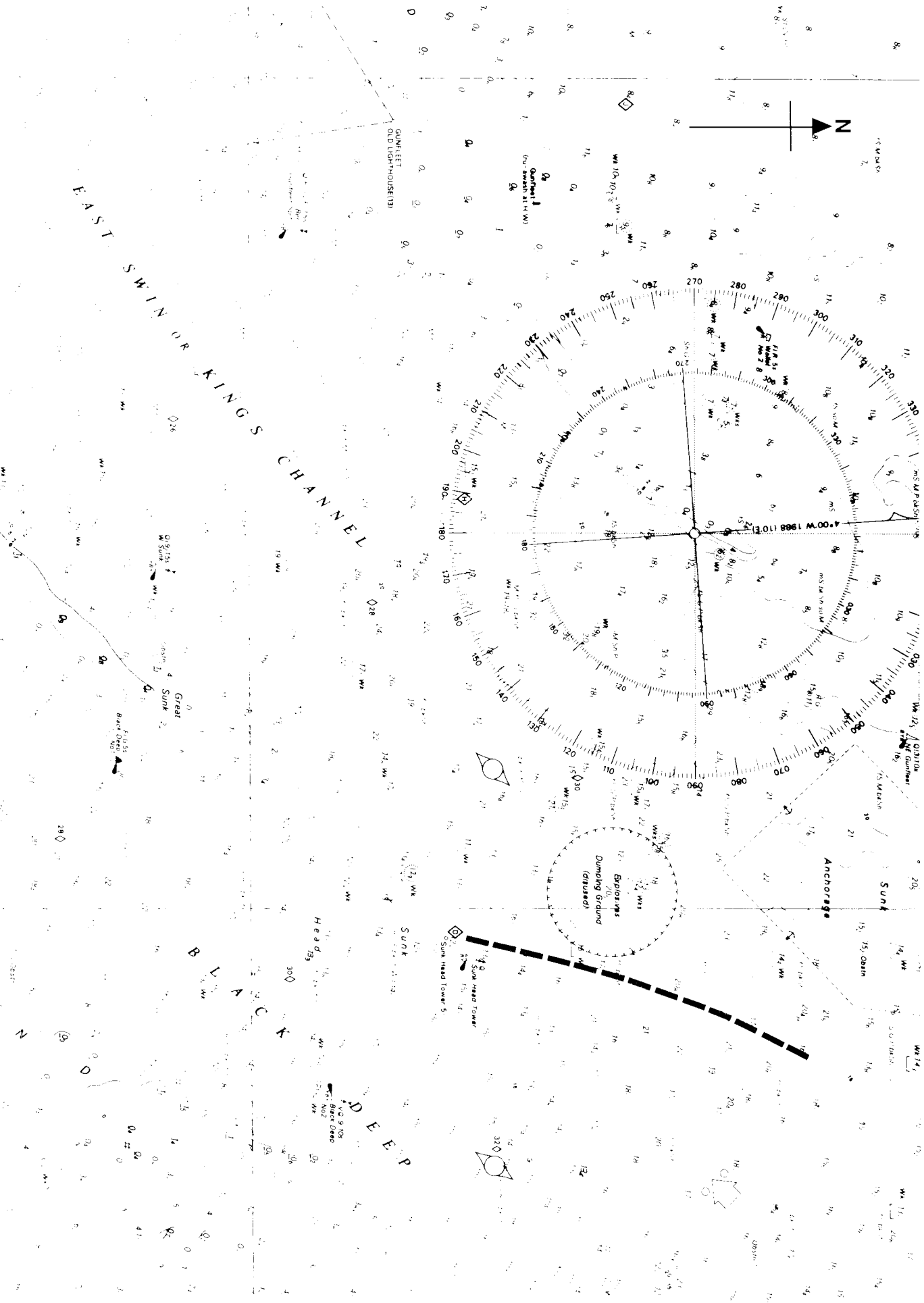
Comment

1. Merchant Shipping Notice No M.854 and the Department of Transport publication "A Guide to the Planning and Conduct of Passages" contain guidance on navigation safety and proper passage planning.

2. When a Pilot is to be taken, he should ideally be embarked as early as possible. This would enable the necessary initial Pilot/Master exchange of information and passage planning to be conducted prior to the ship entering an area where navigation was potentially hazardous.

Extract from Admiralty Chart No. 1975

Figure 1



6. ACCIDENTS TO PERSONNEL ON BOARD OFFSHORE SUPPORT VESSELS

Narrative

During 1989 and 1990, there have been several accidents to personnel on board offshore support vessels involved in the discharging and loading of cargo to and from offshore installations. Some specific cases are summarised below.

