

**Report on the investigation of
an accident to the
skipper of the fishing vessel
Wakil II (BW 147)
3.5 miles south-west of St Bees Head
on 10 April 2000**

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

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

gt	gross tonnage
hp	horse power
kW	kilowatt
m	metre
MAIB	Marine Accident Investigation Branch
MCA	Maritime and Coastguard Agency
MGN	Marine Guidance Note
MRSC	Maritime Rescue Sub-Centre
UTC	Universal Co-ordinated Time
VHF	Very High Frequency

SYNOPSIS

On 10 April 2000, the MAIB was notified of an accident on board the 9.88m fishing vessel *Wakil II*. An investigation began that day.

The skipper/owner was operating the vessel alone, 3.5 miles south-west of St Bees Head. As he hauled in the fishing gear, he slipped and fell on to the trawl warp while it was being heaved in, and was then dragged into the winch.

Fortunately the trapped skipper provided enough resistance to stop the small diesel engine which powered the winch. He was, nonetheless trapped there for many hours before managing to free himself and raise the alarm. He was then transferred to hospital by the rescue services.

The skipper suffered facial, shoulder and rib injuries, but eventually made a full recovery.

The immediate cause of the accident was the skipper losing his footing on deck and falling on to the trawl warp while it was being heaved on to the winch.

Contributory causes were not clearing the deck of hazards before hauling, his decision to place himself in immediate danger, the absence of a dead man's handle fitted to the winch control, and the lack of a risk assessment.

The MAIB recommends that the Maritime and Coastguard Agency (MCA) advises fishermen who own and operate their vessels single-handedly, to carry out a risk assessment.

It also recommends that *Wakil II*'s skipper/owner carries out a risk assessment and fits a dead man's handle to the winch control.

PARTICULARS OF WAKIL II AND ACCIDENT

Vessel details (Figures 1 & 2)

Registered Owner	:	Mr J Towler, Accrington, Lancashire
Port of registry	:	Barrow-in-Furness
Fishing Number	:	BW 147
Type	:	Fishing vessel (Inshore Trawler)
Built	:	1973 Barrow-in-Furness
Construction	:	Wood
Length overall	:	9.88m
Breadth	:	3.44m
Depth	:	1.31m
Gross tonnage	:	7.08
Engine power and type	:	71kW Rushton diesel
Service speed	:	8 knots

Accident details

Time and date	:	Approximately 1700 UTC 10 April 2000
Location of incident	:	54°28.5'N, 003°42.0'W 3.5 miles SW of St Bees Head
Persons on board	:	One
Injuries	:	Shoulder, facial and rib injuries
Damage	:	None



Figures 1&2 - *Wakil II*



SECTION 1 - FACTUAL INFORMATION (ALL TIMES ARE UTC)

1.1 DESCRIPTION OF VESSEL

Wakil II was built in Barrow in 1973 and was constructed of wood. The vessel incorporated one main working deck above the waterline.

Below the working deck there was a storage space forward. Aft of this was the main engine space and a small fishroom area.

The wheelhouse was positioned amidships on the working deck. The deck space forward of the wheelhouse was used for storing gear. On the working deck aft of the wheelhouse was the trawl winch with a net drum positioned above it. This left a small area of working deck for processing the catch.

The hydraulic trawl winch was powered independently from the main engine by a 9kW, twin cylinder Petter diesel. The operating control lever for the winch was situated on the forward side. The winch was not fitted with a dead man's handle.

1.2 BACKGROUND TO THE VOYAGE

Wakil II was operated on a daily basis by her skipper, who was also the owner, normally from the port of Fleetwood, and working the local inshore fishing grounds.

Approximately four to five weeks before the accident the skipper began operating his vessel from the port of Whitehaven due to quota restrictions on the fishing grounds off Fleetwood.

He operated the vessel single-handedly because he concluded it was not financially viable to do otherwise.

1.3 TYPE OF FISHING

Wakil II was engaged in bottom trawling for prawns and white fish; a method of fishing using a trawl net which is towed along the seabed at a slow speed and high propeller torque.

