

**Report on the investigation of
the loss of the fishing vessel
HARBOUR LIGHTS
off Polperro, Cornwall
on 8 January 2000
with the loss of one life**

Marine Accident Investigation Branch
First Floor Carlton House
Carlton Place
Southampton
SO15 2DZ

Report No 27/2000

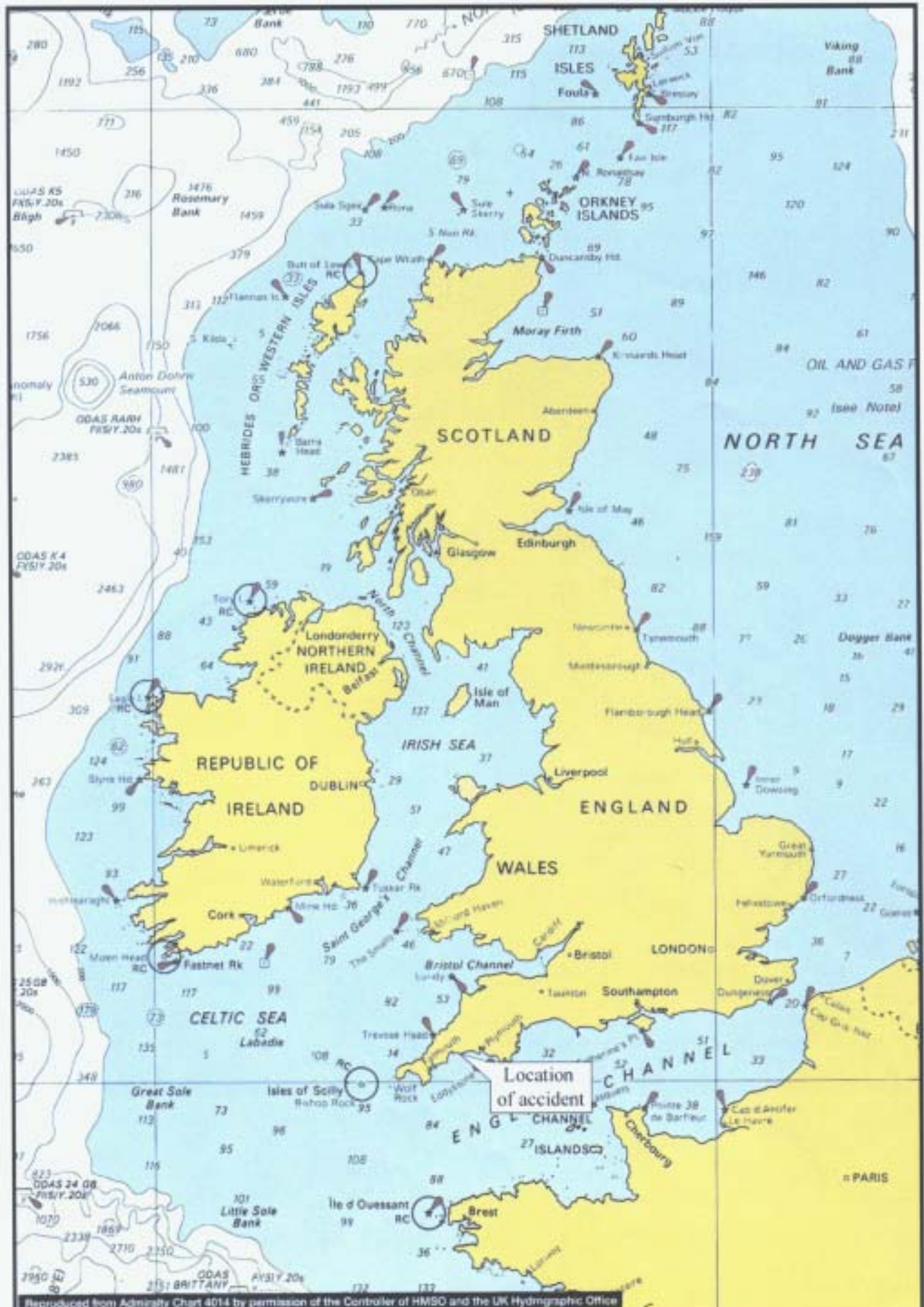
**Extract from
The Merchant Shipping
(Accident Reporting and Investigation)
Regulations 1999**

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

CONTENTS	Page
GLOSSARY OF ABBREVIATIONS AND TERMS	
SYNOPSIS	1
VESSEL AND ACCIDENT PARTICULARS	2
SECTION 1 - FACTUAL INFORMATION	3
1.1 Narrative	3
1.2 Vessel, crew and certification	3
1.3 Weather	4
1.4 Fishing operation	4
1.5 Search operation	4
1.6 Lifesaving equipment	5
1.7 Radio	6
1.8 Safety advice	6
SECTION 2 - ANALYSIS	7
2.1 Accident	7
2.2 Wreckage	9
2.3 Vessel condition	9
2.4 Weather	9
2.5 Lifejackets	9
2.6 Waterproof portable VHF radio	11
SECTION 3 - CONCLUSIONS	12
3.1 Findings	12
3.2 Cause	12
SECTION 4 - RECOMMENDATIONS	13
Annex 1 MCA leaflet about single-handed operation	
Annex 2 Lifejacket article published in the March edition of Fishing Monthly	

GLOSSARY OF ABBREVIATIONS AND TERMS

EPIRB	-	Emergency position indicating radio beacon
FISG	-	Fishing Industry Safety Group
GRP	-	Glass reinforced plastic
kg	-	kilograms
m	-	metres
MAIB	-	Marine Accident Investigation Branch
MCA	-	Maritime and Coastguard Agency
MHz	-	megahertz
RNLI	-	Royal National Lifeboat Institution
SCUBA	-	Self-contained underwater breathing apparatus
SFIA	-	Sea Fish Industry Authority
“Stag night”	-	A late night party for men only
UTC	-	Universal Co-ordinated Time
VHF	-	Very High Frequency
WSW	-	west-south-west



Reproduced from Admiralty Chart 4014 by permission of the Controller of HMSO and the UK Hydrographic Office

SYNOPSIS

At 2251 on 8 January 2000 the Marine Accident Investigation Branch (MAIB) was informed that *Harbour Lights* was overdue and a search for her had begun off the south coast of Cornwall. An investigation, conducted by MAIB inspector Richard Barwick, began two days later, after wreckage had been found.