Case 1 - two crew members went to the stern of their vessel to hook on a skip to the platform crane for discharge. As they returned forward up the starboard walkway, a wave came over the stern roller and knocked the two men over. One of them sustained fractured ribs.

Case 2 - also involved the shipping of a large wave over the stern. One of two crew members saw the wave and called a warning to his colleague who ran forward into the safety area. However, the first crew member ran across the deck between a container and a lashed down rubbish skip. The water on deck caused several empty containers to move and he became trapped by one of them. Fortunately he escaped with only bruising.

Case 3 - during the discharge of deck cargo, a crew member entered a loose block stow to facilitate the hooking on of the crane to a "half-height". The vessel rolled and a container shifted, crushing him between the container and the "half-height" causing a fractured bone.

Case 4 - a rig crane had lowered a fuel hose for connection to the vessel's manifold. Whilst the hose was suspended above the vessel's stern deck area, the end of the hose and about 30 feet of slack were laid out on the deck. A crew member then tried to secure the hose to the stern bulwark of the vessel with a lashing. During this operation his hand was trapped between the ship's bulwark and the hose, causing a crush injury.

Case 5 - during the loading of containers on board, a crew member attempted to operate the release mechanism of the platform's crane wire hook. During this attempt, the crane wire suddenly spun several times, trapping his right hand between the crane hook and a container, which had just been landed. His finger was crushed.

Case 6 - a crew member slipped on the greased ends of pipe casings, whilst proceeding to position an empty fuel tank, which was being lowered by a rig's crane. On slipping he fell forward under the tank and as the vessel rose to the swell he was trapped by his leg and lower body. The tank did not fully land on him, being supported by the crane, which immediately lifted the load clear. He suffered slight bruising and a strained back.

Observations

1. Loading and discharging at sea is hazardous, even in good weather.

2. In cases 1 and 2, seas were shipped even though the wind and sea states were not severe. In both cases there was a considerable swell.

3. Accidents are most commonly related to movement of the vessel in a seaway and the unexpected shipping of the occasional heavy sea.

Comment

1. Despite the recommendations in Merchant Shipping Notice No M.1231 and in the Code of Safe Working Practices for Merchant Seamen, especially Chapter 31, accidents to personnel which could be avoided are still occurring.

2. Periodically the entire complement of each offshore support vessel should review these recommendations and their own working procedures and practices with the objective of improving safety on board and reducing the possibilities of accidents occurring.

7. FIRE IN A FUEL OIL TANK CERTIFIED FOR HOT WORK

Narrative

An offshore support ship was in dry dock undergoing tank steel work replacement. A member of the crew observed smoke, and the fire alarm was raised and the local fire brigade called. Boundary cooling was commenced and two breathing apparatus teams entered the suspect tanks and located the fire.

Observations

1. The fire was relatively small with damage confined to the tank coatings.

2. A Hot Work Certificate had been issued for the relevant spaces.

Comment

1. Merchant Shipping Notice No M.957 makes the point that routine testing for flammable materials should be carried out prior to and during the period hot work is undertaken.

2. The spaces certified for hot work should have been isolated from the fuel oil system using spade blanks or locked double valve shut-offs. It seems likely that an unauthorized tampering with the suction valve of a fuel tank may have caused residual fuel in the line to drop into the tank.

3. As a result of the incident, the fuel tank internal suction bends were removed and solid blanks were fitted for the duration of repairs.

8. CARBON MONOXIDE POISONING

Narrative

Three crew members on board a 4 month old 10.7 metre ketch rigged yacht inhaled a significant amount of carbon monoxide gas. The yacht was moored in a harbour and the night had been clear and cold, with a very light stern breeze.

The crew members had been ashore for approximately two hours, leaving the accommodation closed up from the outside, with the interior doors open and the heating system in operation. The heating system consisted of a small liquid petroleum gas (LPG) fuelled water heater, which was sited in a compartment at the stern. The unit fed hot water to a fan assisted, ducted space heater situated in the main saloon. Soon after returning on board, the crew members, having turned off the heating system, retired to their bunks. However, some time later one of the crew woke up, and upon attempting to stand, collapsed to the deck. Realising that he was suffering from the inhalation of some sort of gas, he raised the alarm and eventually all three, after having collapsed several times, managed to evacuate the accommodation spaces to the open deck. The subsequent tests during medical examinations in hospital, proved that they had each received a dose of about 25% carbon monoxide to oxygen in their blood streams; greater than 60% can prove fatal.

