

Report on the investigation  
of the loss of the  
fishing vessel  
***Rebecca Kay***  
on 20 April 2001  
off Bideford Bar Buoy

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**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.

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## SYNOPSIS



On 20 April 2001, the Marine Accident Investigation Branch (MAIB) was advised that the fishing vessel *Rebecca Kay* had sunk off Bideford Bar Buoy, North Devon.

An investigation into the causes began that day.

After completing a major refit of his vessel, the owner/skipper found that she had suffered minor vandalism while alongside in Bideford. Nothing appeared to have been stolen, so the skipper started the engine and set off single-handedly for the fishing grounds off Baggy Point. Once clear of Bideford Bar Buoy, he increased the engine speed to about 7 to 8 knots, and headed *Rebecca Kay* into a short choppy sea.

When about  $\frac{1}{4}$  mile north-west of the bar, the skipper noticed that his vessel was rolling quite heavily, so checked the bilge discharge, and started to ease off the speed. The auxiliary electric power failed, and the engine stopped. The bilge alarm sounded, and the electric bilge pump started automatically.

He attempted to reach the engine space, but the combined rolling of the boat, and the fishing gear moving about, made it very difficult and dangerous. All electrical power had been lost, the boat was flooding rapidly and was sinking. The skipper, therefore, donned his lifejacket and jumped overboard, taking with him the EPIRB. *Rebecca Kay* sank shortly afterwards, in about 4 metres of water.

About 5 minutes later another fishing vessel in the area rescued the skipper. Although suffering from the cold and shock, he was otherwise uninjured.

This report makes no safety recommendations.

## SECTION 1 - FACTUAL INFORMATION

### 1.1 PARTICULARS OF VESSEL

Name	:	<i>Rebecca Kay</i>
Official No	:	B11037
Fishing No	:	D 284
Port of registry	:	Bideford
Gross tonnage	:	2.57
Overall length	:	7.32 metres
Breadth	:	2.95 metres
Depth	:	0.78 metres
Year of build	:	1989, Holton Work Boats, UK
Construction	:	Fibreglass
Type	:	Potter/netter
Main Engine	:	Ford BSD 444
Crew	:	1
Owner	:	Mr Stefan Jones, 152 New Street, Torrington North Devon, EX38 8BU
Date and time	:	20 April 2001, about 0600
Place of incident	:	0.75 miles ESE of Bideford Fairway Buoy
Position of Incident	:	51° 05.8' N, 004° 15.68W
Injuries	:	Shock
Damage	:	Vessel sank – total loss

## 1.2 NARRATIVE

- 1.2.1 The owner/skipper of *Rebecca Kay* had been carrying out a major refit of the vessel while she was alongside in Bideford, with the object of fitting her out for fishing during the summer season. A new fuel system, complete with double walled piping was fitted, together with a new wheelhouse and safety fittings to comply with the latest MCA requirements.

The owner/skipper arrived at the quay at 0500 on 20 April 2001 to find that two windows had been broken in the wheelhouse. He carried out a careful search of the boat to see if anything had been stolen; nothing appeared to be missing. The police were contacted and the boat inspected, but, with only limited visible damage, the incident was put down as “drunks playing about”.

- 1.2.2 With the vessel now cleared for departure, the skipper, the only person on board, started the engine and set off for the fishing grounds off Baggy Point. Once clear of Bideford Bar buoy, engine speed was increased and the boat headed off into a short choppy sea. With the after deck full of fishing gear, pots etc, the increase in speed caused the stern to dig deeper in the water. The vessel at this time was doing about 7 to 8 knots.

When about ¼ mile north west of the bar, the skipper noticed that the boat was rolling a bit heavy, principally to port. He checked the bilge discharge and eased off the speed. Just at that moment, the auxiliary electric power failed and the engine stopped. With the vessel now easing down and levelling out, the bilge alarm sounded and the electric bilge pump started automatically (directly wired to the battery).

The boat, by this time, had swung broadside on to the waves causing the fishing gear aft to start to move about. The skipper tried to see if he could get to the engine space aft, through the deck hatch, but the combined movement of the boat and the fishing gear made any attempt to get aft dangerous.

- 1.2.3 By then it was becoming obvious that the boat was flooding rapidly and that the skipper needed to leave the vessel. He tried to make a distress call on his VHF radio but all electric power had been lost. After donning his lifejacket and taking the EPIRB, he jumped overboard into the sea and swam away, in case the vessel capsized. The vessel sank shortly afterwards in about 4 metres of water.