Harbour Lights was a 7.2m in length, glass reinforced plastic (GRP) gill netter. Based in Polperro, Cornwall, she fished the area to the south of the port. She was also used for passenger sightseeing trips and taking out diving parties. The owner and skipper, Mr Daniel Kebble, was an experienced young fisherman who had undertaken all the basic safety training courses. Both he and *Harbour Lights* were licensed by the local council to undertake these activities.

Mr Kebble was fishing single-handedly from *Harbour Lights*, about a mile south of Polperro. While deploying the last gill net, he fell overboard. The vessel continued on until it hit rocks and broke up just east of Downend Point, about a half a mile east of Polperro. During the day Mr Kebble had caught about 190kg (30 stone) of fish.

An extensive search operation began at 1911, shortly after *Harbour Lights* became overdue. This continued for the rest of the evening, throughout the night, and most of the next day. The search involved a helicopter, lifeboats, about 30 fishing vessels, a police diving unit, and coastguard teams working along the shore. Flotsam and wreckage from *Harbour Lights* were recovered but, at the time of writing this report, the body of Mr Kebble was still missing.

Mr Kebble did not normally wear a lifejacket. Had he been wearing one at the time of the accident, his chances of survival would have increased substantially. The non-wearing of lifejackets is a common feature in the loss of fishermen. This tragic accident spurred the harbourmaster of Polperro, and Mr Kebble's father, to organise a lifejacket campaign in the area, which resulted in the local chandler selling out of lifejackets. The MAIB strongly supports this sort of initiative; if it were followed throughout the country, the chances are there would be a reduction in the number of fishermen lost.

A recommendation has been addressed to the training section of the Sea Fish Industry Authority emphasising the importance of wearing lifejackets and carrying waterproof portable VHF sets on fishing vessels operated single-handedly. If such fishermen fall overboard the lifejacket will keep them afloat and the radio will enable them to summon help, thus enhancing their chances of survival.



Figure 1 - General views of *Harbour Lights*



Colour scheme at time of accident

VESSEL AND INCIDENT PARTICULARS

Name: : *Harbour Lights*

Type: : Fishing vessel (gill netter)

Port of registry : Ipswich

Fishing number: : IH 92

Official number: : B11938

Owner: : Mr Daniel Kebble
6 Carey Park, Killigarth, Polperro, Cornwall

Built: : 1990, at Wimborne

Material of construction: : GRP

Length (registered): : 7.2m (23.6')

Breadth: : 2.85m

Depth: : 0.85m

Gross tonnage: : 3.98

Position of accident: : 50° 19'N 004° 29'W

Time and date: : About 1600 UTC on 8 January 2000

Casualties: : The crewman lost his life

Photographs of *Harbour Lights* are shown in **(Figure 1)**.

SECTION 1 - FACTUAL INFORMATION

(All times are UTC)

1.1 NARRATIVE

The 7.2m gill netter *Harbour Lights* left Polperro at about 0830 on 8 January 2000, and headed for her fishing grounds about a mile to the south. She was operated single-handedly by her owner/skipper Mr Daniel Kebble, an experienced young fisherman. About 45 minutes later she arrived at the most westerly net. Each net was hauled and shot in sequence, working east.

At about 1515, just after Mr Kebble had completed the last hauling operation, he used a VHF radio to call Mr Pengelly on the fishing vessel *Palores*, to say that he had about 190kg (30 stone) of fish on board.

Mr Kebble then shot his last net. This was properly deployed, although the rope connecting the northerly dan had parted. *Harbour Lights* was on a northerly course, which was an extended line from where the last net was shot. At about 1600 another local fisherman, Mr Moore, saw from his house in Polperro, *Harbour Lights* heading close into shore in a northerly direction through Downend Shoals. He was fairly sure that the mizzen sail was down when he saw her. He had lost sight of the vessel by the time she passed the headland of Downend Point. *Harbour Lights* continued on this course until she hit the rocks and broke up just to the east of Downend Point (**Figure 2**).

1.2 VESSEL, CREW AND CERTIFICATION

Harbour Lights was operated single-handedly by her owner Mr Daniel Kebble, who from an early age had a strong interest in boats and the sea. He had helped part-time on fishing trips since he was about 13 years old. Mr Kebble started an apprenticeship as an electrician when he left school, but about 18 months later he began a career as a full-time fisherman. Initially he worked as a deckhand on board *Girl Jane*, but about three years before the accident he purchased *Harbour Lights*, using her for gill netting.

During the summer months *Harbour Lights* carried up to 12 passengers on pleasure trips from Polperro. Caradon Council issued the vessel with a licence for both this, and diving operations with a maximum of eight divers on board. A representative of Caradon Council had surveyed *Harbour Lights* on 22 March 1999, and found her to be in a satisfactory condition to perform the duties for which she was licensed.

Mr Kebble was aged 21 at the time of the accident. He was a qualified boatman and an experienced young fisherman, taught by the harbourmaster of Polperro. Mr Kebble had attended training courses in basic survival at sea, basic fire-fighting and prevention, and basic first-aid. He was a strong swimmer, and could also SCUBA dive. Known to be safety conscious, he had for example, attached steps to the transom of *Harbour Lights*, so that if he fell overboard he could climb back on board.

Figure 2



Rocks where *Harbour Lights* came ashore

1.3 WEATHER

At the time of the accident the wind was west-south-west (WSW) force 4, there was a moderate sea, slight swell and good visibility.