Observations

1. The water heater was sited inside an athwartships seat locker built into the yacht's transom stern. The upper part of this locker did not make provision for the dispersal of the products of combustion to the atmosphere. There were vent apertures at the bottom, but the weather conditions that night caused a damming effect and the heater was therefore recycling ever increasing amounts of carbon monoxide.

2. Four vent holes leading to the engine compartment had been made in the upper part of the locker. This allowed carbon monoxide to penetrate, through the engine compartment, to the accommodation spaces where the gas was retained due to lack of thorough ventilation even when the heater had been shut off.

3. This particular make of water heater was designed to burn propane but had been converted to use butane. Following conversion, the unit produced amounts of carbon monoxide which exceeded the level set by the British Standards Institution.

Comment

1. It was recommended to the yacht builder and the supplier of the heating system that all previously installed water heaters should not be used until it had been established that it was safe to do so.

2. This serious incident could have been avoided had the advice in Merchant Shipping Notice No M.984 been followed.

9. INJURY AND HEAVY WEATHER DAMAGE ON A COASTAL TANKER

Narrative

A 2162 deadweight tonnes coastal tanker sailed from Falmouth for a passage in ballast to Milford Haven during the winter season. The weather rapidly deteriorated. At midnight, as the ship passed Lands End and set course for Milford Haven, the wind was logged as south-westerly force 8/10 and the barometer was falling. At 0400 hours the wind was south-westerly force 10, with the barometer reading 988 mbs. At 0530 hours the wind veered to the west and increased to force 11/12. The wind was now only a point abaft the beam and the ship, as to be expected, was rolling very heavily at times. At 0800 hours the log entry showed the wind to be still west at force 10 with the barometer reading 990 mbs.

At 0815 hours the ship was laid violently over to starboard. The Master was thrown across the wheelhouse and suffered multiple fractures to his arm, around the elbow, causing him very severe pain. The starboard life-boat was torn from its davits and washed away. The port life-boat was severely damaged, being left impaled on its own gravity winch with the lower davit support protruding through the keel. Both inflatable life-rafts were torn from their stowages, washed overboard, inflated and were subsequently lost. Various structural damage to the superstructure and deck attachments was sustained. All the cabins on the two lower accommodation decks were flooded and a window to a mess room was burst open by the force of the sea. The general alarm was sounded and all the crew mustered. The ship was then turned into the weather and hove to and remained hove to for nearly five hours. The Master, who had been given first aid by the Second Officer, declined an offer from the Coastguards to lift him off by helicopter in view of the risk involved.

The ship completed the passage later that day without further damage. The Master, who had been conscious throughout but in severe pain, was immediately taken to hospital for treatment.

Observations

The ship had sailed from Falmouth at about 1600 hours and throughout that day there had been gale warnings in force for all sea areas except Trafalgar. The following are extracts from transcripts of the shipping forecasts broadcast on BBC Radio 4 which are reproduced, together with the synoptic chart at Figure 2, with the permission of the Met. Office.

	Broadcast General Synopsis Time	Forecast for the next 24 hrs. - Sea area Lundy
0555 hrs.	Midnight : Low Viking 982 moving rapidly east. Low just west of Shannon 982 expected Faroes 952 by midnight tonight. Atlantic low moving north-east expected Rockall 973 by same time.	Southerly veering westerly 7 to severe gale 9.
1355 hrs.	0600 : Low north Rockall 977 expected 200 miles north-east of Faroes by 0600 tomorrow. Atlantic low 981 moving very rapidly north-east expected near Edinburgh 957 by same time.	South-westerly veering westerly 7 to severe gale 9, perhaps storm 10 later.
1750 hrs.	Midday : Low South Iceland 964 expected	South-westerly veering