Fortunately, another fishing vessel, *Jane Howard*, had left Bideford just after *Rebecca Kay* and had realised that she was in trouble. *Jane Howard* contacted the coastguard at 0634, advised them of the situation, and said that they were about to pick up the skipper. They came alongside the skipper and recovered him after about five minutes. Although cold and suffering from shock, he had no other injuries.

### **1.3 THE WEATHER**

The weather at the time of the incident was good, north-east force 2, slight sea and swell with visibility of 16 miles.

### **1.4 LIFESAVING EQUIPMENT**

Just before entering the sea, the skipper put on his "Mullion" lifejacket. He has stated that it operated without a problem, was comfortable to wear, and provided excellent support and protection in the water.

## SECTION 2 - ANALYSIS

### 2.1 CAUSE OF FOUNDERING

2.1.1 The only possible source of water entry to the engine space, other than a split in the hull, was through a hull connection. Since the vessel had recently undergone a major refit, during which time all hull connections had been checked, the point of entry was probably the engine exhaust hull penetration and connection at the stern.

If pipe failure had occurred on the engine cooling system inboard of the hull connection, the high temperature cooling water alarm fitted to the engine would have sounded. The skipper states that no alarm sounded, so this can be discounted.

Flooding would be possible, however, if the water-cooled exhaust piping overboard fractured at the intersection of the pipe and hull. A fracture at this point would allow engine cooling water, which would normally be discharged overboard, to spill and collect in the engine space bilge.

Furthermore, when under the influence of increased engine power, plus the weight of the fishing gear, the stern moved downwards, the fracture would likely be at or below the waterline. In this condition back flooding would occur, adding to the flooding rate of the engine space.

2.1.2 Another possibility is that during the refit and the fitting of the new fuel system, the engine exhaust piping was disconnected or damaged. If it had been disconnected and then refitted, it may be that unbeknown to the owner, the person undertaking that refit failed to properly secure the pipe back in place.

On starting the engine initially, all would seem to be in place. Only when the vessel had been moving in a seaway for a short time would the assembly collapse; leading to eventual flooding.

2.1.3 It was originally intended that the vessel would be salvaged. This would have enabled an examination of the engine space and exhaust attachments to be undertaken. Unfortunately, after the vessel sank, the weather deteriorated and the vessel not only shifted, but also broke up. Further examination was therefore impossible.

2.1.4 The possibility of foundering due to the prevalent weather conditions was considered but discounted, as neither the wind nor waves were of sufficient intensity to cause any difficulty to a vessel of *Rebecca Kay's* size or type.



## **2.2 OTHER COMMENTS**

Regarding the broken windows in the wheelhouse, the police were unable to make any progress and the matter was not pursued. The owner has suggested that a certain amount of ill-feeling was present among the fishing fraternity in Bideford, some of which was directed towards his fishing operation.

He considers that there may be a link between the damage to his wheelhouse and the suspected subsequent flooding through the exhaust outlet overboard. It is his view that it had been properly secured during the refit, and he finds it difficult to accept that it could have failed without outside help. It is his view that the exhaust was deliberately damaged immediately before the incident. No evidence has been presented to support this allegation.

## **SECTION 3 - CONCLUSIONS**

### **3.1 FINDINGS**

1. *Rebecca Kay* was properly registered in Bideford and complied with the latest requirements of the MCA. [Ref: 1.2.1]
2. The only possible source of water entry to the engine space, other than a split in the hull, was through a hull connection. With the vessel having recently undergone a major refit with all hull connections checked, the point of entry is most likely to have been the engine exhaust hull penetration and connection at the stern. [Ref: 2.1.1]
3. Deliberate interference with the exhaust connection has been suggested, but no evidence is available to support this allegation. [Ref: 2.2]

### **3.2 CAUSE OF FOUNDERING**

The cause of the foundering was the entry of sea water into the engine space of the vessel. The point of entry into the space remains unknown.

## **SECTION 4 - RECOMMENDATIONS**

The MAIB has no safety recommendations to issue at this time.

NB: Batteries supplying electrical power to emergency equipment should be sited as high up in engine spaces as is practical. The longer electrical power remains available, the greater the chances that the situation can be retrieved, or the emergency services contacted and rescue operations started.

**Marine Accident Investigation Branch  
November 2001**