1.4 FISHING OPERATION

On the day of the accident five bottom gill nets, positioned as shown in **(Figure 3)** were being worked. These would have been shot while heading north at about 4 to 5 knots; the vessel was steered by auto-pilot. When shooting, the first dan was thrown over, followed by the first weight, then the net was pulled out of the net bin; a similar bin is fitted to the fishing vessel *Palores* **(Figure 4)** owned by Mr Pengelly. Finally, the last weight, followed by the last dan were thrown over, to complete the deployment of a net. A diagram of a gill net is shown in **(Figure 5)**. Fish are caught by the gills in such nets, which require no bait. When the net is hauled, the fish are removed and stowed in a hopper; the net is then shot again. Each net takes about an hour and a quarter to work. Usually a short break is taken for lunch.

Gill nets are normally shot during the day and then left overnight. Fish die after about 12 hours trapped in a gill net, so to prevent the catch from spoiling it should be hauled the next day. If a day's fishing is missed because, for example, the weather is not good, degradation of the fish will be slight.

The fish were normally gutted when the vessel was back in harbour, and then taken ashore for sale.

When hauling the nets, the mizzen sail at the aft end of the vessel was rigged to prevent excessive rolling. This sail was taken down after the last haul and before the last shoot, or after the last shoot when on passage back to Polperro.

The nets are normally worked into wind, but on the day of the accident Mr Kebble wanted to be close to Polperro at the end of the day, because he needed to get back for a "stag night" which was arranged for that evening. The tidal stream was not strong in the area, having a maximum speed of about 1 knot, which would not have significantly affected the way the nets were worked.

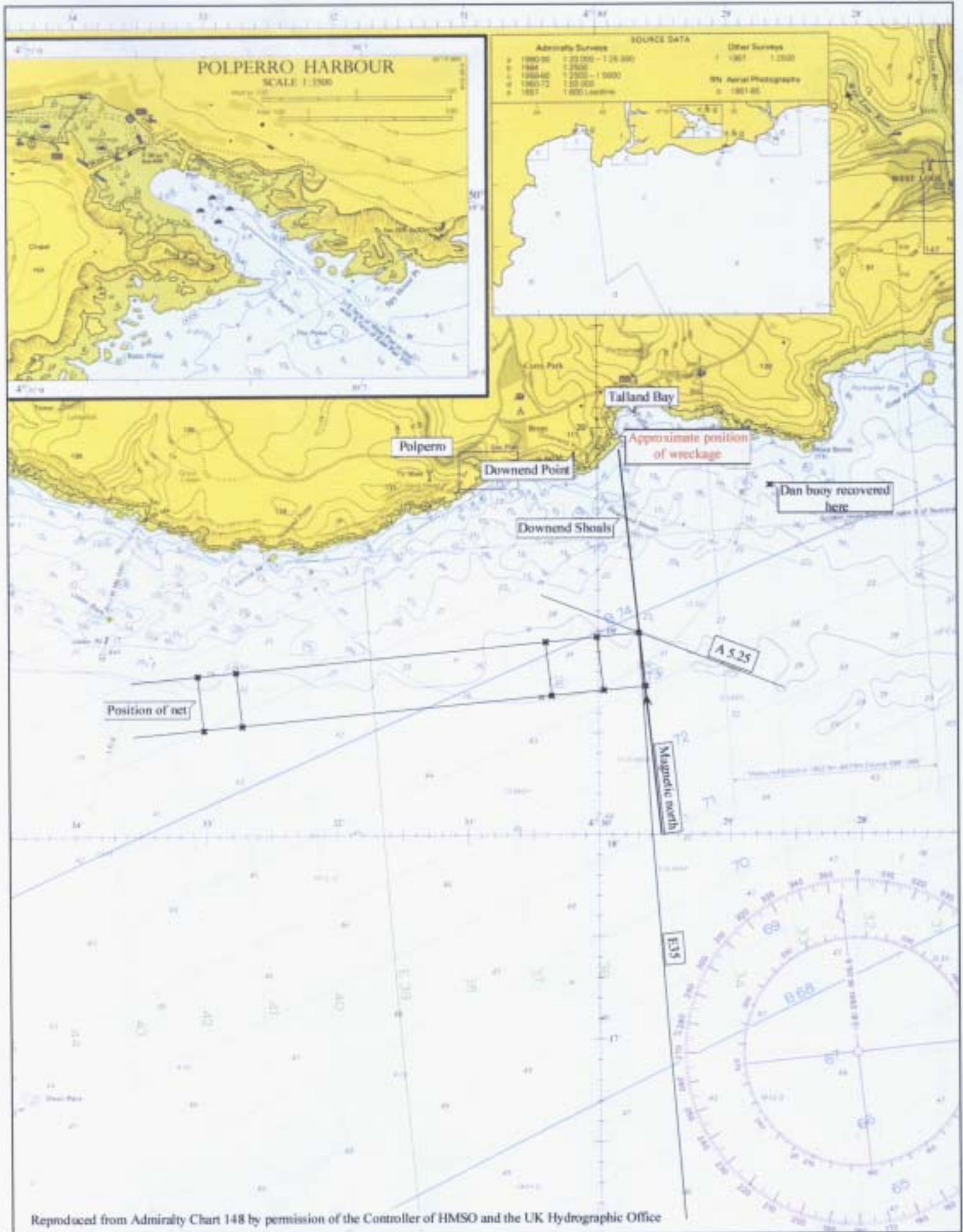
1.5 SEARCH OPERATION

The "stag night" was arranged to start at 1830. Because *Harbour Lights* had not returned to Polperro at that time, shortly afterwards, at 1853, the coastguard was informed that she was overdue. The search for *Harbour Lights* began at 1911.

Wreckage from *Harbour Lights* was discovered at 2005 on 8 January between Looe and Polperro. The next day the wheelhouse top was photographed **(Figure 6)**. Dead ungutted fish, mainly cod, were found floating near the wreck. No nets were found at the wreck site.