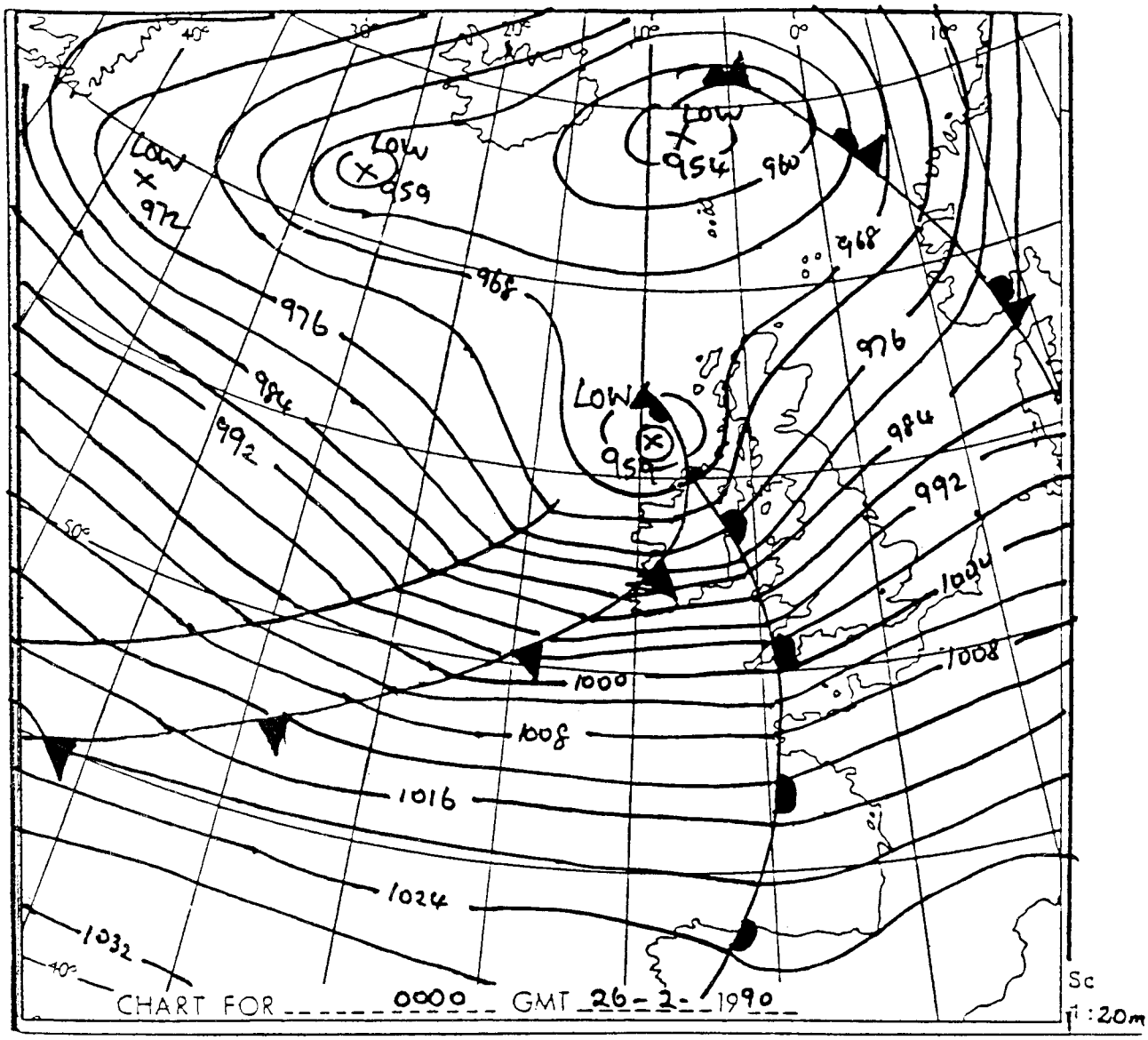
	200 miles east of Iceland 950 by midday tomorrow. Atlantic low 970 moving very rapidly east-north-east expected Fisher 950 by same time.	westerly 6 to gale 8, increasing gale 8 to storm 10.
0033 hrs.	1800 : Low 250 miles west of Rockall 963 expected south Norway 938 by 1800 tomorrow. Low south-east Iceland 956 moving slowly east expected 945 by same time.	South-west veering west gale 8 to storm 10. Increasing violent storm 11 at times.

Comment

Seafarers should never under estimate the power of the sea in a gale, irrespective of the size of the ship and should take early action, whenever possible, to minimise the effects it might have on a ship.

Figure 2

The Met. Office Southampton Weather Centre



GENERAL SYNOPTIC SITUATION
A VERY DEEP DEPRESSION WILL CROSS SCOTLAND EARLY TODAY BRINGING SEVERE GALES AND LOCALLY STORM FORCE WINDS TO MUCH OF BRITAIN AND THE ENGLISH CHANNEL. THE DEPRESSION WILL RACE EASTWARDS INTO THE NORTH SEA, THIS MORNING , DEEPENING AS IT GOES BEFORE ENDING UP IN THE BALTIC ON TUESDAY MORNING.

SEA AREA FORECAST FOR 24 HOURS FROM 0500 GMT 26th February 1990

DOVER WIGHT
SOUTHWEST VEERING WEST OR NORTHWEST STORM 10. RAIN THEN SHOWERS. MODERATE OR POOR BECOMING GOOD.

PLYMOUTH PORTLAND
SOUTHWEST VEERING WEST GALE 8 TO STORM 10. RAIN THEN SHOWERS. MODERATE OR POOR BECOMING GOOD.

Issued at 0600 GMT

10. GROUNDING OF A FISHING VESSEL

Narrative

An 11.2 metre fishing vessel departed from harbour and proceeded with the intention of keeping to the recognised leading line track between charted rocks. The vessel deviated from the intended track and grounded: she was holed and rapidly took in water. The Skipper decided to return to the harbour and was able to manoeuvre the vessel alongside the quay. The three crew members had time to disembark before the vessel sank.

Observations

1. It was a dark night with a new moon and an overcast sky. The visibility was good but the degree of darkness made visual detection of the rocks more difficult than usual although the safe passage through them was clearly marked by leading lights.

2. The Skipper was alone on the bridge and occupied with steering, navigation and keeping a lookout ahead. (The leading lights were astern of him).

3. The radar was switched on but had not been tuned. It was not used prior to the accident.

4. The Skipper was more concerned with positively detecting the rocks ahead than with monitoring the progress of the vessel in relation to the leading lights astern.

Comment

1. The Skipper failed to properly monitor the navigation of the vessel as a result of not ensuring that watchkeeping arrangements were adequate for a safe navigational watch.

2. The Skipper failed to make the most effective use of all navigational equipment at his disposal.

3. Advice on the keeping of a safe navigational watch and on the bridge manning and command of fishing vessels is published in Merchant Shipping Notices Nos M.1020 and M.1190.

11. SINKING OF A SMALL FISHING VESSEL

Narrative

A wooden hulled fishing vessel of less than 12 metres in length was shooting trawling gear about 20 miles off the coast when she hit an unseen underwater object. The vessel was damaged, resulting in water ingress on both sides of a bulkhead.

The weather at the time was a south-easterly wind force 4/5 with a moderate sea and good visibility.

Despite attempts to plug the holes, water came in at a rate faster than the pumps could handle. The Skipper called the Coastguards for assistance, prepared his gear ready for slipping and had his crew don life-jackets and launch the life-raft. The rising water then caused the loss of all power.

A rescue helicopter arrived and put two pumps aboard, but it was too late to save the vessel from foundering. As she laid over, the crew and the helicopter winchman took to the life-raft. All were safely rescued shortly after by a RNLI life-boat.

Observation

This incident took place in 70 metres of water with no charted obstructions. The nature of the damage indicated contact with a hard point source such as the corner of a submerged container.

Comment

1. Although it was not required by regulations, the Skipper had on board a life-raft which he was able to use to evacuate his sinking vessel.

2. The Skipper, a very experienced fisherman, was of the opinion that some small fishing vessels were complacent about safety equipment. To quote his own words: "But the sea needs to be shown respect and the carrying of safety gear gives you a chance when things do not go right".

3. A "Danger to Navigation" warning must be broadcast when any object which may be a hazard to other vessels, especially small craft, is lost overboard.

12. LIFE-RAFT SAVES ANOTHER FOUR LIVES

Narrative

A 10.5 metre fishing vessel which was only partly loaded was swamped and quickly sank in near gale conditions, in a position 50 miles due south of Falmouth, Cornwall.

The four crew managed to board their inflatable life-raft from the sea and after spending 36 hours in the confines of a 4 man life-raft, were spotted by a French trawler. The crew were picked up safely and later airlifted to Culdrose, Cornwall.

Observations

1. This small vessel was in sea and wind conditions which proved to be outside her safe operating capabilities.

2. The swamping and sinking happened very quickly and as the life-jackets were stowed below in the accommodation, there was no time to put them on. There was no time for the Skipper to send a MAYDAY, so the Coastguards were unaware of the accident until contacted by another fisherman who became concerned for their safety.

3. The Skipper and crew provided a detailed account of their experiences including the experiences and problems encountered during the period spent in the small life-raft. They praised the benefits of attending a survival course, which they had completed not long before this accident.

Comment

1. It seems that small fishing vessels often need to go further offshore than used to be necessary; this adds emphasis to the need for them to carry appropriate life-saving equipment, especially when they are operating alone. The Skipper's action in this case in voluntarily carrying a life-raft, undoubtedly saved the lives of all four crew.

2. Although the carriage of life-rafts is not mandatory for fishing vessels under 12 metres in length, the Skipper had taken note of Merchant Shipping Notice No M. 1385 which recommends strongly that life-rafts are provided. With the help of a grant from the Sea Fish Industry Authority he had purchased the life-raft two years before the accident.