Polperro fishermen recovered the nets from the positions shown in **(Figure 3)**. The north end of the most easterly net was recovered from position 50° 19.034'N 004° 29.666'W, which was

Figure 3



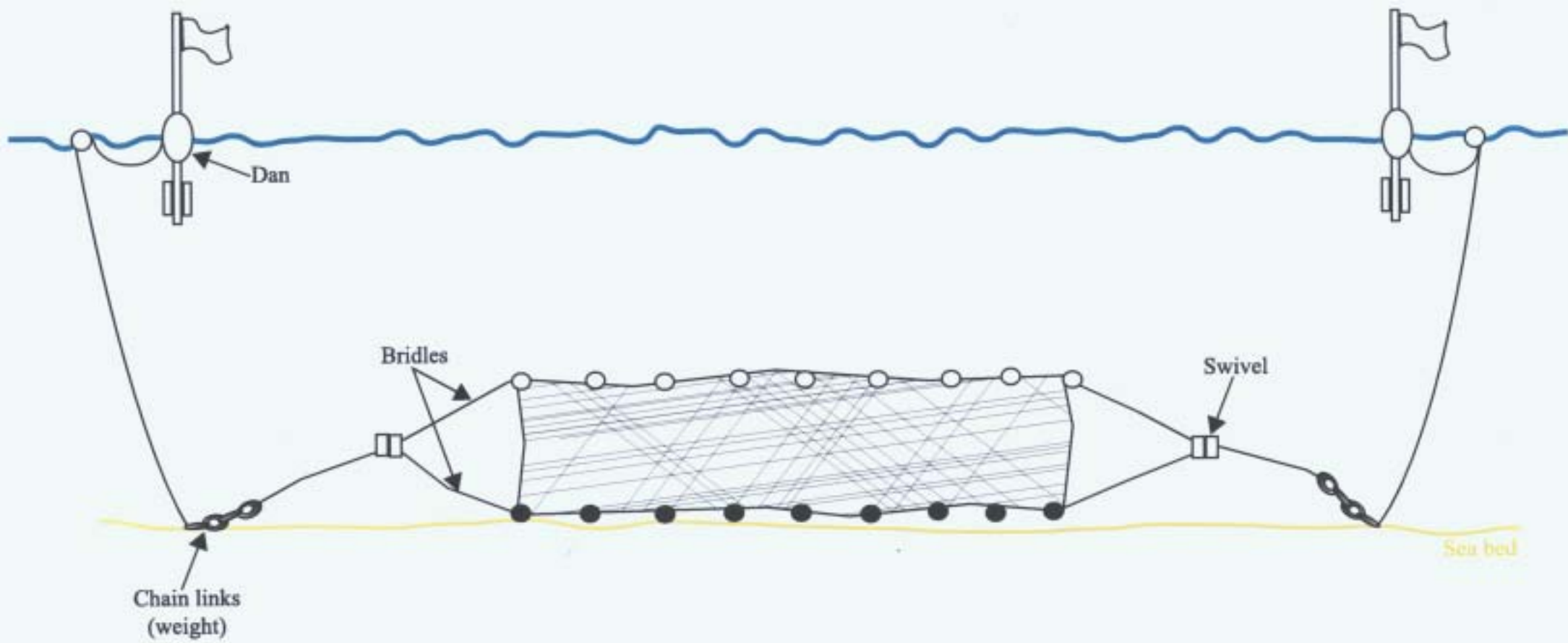
Reproduced from Admiralty Chart 148 by permission of the Controller of HMSO and the UK Hydrographic Office

Figure 4



Net bin

Fishing vessel *Palores* in Polperro



Bottom gill net

Figure 6



Wreckage (wheelhouse top)

Photograph courtesy of Sean Hennon

Decca A5.25, E35. The water depth here is about 28m. The accident would have occurred approximately at this position, 50°19'N 004°29'W. The dan for the north end of the most easterly net was found floating free, about a third of a mile from the wreck site.

A rescue helicopter, the Fowey, Looe and Plymouth lifeboats, about 30 fishing vessels, a police diving unit, and coastguard teams working along the shore, all took part in the search, which was terminated at 1801 the day after the accident.

When the MAIB inspected the scene, part of the wreckage, including a lifejacket (**Figure 7**) was seen on the rocks. Difficulties in accessing the site, however, prevented a closer inspection. Pieces of wreckage, which were recovered during the days following the accident, were collected at a local boatyard (**Figure 8**).

At the time of writing this report the body of Mr Kebble had not been found.

1.6 LIFESAVING EQUIPMENT

Lifesaving equipment required

Under the *Fishing Vessel (Safety Provision) Rules 1975, Harbour Lights* should have carried the following lifesaving equipment:

- Two lifebuoys, one of which should have attached to it a buoyant heaving line, and
- Six red star distress signals.

Additionally, under the *Fishing Vessel (Lifesaving Appliances) Regulations 1988* she should have carried:

- Two lifejackets, of which one was required to be fitted with a lifejacket light.

or

Under a general exemption to the above rules dated 1 April 1998, the following lifesaving equipment should have been carried:

- One lifejacket with whistle, light, and retro-reflective tape, for each person on board.
- Two lifebuoys, one with 18m of buoyant line attached; or one lifebuoy with 18m of buoyant line attached, plus one buoyant rescue quoit and line.
- Three parachute flares, two hand-held flares, and one smoke signal.

Harbour Lights carried the following lifesaving equipment

Two lifebuoys (**Figure 9**).

Figure 7



Position of wreck

Lifejacket

Figure 8



Wreckage collected at a local boatyard

Figure 9



Flares
canister

Lifebuoys and canister containing flares

Figure 10



Lifejacket

Four parachute flares, plus four hand-held flares, and two smoke signals, all in date. Four out of date parachute flares were also on board (**Figure 9**).

At least twelve lifejackets, stowed on board for when the vessel was taking passengers on pleasure trips from Polperro, were carried. The lifejackets were of the inherently buoyant type (**Figure 10**) and unsuitable for constant use. Mr Kebble did not normally wear a lifejacket when fishing.