3. The accident highlights the importance of easy and quick access to the life-rafts.

4. All four crew had previously attended a survival training course put on by the Sea Fish Industry Authority and they believed that this helped to save their lives.

13. ACCIDENTS INVOLVING THE FISHING GEAR ON BEAM TRAWLERS

Narrative

Three recent accidents involving fishing gear on beam trawlers are summarised below.

Case 1 - while fishing in conditions of wind force 7/8 and the associated heavy seas, the crew needed to make repairs to part of the vessel's beam trawl gear. While undertaking this operation, with the gear on board, one end of the beam swung free as a result of the vessel rolling, and a crew member working on the repair was badly injured. The beam continued to swing free for some time before it was successfully secured.

Case 2 - this accident occurred when the crew were preparing to undertake repairs to the vessel's beam trawl gear. The vessel was fishing in gale force 8/9 winds and heavy seas and was rolling heavily. The port beam trawl gear was on board when the derrick swung across the vessel out of control. The result of this uncontrolled movement was that the gantry mast, the attached derricks (port and starboard) and the fishing gear all collapsed to starboard. The transfer of all this weight to one side of the vessel resulted in her listing dangerously and the crew were evacuated by helicopter. Fortunately there were no injuries in this case.

Case 3 - while fishing, a vessel snagged both her port and starboard beam trawl gears. After unsuccessfully trying to free the gear, the quick release device on one side was let go, which resulted in the vessel capsizing and sinking. Sadly, two of the vessel's crew lost their lives in this accident.

Observations

1. A fishing vessel can be a dangerous place even for the experienced fisherman.

2. Most training of crews in fishing gear operation appears to be by word of mouth and on board experience.

3. Two booklets which should be read by all fishing vessel Skippers and crews and should be kept readily available for reference, are:-

   a) ''Fishermen and Safety - A Guide to Safe Working Practices for Fishermen'', which is available free of charge from Fishing Vessel Survey Offices; and

   b) ''Recommended Code of Safety for Fishermen'' (ISBN 0115 12201X) which is available through Her Majesty's Stationery Offices or any good bookshop.

Comment

1. It is necessary for crews to be particularly watchful when gear is aloft and during certain operations where it is not possible for the Skipper to observe everybody involved.

2. Means of controlling and securing the vessel's gear should be fully understood by the crew.

3. Even greater care than usual is necessary when it is required that the gear should be worked on:-

   a) in what might be considered worse than usual weather conditions; and

   b) when the motions of the vessel are excessive or unpredictable. This can often be the case in relatively low as well as high sea states.

4. Owners and Skippers should impress upon their crews the particular dangers of working with beam trawling equipment.

5. The wearing of buoyancy aids or life-jackets might have saved life in Case 3.

14. LOSS OF A FISH FACTORY TRAWLER

Narrative

A 2654 gross registered tonnage fish factory trawler left Ullapool for Falmouth. The Second Deck Officer took over the bridge watch at midnight by which time the vessel was approaching The Little Minch on a west-south-westerly course at about 10 knots. The weather was moderate with moderate to good visibility. The vessel was being navigated by radar fixes of the land, although shore lighthouses were visible. After about forty minutes the radar picture faded. The Second Deck Officer called the Chief Deck Officer who went to the bridge and tried to restore the picture without success. The Chief Officer then informed the Master, who first ordered speed to be reduced to 'half ahead' (about 6 knots) and then ordered those on the bridge to keep a sharp visual lookout. The vessel continued on automatic steering. The Master arrived on the bridge at about 0100 hours, just as the vessel grounded on rocks. An extract from the appropriate chart is at Figure 3.

The vessel was holed and the consequent flooding could not be stemmed. Later the weather deteriorated and the ship was abandoned, and (despite attempted salvage) became a total loss. There was some pollution from the factory ship's fuel oil tanks, but this was successfully treated with dispersants from a Marine Pollution Control Unit aircraft.

Comment

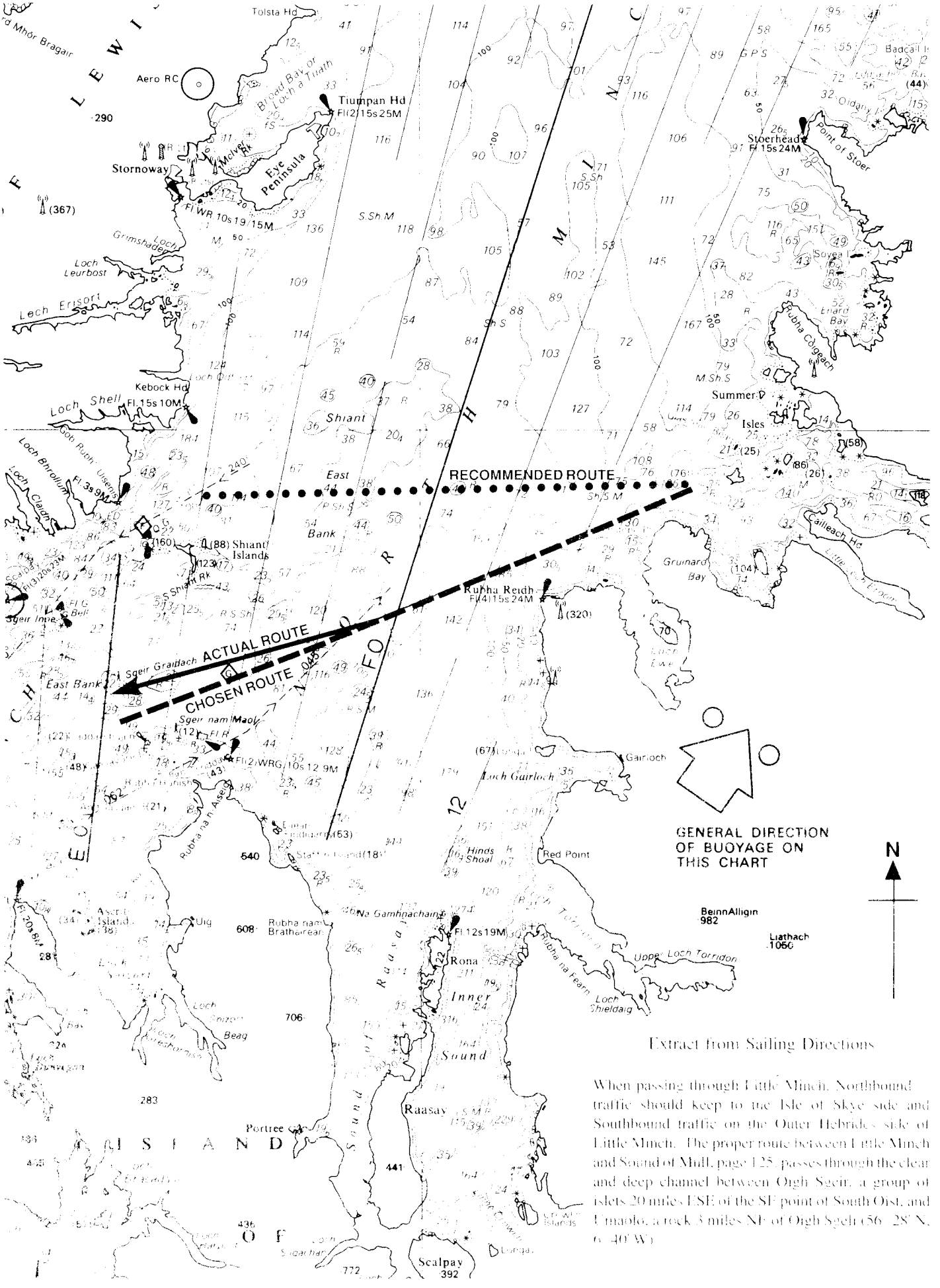
1. There was a failure to produce and follow a safe passage plan. The recommended route had not been followed and the one chosen passed too close to charted dangers.

2. No account had been taken of the prevailing tidal stream. In fact there was a current of about 1 knot which set the vessel to the north, and to the west, towards the rocks.

3. Total reliance had been placed on the radar. When this failed no attempt was made to fix positions by other means.

Extract from Admiralty Chart No. 2635

Figure 3



Extract from Sailing Directions

When passing through Little Minch, Northbound traffic should keep to the Isle of Skye side and Southbound traffic on the Outer Hebrides side of Little Minch. The proper route between Little Minch and Sound of Mull, page 125, passes through the clear and deep channel between Oigh Sgeir, a group of islets 20 miles ESE of the SE point of South Uist, and Lmaolo, a rock 3 miles NE of Oigh Sgeir (56° 28' N, 6° 40' W).

15. LOSS OF TWO MEN FROM A FISHING TENDER

Narrative

Both crew members of a small fishing vessel were lost probably because the associated small tender from which the fishermen were laying nets capsized.

The method of fishing was to anchor the vessel at about low water close to drying mud-flats a short distance offshore, and to use the tender - a small dinghy - to secure lengths of nets (totalling up to a mile or more) along a line of stakes set into the mud near the edge of the flats. When the fishing vessel was reported overdue, an extensive search was carried out, and she was found at anchor with no-one on board; the tender was found later, overturned and empty, and wrapped in nets. The bodies of the two crew were found separately some days later.