1.7 RADIO

Harbour Lights had a fixed VHF radio set, and carried a hand-held VHF radio. The last call Mr Kebble made was to Mr Pengelly at about 1515 on 8 January. The coastguard received no distress message from *Harbour Lights* on the day of the accident.

1.8 SAFETY ADVICE

The Maritime and Coastguard Agency (MCA) has produced a safety leaflet on single-handed operations (**Annex 1**). This document provides simple advice in the form of a list of Do's and Don'ts.

Two important items are:

- a flotation garment (lifejacket) should be worn; and
- a personal locator beacon should be carried.

SECTION 2 - ANALYSIS

2.1 ACCIDENT

The VHF radio call made to Mr Pengelly at about 1515, just after the last net was hauled, confirmed Mr Kebble's presence on board *Harbour Lights*. The 190kg (30 stone) of fish that he had caught was a good catch, which may have caused him some elation.

Mr Moore was probably the last person to see *Harbour Lights* (at about 1600) before she hit the rocks. He was suffering from influenza on the day of the accident, so remained at home in Polperro. Normally he would have been out fishing on his vessel *Northern Star*. Mr Moore berthed his vessel beside *Harbour Lights* in Polperro and undertook the same type of fishing; so he knew Mr Kebble well. He thought Mr Kebble might have been taking somebody into Talland Bay on a sightseeing trip, because *Harbour Lights* did not normally fish that close inshore. As the mizzen sail was down it indicated that the last haul had been completed.

By the time the last net was shot it would have been about 1600. When this net was recovered, it was apparent it had been deployed normally, except for the last part at the north end.

The chain weight is kept on deck, and approaching the end of the shoot the weight is lifted on to the top of the transom so that when the end of the net is reached the chain is pulled over. If this weight is not lifted on to the transom the rope connecting it to the net would probably break. This was not the case, so it is assumed that Mr Kebble successfully performed this task.

The dan buoy at the end of the net consists of a thick bamboo cane with some steel weights taped to the bottom, some flotation attached to the middle, and a flag at the top. A small buoy is also attached, making the whole unit easier to grapple (**Figure 11**). The rope to the dan had parted under strain (**Figure 12**); the break did not look like a clean cut made with a knife.

Three possible reasons for why the dan rope parted have been identified:

1. The dan buoy and its rope may have been thrown over immediately after the weight was deployed, as opposed to allowing the dan rope to be pulled over and then throwing the dan buoy in once this was near completion. Throwing the dan rope over in a bundle may have meant that it became tangled around the propeller shaft. If this had happened the rope would have wound around the shaft ever tighter until it parted under the strain. If this had been the case Mr Kebble would have stopped the vessel and then tried to release the rope from around the shaft. This scenario is considered to be unlikely, because if Mr Kebble fell overboard when trying to release the rope, he would probably have been able to climb back on board using the steps attached to the transom. This possibility is not consistent with the fact that at the last sighting of *Harbour Lights* she was heading towards the rocks well north of where the last net was deployed, and therefore is considered to be very unlikely.

Figure 11



The dan

Figure 12



Parted dan rope

2. The last net was deployed properly and the rope to the dan parted when it became tangled around the shaft of another vessel. This is considered to be unlikely as the search operation began only a couple of hours after *Harbour Lights* was last seen. There would have been few, if any, pleasure vessels out there on that winter's evening. There was no reason for a large vessel to be that close inshore. Had the break been caused by another fishing vessel, it would probably have been reported, as most of the local fishing boats were involved in searching for *Harbour Lights*.
3. Mr Kebble was no longer in control after the weight had been thrown over. If the dan was not thrown over, it is almost certain it would have been caught in the gantry (**Figure 1**) when the rope came tight. It is believed that the dan was not thrown over and hence the rope parted.

The fishing vessel *Satin* picked up the detached dan buoy in the late evening of 8 January. The recovery position was close to the Hore Stone, east of the line between where the last net was deployed and the wreck site (**Figure 3**). The wind and tide that evening would have taken a free-floating dan buoy in that direction.

Sometime between throwing the weight over, and when the dan should have been thrown over, Mr Kebble was no longer in control. There are two possible reasons for this:

1. He slipped and knocked himself unconscious. If so, he would have been on board *Harbour Lights* when she ran ashore. Had he ended up there it is likely that his body would have been recovered.
2. He fell overboard, or was dragged overboard by the weight, or the line attached to the weight. The vessel would then have continued heading north on auto-pilot, and Mr Kebble would have been on his own in the water. He normally wore boots and oilskin trousers. He did not normally wear a lifejacket. The oilskins and boots would have dragged him down, even though he was a strong swimmer. Once Mr Kebble had fallen overboard he would not have survived for long in the cold water. This is considered to be the most likely scenario.

The last net *Harbour Lights* deployed was recovered, along with the other four nets that were used on 8 January. Mr Kebble's body was not hauled up with the last net, but this is not surprising, as the net had been fully deployed when the accident occurred. It is believed that the weight had been deployed before the accident happened, and therefore *Harbour Lights* would have been well north of the net at the time Mr Kebble went overboard.

The scope for safety recommendations is limited, because nobody saw the accident. However, since it can be assumed that Mr Kebble ended up in the water, had he been wearing a lifejacket, and had he been able to summon help, his chances of survival would have increased.

2.2 WRECKAGE

When *Harbour Lights* hit the rocks, substantial damage occurred. The wreckage found was broken into many pieces and incomplete, making it of little use to the investigation.

2.3 VESSEL CONDITION

Harbour Lights was a seaworthy vessel, quite able to cope with the conditions on the day of the accident. Caradon District Council had surveyed the vessel and certified her for the safe carriage of passengers and divers.

The safety equipment carried on board complied with legal requirements, although the only lifejacket seen by the MAIB inspector had no light attached. It is possible that one of the other lifejackets lost after the accident had been fitted with a light.

2.4 WEATHER

The weather was well within the capabilities of *Harbour Lights*; it was a fine day with the wind WSW force 4. Polperro vessels generally work in a maximum wind speed of up to force 6.