Observations

1. The dinghy would have been very heavily laden with nets and therefore vulnerable to capsize even though the weather at the time of the accident was good. It was considered probable that in the course of laying the nets the boat overturned and tipped its occupants into the water.

2. Both men were wearing heavy clothing and waders, but they were not wearing life-jackets or buoyancy garments. They almost certainly became entangled in the nets at the time of the capsize.

3. The usual crew totalled three men, which allowed one man to remain on board the vessel at anchor while the other two worked in the tender. On this occasion the third member of the crew was absent so there was no one to keep watch from the vessel.

Comment

1. In fishing operations of this type, great care is needed not to overload the tender, and also in paying out and recovering the nets.

2. In such operations, it is a sensible precaution to maintain a watch on board the anchored vessel.

3. Once again, the accident points to the desirability of fishermen wearing some form of buoyancy garment when working, especially in small craft.

4. The tender used had no in-built buoyancy. The provision of a tender designed with inherent buoyancy would reduce the likelihood of such an accident.

INVESTIGATIONS COMMENCED IN THE PERIOD 1.04.90 -30.06.90

DATE OF ACCIDENT	NAME OF VESSEL	TYPE OF VESSEL	FLAG	SIZE	TYPE OF ACCIDENT
23.02.90	LIBATION	Cargo	U.K.	198 grt	Accident to Person
26.03.90	LOWLAND CAVALIER	Offshore Support	U.K.	1396 grt	Fire
31.03.90	PLATESSA	Cargo	Denmark	162 grt	Stranding
03.04.90	ESSO PUERTO RICO	Tanker	Bahamas	21961 grt	Stranding
04.04.90	FRANK PAIS	Cargo	Cuba	7189 grt	Accident to Person
06.04.90	NORRONA	Ro-Ro	Denmark	7839 grt	Fire
06.04.90	WASA PRINCE	Ro-Ro	Finland	4655 grt	Accident to Person
10.04.90	REINE MATILDE	Ro-Ro	France	5465 grt	Fire
11.04.90	MAGRIX	Cargo	U.K.	998 grt	Grounding
14.04.90	EUROPEAN CLEARWAY	Ro-Ro	U.K.	3335 grt	Damage to Life-boat
15.04.90	PRIDE OF SANDWICH	Ro-Ro	U.K.	12503 grt	Crumbling Asbestos
19.04.90	FIRST LIGHT OF HELFORD	F.V.	U.K.	12.19m	Sinking
25.04.90	KONDOR	Fish Factory	Bulgaria	2654 grt	Grounding
27.04.90	WILLEM	F.V.	U.K.	21.03m	Stranding
30.04.90	HAVILAH	F.V.	U.K.	20m	Grounding
30.04.90	EMILY PG/ BRANDARIS	Cargo Cargo	U.K. Cyprus	409 grt 490 grt	Collision
03.05.90	ST CHRISTOPHER	Ro-Ro	U.K.	7399 grt	Damage to Life-boat
07.05.90	DANVIC/ EILEAN MO GRAIDH	F.V. Cargo	U.K. U.K.	11m 424 grt	Collision
11.05.90	SEAFALKE	F.V.	U.K.	19.96m	Accident to Person
14.05.90	LUCKY PEPPY	F.V.	U.K.	6.8m	Capsize
16.05.90	JACKIE H	F.V.	U.K.	7.06m	Missing
17.05.90	ROSEBAY/ DIONNE MARIE	Tanker F.V.	Liberia U.K.	118050 grt 23.16m	Collision
29.05.90	RAUTZ	Cargo	Austria	1935 grt	Accident to person
01.06.90	CAM TIGER	Offshore Support	U.K.	3987 grt	Machinery Failure
02.06.90	KITTYWAKE 2	F.V.	U.K.	4m	Missing

DATE OF ACCIDENT	NAME OF VESSEL	TYPE OF VESSEL	FLAG	SIZE	TYPE OF ACCIDENT
03.06.90	MOONBEAM	Yacht	U.K.	40m	Explosion
07.06.90	BLENHEIM/ SPIRIT OF WINESTEAD	F.V. Yacht	U.K. U.K.	15.66m 18.3m	Collision
17.06.90	BASSRO STAR	Ro-Ro	Norway	3332 grt	Machinery Failure
25.06.90	SATURN	Ro-Ro	U.K.	851 grt	Grounding
27.06.90	BRANDARIS/ PROVIDER	Cargo F.V.	Cyprus U.K.	490 grt 15.4m	Collision