2.5 LIFEJACKETS

Mr Kebble did not normally wear a lifejacket. It is assumed that he was not wearing one on the day of the accident. Had he been wearing one he might have survived, as he was close to shore. Wearing a lifejacket is especially important for a fisherman who works single-handedly.

Mr Kebble might have had a brief lapse of attention when the accident occurred. He was near the end of the fishing trip, so he would have been at his most tired then. He was attending a “stag night” in the evening, and was to have been the best man at the subsequent wedding. It is possible he was concerned about the arrangements for these events. He had a good catch on board; this success may have been a distraction.

When fishing, it is important to work in an organised manner, which should include staying clear of the gill net when it is being pulled over the side. By all accounts Mr Kebble would have followed safe practice, as he was known to be a careful fisherman, but he should have worn a lifejacket, because it only needs a moment of inattention for an accident to happen.

The non-wearing of lifejackets is a common feature in many fishing vessel fatal accidents. It is not sufficient to merely carry a lifejacket; one should be worn all the time when working on the open deck. Compact halter type self-inflating lifejackets, suitable for constant wearing, are now widely available. Marine Guidance Note MGN 16 (F), published by the MCA, gives further information. This document is being updated; this revised version will be published shortly as MGN 155 (F). This new document will show that single chamber

self-inflating lifejackets manufactured to BS EN396 or BS EN399 will be satisfactory for abandon ship purposes on vessels under 12m.

Mr Chris Curtis, the harbourmaster of Polperro, and Mr Terry Kebble the skipper's father, organised a lifejacket campaign shortly after the accident. This initiative included inviting various manufacturers of lifejackets to Polperro so that the fishermen there could try the different products to find those with which they felt most comfortable. Mr Curtis and Mr Kebble hoped that this would encourage every Polperro fisherman to wear a lifejacket in the future. The MAIB commends them for undertaking this exercise, and would like to see similar campaigns in other fishing ports.

It is believed that the local chandler sold out of lifejackets shortly after the accident, so it would appear that this tragedy has driven home the message in this part of the country. At a recent fishing exhibition a supplier of lifejackets stated that fishermen are showing much greater interest in personal safety, with the result that it had sold more lifejackets in the last six months than in the previous five years.

In the last ten years over 50 fishermen have been lost in manoverboard incidents. Fishermen should wear lifejackets when working on deck. Far too many lives are lost unnecessarily by the failure to do so, but it is noted that in one or two parts of the country attitudes are beginning to change, and the wearing of lifejackets is becoming accepted practice. The MAIB will continue to press for this to become more widespread.

Some fishermen think that wearing lifejackets does not fit the macho image of the industry, but lifeboat crews wear them when at sea. Most fishermen consider lifeboatmen to be brave and skilled boat handlers; therefore it is difficult to see why they do not follow the good example. Indeed many fishermen also work as lifeboatmen; they are quite happy to wear lifejackets on lifeboats, but are reluctant to wear them while fishing.

The Sea Fish Industry Authority (SFIA) also strongly encourages fishermen to wear lifejackets. (**Annex 2**), written by John Tumilty, was published in the March 2000 issue of Fishing Monthly, and is an excellent summary of all the issues involved.

For employees who work on fishing vessels where there is a risk of falling overboard, the wearing of lifejackets is now required in The Merchant Shipping and Fishing Vessels (Personal Protective Equipment) Regulations 1999. It can be argued that this legislation would not have applied to Mr Kebble as he was working single-handedly, but the wearing of lifejackets is still advisable, since this would dramatically reduce the number of fishermen who are lost.

Recently a fatal accident inquiry was held in Scotland on a similar case. In summing up, the sheriff put particular emphasis on the wearing of lifejackets. He said that this type of accident would continue to happen until fishermen accept the need to wear them when working on the open deck.

2.6 WATERPROOF PORTABLE VHF RADIO

Fishermen who work single-handedly should also carry a waterproof portable VHF radio on them when at sea. One of these devices should enable help to be summoned. There was a portable VHF radio on board *Harbour Lights*, but as it was not waterproof, would have been no use in a manoverboard situation where the vessel was operated single-handedly.

Some information on waterproof portable VHF radios is as follows:

1. At the time of writing this report these radios cost about £300. There are about four different makes available. Although relatively expensive, in the context of saving a fisherman's life, they are considered to be good value.
2. A person in the water using a waterproof portable VHF radio should be able to contact the coastguard provided the distance to a receiver is not more than about 15 miles. There are blind spots around the coast, but if the coastguard does not receive a distress, another vessel may be able to relay the message provided the distance to the person in the water is not more than about 3 miles. It is also possible that transmission will be intermittent in a heavy swell, due to the low height of the radio when held by someone floating in the water.
3. There are units available, which will survive immersion to a depth of 1m.
4. The latest portable VHF radios are about the size of a mobile phone, but slightly heavier. They can be kept in a pouch attached by a belt around the waist.
5. A fisherman in the water, who is able to transmit a distress and receive a reply, knows that help is on the way. This should bolster his spirits, and increase his chances of survival.
6. Portable EPIRBs (emergency position indicating radio beacon) are unsuitable for single-handed fishermen. Most of these devices operate on the 121.5MHz frequency and have a range of about 1 mile. They are designed to be used in association with a homing unit on the vessel, but this is useless if there is no one left on board. As yet, the coastguard does not have homing equipment for this frequency, but search and rescue helicopters and RNLI lifeboats can home on 121.5MHz.
7. Portable EPIRBs which operate on the 406MHz frequency are becoming available, but these are much more bulky than the 121.5 type, and cost about £400 at the time of writing.
8. Portable EPIRBs have the disadvantage in not allowing the sender to know if the distress has been received.

SECTION 3 - CONCLUSIONS

3.1 FINDINGS

1. At about 1600 on 8 January 2000, while deploying the last gill net of the day, Mr Kebble fell, or was dragged overboard from *Harbour Lights*, at position 50° 19'N 004° 29'W, where the depth of water is about 28m. [1.1, 1.5, 2.1]
2. At the time of the accident the wind was force 4, there was a moderate sea, and good visibility. It was a fine day for fishing. [1.3, 2.4]
3. *Harbour Lights* was seaworthy and quite able to cope with the conditions on the day of the accident. [2.3]
4. The safety equipment carried on board complied with legal requirements. [2.3]
5. Caradon Council had surveyed and certificated the vessel for taking passengers on sightseeing trips. [1.2]
6. Mr Kebble was an experienced fisherman. He was qualified as a boatman, and had attended all the basic fishermen's safety training courses. [1.2]
7. Mr Kebble did not normally wear a lifejacket when fishing. [1.6, 2.5]
8. The coastguard received no distress message from *Harbour Lights* on the day of the accident. [1.7]
9. The people ashore acted promptly, and a comprehensive search was conducted. [1.5]
10. A waterproof portable VHF radio was not carried on board *Harbour Lights*. [2.6]

3.2 CAUSE

Immediate cause:

Mr Kebble fell overboard, or was dragged overboard by the fishing gear.

Contributory factors:

He was unlikely to have been wearing a lifejacket.

He was not carrying a waterproof portable VHF radio.

SECTION 4 - RECOMMENDATIONS

The training section of the Sea Fish Industry Authority is recommended to:

1. Advise the co-ordinators for fishermen's basic safety training to emphasise the importance of wearing lifejackets to fishermen who operate single-handedly. The safety benefits of carrying a waterproof portable VHF radio should also be explained.

Note: The MAIB will send copies of this report to all training co-ordinators.

**Marine Accident Investigation Branch
August 2000**

"The risks of working single handed are obvious.

If you don't take adequate precautions, a minor incident can soon develop into a tragedy when there's nobody around to help."

SINGLE HANDED OPERATION



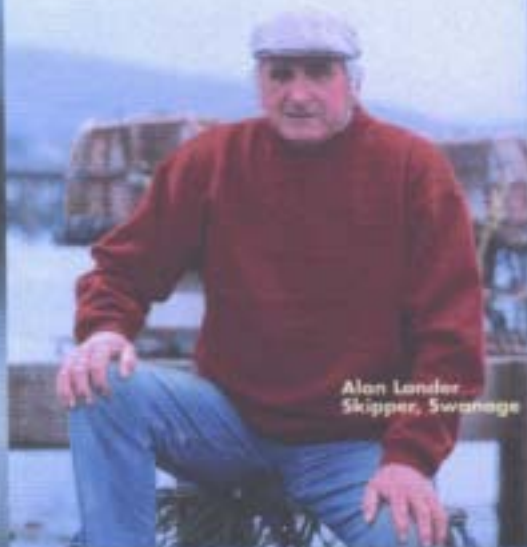
**Vyvyan Ping,
Mylor Bridge, Cornwall**

Geoff Ping worked single handed from Mylor in Cornwall. Nine years ago he left port never to return.

Here are the words of his widow, Vyvyan: "Nine years on and it still hurts. Seeing our daughters Sarah (16) and Helen (14) hurts even more, because Geoff never saw them grow up. If he hadn't been fishing single handed perhaps it may never have happened. We will never know, and that's the worst pain of all. I hear of many fishermen working single handed saying they're safe because other fishermen are nearby, but the truth is that nobody's ever close enough.

If you work on your own, you must take extra care. Be prepared for everything."

Geoff's 28ft netter, Nil Desperandum, was found unmanned only hours after he left port.



**Alan Lander
Skipper, Swanage**

**SAFE
FISHING**

KEEPS YOU FISHING, KEEPS YOU ALIVE

Produced by The Fishing Vessel Safety Trends Initiative Steering Group with support from



SINGLE HANDED OPERATION

GETTING IT RIGHT

- ✓ Making sure you and your vessel are fit to go to sea.
- ✓ Checking the weather forecast before you set off.
- ✓ Telling someone ashore where you intend to fish and when you expect to return.
- ✓ Carrying a VHF radio and keeping in regular contact with other vessels in the area or shore base.
- ✓ Fitting machinery emergency stops and maintaining them.
- ✓ Dressing to keep as warm, dry and safely protected as possible.
- ✓ Making sure safety equipment is easily accessible.
- ✓ Wearing a flotation garment (buoyancy aid, lifejacket or survival suit) at all times.
- ✓ Considering using a safety harness while you are working on deck.
- ✓ Considering wearing a personal locator beacon and carrying mini flares.

GETTING IT WRONG

- ✗ Leaving on your fishing trip without checking the engine over.
- ✗ Sailing in bad weather or fog.
- ✗ Operating beyond the limitations of your radio equipment.
- ✗ Forgetting to keep a clear lookout whenever possible during fishing operations.
- ✗ Relying entirely on a mobile phone for emergency communication.
- ✗ Overloading your vessel.
- ✗ Exhausting yourself.
- ✗ Forgetting to check that you have all your safety equipment on board before you leave.
- ✗ Delaying calling for assistance if you are in difficulties.
- ✗ Not carrying an alternative means of propulsion on a small vessel (oars or a spare outboard motor).
- ✗ Taking unnecessary risks. There is no one to help you if you make mistakes.

TECHNICAL TALK

FISHING MONTHLY MARCH 2000

with John Tumilty

Lifejackets must be considered

When vessel operators face up to the challenge of doing the risk assessment, as required under the Health and Safety at Work regulations 1997, they are faced with issues that may require change from the normal practice of fishing. Issues such as the wearing of lifejackets, hard hats, and guards



On winches. There is no regulation to say that these are required but they may be sensible measures to take aboard your vessel. The object of risk assessment is to consider possible hazards and to prevent or protect against them. Risk assessment considers the particular circumstances on your vessel and enables you to decide what is appropriate. Previously, owners simply complied with the regulations to be able to say that their vessel was safe but to be truly safe, the actual risks that occur when working on the vessel must be considered.

An actual risk, common to all fishing vessels, is that of falling overboard or sudden vessel loss resulting in persons in the water with no means of staying afloat long enough to be rescued. Obviously, the risk varies greatly between small and large vessels but, even though it is so very unlikely to happen, because the consequences could be death, or multiple deaths, it will always be a risk requiring action to be taken subject to it being reasonable and sensible, (risk factor 3 or 4). The problem is deciding what is reasonable and sensible. In other industries anyone exposed to the risk of drowning would be expected to wear a lifejacket but fishermen have shown great reluctance to the wearing of these mainly because the lifejackets carried on the vessel are designed for abandon ship purposes only and cannot be used for working. However, modern slim inflatable lifejackets are now available, as are various buoyancy aids that can be worn when working. A revised Marine Guidance Note on Constant Wear Buoyancy Equipment is being

considered to recommend that suitable buoyancy devices are worn by all persons when working on deck. 'Suitable' means that the device can be comfortably worn without hindrance to the work of the fisherman and that it will float the wearer 'face upwards' with the mouth well clear of the water. Thus, it will be up to owners, ideally having discussed with their crewmembers, to decide on the action to be taken on their vessel and to select a buoyancy device that suits the fishing operation.

Perhaps the most readily available buoyancy device is the single chamber, halter style inflatable lifejacket. These usually provide buoyancy of 150 Newtons which is considered adequate for general offshore use. 275 Newton versions are available for use by persons who may be carrying significant weights such as tools. These high buoyancy lifejackets should also be used by persons wearing clothing that may adversely affect the self-righting capability of smaller lifejackets. The halter style lifejacket is comfortable to wear, simply fitting around the neck with a belt at the waist. The belt should be worn tightened otherwise, in the water the lifejacket will float up above the wearer's shoulders. Some lifejackets have crutch straps to prevent this problem. Inflation can be either automatically or manually activated. Automatic lifejackets will inflate within a few seconds on being immersed in water and thus even if the wearer is unconscious the lifejacket will inflate. Until recently automatic inflation was achieved by the use of a soluble capsule and these could result in false activation if they became damp. Hydrostatic devices are now being used as they are not affected by damp. If you are buying automatic lifejackets make sure that hydrostatic devices are fitted. Manual lifejackets have a toggle pull string to activate inflation and these are also fitted on automatic versions as a 'back up'. All inflatable lifejackets have a mouthpiece for oral inflation or 'top up' if necessary. Inflatable devices are not a 'buy and forget' item because they may become punctured and the inflation cylinder can work loose with the movements of the wearer. Regular checks need to be made every few weeks to ensure that they will be reliable when needed and importantly, persons need to be aware that the lifejacket must be worn on top of oilskins, never underneath, as the inflation could restrict breathing.

Inherently buoyant devices are totally reliable but to have sufficient buoyancy they have to be relatively bulky. Typical inherently buoyant devices are the buoyant thermal work suits. These are ideal in the winter but simply too hot to work in during the rest of the year. The suits give

good buoyancy but float the wearer in a horizontal attitude which, if he becomes unconscious could be either 'face up' or 'face down'. For this reason, ideally a high buoyancy 275 N. lifejacket should be worn with the suit. Of course, by wearing the suit, thermal protection is provided and the person in the water will stay conscious for longer. Other inherently buoyant devices are flotation waistcoats. These may be ideal to wear but the buoyancy provided is very limited, perhaps just sufficient to keep your mouth clear of the water although, certainly better than wearing nothing.

From the above it can be appreciated that the 'ideal product' does not exist and a compromise is necessary between lifesaving properties and suitability to be worn when working. Inflatable lifejackets will give good buoyancy and will right an unconscious person however, they provide no thermal protection to delay hypothermia. Inherently buoyant suits do give thermal protection but are too hot to work in for much of the year. You should select the most suitable product to meet your needs but make sure that you and your crew are fully aware of any limitations. Ask the supplier for assurance on the suitability of the product, will it keep an unconscious person in a face upward position and ensure that it provides buoyancy of at least 80 Newtons. Be sure that it can be safely worn without being likely to snag on the fishing gear, can it be comfortably worn all year round and look for materials that can be easily cleaned. With inflatable devices buy a re-arm kit in order to have a spare cylinder and seal available and you must check it regularly otherwise it will not work when you need it.

One product, developed by Seafish is the oilskin trouser with a lifejacket built into the bib. From acceptability trials it was found that the single chamber halter style inflatable lifejackets could readily be worn without hindrance by most fishermen but because of the effort of putting them on and off several times a day they quickly could not be bothered to wear them. To solve this problem we decided that the buoyancy device should be part of the 'sea gear' thus, the fisherman is wearing a lifejacket whenever he puts on the oilskins. Because the oilskin top is often not worn the lifejacket had to be incorporated into the trousers but, this necessitated manual activation only because an automatic device could suffocate the wearer if an oilskin top was being worn over it.

The oilskins are made by 'Guy Cotten' and have a 'Crewsaver' lifejacket in a pouch forming the bib. The lifejacket easily removes from the oilskins to be transferred to replacement ones once the original oilskins have become worn or damaged. To use, the wearer simply pulls open the pouch, slips the lifejacket over his head and pulls on the lanyard to inflate. If a top is being worn this can be opened or taken off to gain access to the lifejacket. It is surprisingly easy to remove an oilskin top when in the water and the lifejacket can be in place and inflated in less than 30 seconds. Of course, the wearer must be conscious to achieve this and hence on those rare occasions when someone is unconscious on entering the water only an automatic lifejacket would save him.

As more operators carry out their risk assessments there is an increasing appreciation that buoyancy devices should be worn by fishermen when it is appropriate. Quite a few vessels, especially some of the bigger ones, now have buoyancy devices for the crew and they are expected to wear them when working on deck. Although crewmembers may resist this, any court enquiry into a drowning would wish to know why a buoyancy device was not being worn and as the employer, you could be held liable for failing to ensure a safe working environment.