The trawl is spread using otter boards connected to the main towing wires.

It is hauled up from the seabed, and the catch is taken on board at three to four hour intervals.

Figure 3



Trawl winch

Figure 4



Working deck

1.4 THE CREW

The 52 year old skipper was the only person on board *Wakil II* at the time of the accident. He was an experienced fisherman who had been operating vessels of less than 12m in length for the past 20 years.

He had received no training in basic sea survival, fire-fighting or first-aid. Having been born before March 1954 he was exempt from this training, which is otherwise mandatory for serving fishermen.

Under *The Fishing Vessel (Certification of Deck Officers and Engineer Officers) Regulations 1984*, *Wakil II* was not required to have any certificated people on board.

1.5 ENVIRONMENTAL CONDITIONS

The weather throughout the incident was a westerly wind of force 4 with a 1m westerly swell. The visibility was good to moderate.

1.6 NARRATIVE OF EVENTS

Wakil II sailed from Whitehaven at 0500 on 10 April 2000, bound for the local inshore fishing grounds. The skipper was the only person on board.

After steaming west for about an hour, he shot the trawl and began towing the fishing gear in a south-easterly direction towards a point west of Ravenglass.

At approximately 1100, the gear was hauled then re-shot with the catch being landed on board. *Wakil II* then began towing on a reciprocal course towards St Bees Head for the final haul of that day.

To make it easier to handle and grade the catch, the skipper laid out six empty fish boxes on the small working deck aft. He normally used only three boxes, but because the size of the prawns varied so much, he decided on this occasion to use six.

With the deck so cluttered, the skipper had to step on the fish boxes when moving around.

At approximately 1700, the skipper decided to haul the gear. He usually squared up the deck before hauling, but because he had not yet graded all the catch from the previous haul, he left the six boxes where they were.

After 20 fathoms of warp had been hauled on to the winch, the main engine stopped. The skipper tried to start it again, without success. He thought the problem might be related to an incident earlier in the day when the main engine had misfired.

Rather than tackle the problem at that time, especially with the fishing gear still outboard and because the trawl winch had its own means of power, he decided to continue hauling the gear before investigating further.

Back on deck, while the gear was being heaved up, the skipper continued grading prawns from the previous haul into the boxes. While in a position near to the port winch barrel, he lost his footing and fell on to the port trawl warp as it was being heaved on to the winch.

He fell awkwardly, and the sleeve of his oilskin jacket caught on a shackle connecting the heavy warp to the light warp. He was dragged on to the port barrel of the winch. The sleeve of his jacket became trapped in the winch from the cuff to the neck, pinning him to the deck underneath the winch barrel.

Fortunately the trapped skipper provided enough resistance to stop the small diesel engine which powered the winch.

The skipper, still semi-conscious but in shock, was trapped underneath the barrel of the winch. He had one hand free, but was unable to free himself.

After lying there helpless for about three hours he heard a call from the fishing vessel *Mylads* which was trying to contact him by VHF radio. He could not reply. Two hours later a similar call was made. The skipper was still trapped, choking and in a lot of pain, but unable to free himself.

By this time it was beginning to get dark. No navigation lights had been switched on, and the skipper became worried that he might not be found. He also realised his vessel was in danger of drifting on to the rocks at St Bees Head and breaking up, while he remained trapped in the winch and drowned.

With this in mind, he put as much effort as he could into freeing himself from the winch. At approximately 0200 the next day, the skipper managed to rip his oilskin jacket from the arm up to the neck, freeing first his head and eventually the rest of his body.

He then made his way to the wheelhouse and switched on the heaters, as by now he was suffering from mild hypothermia.

About 30 minutes later, he used the mobile telephone to call the skipper of *Mylads*, whose vessel was then in harbour.

At 0232 *Mylads* skipper contacted Liverpool MRSC and reported the situation.

St Bees inshore lifeboat and the Workington lifeboat, with a doctor on board, were launched and tasked to the scene. When he arrived the doctor advised the skipper be immediately transferred to hospital.

Shortly afterwards the skipper was transferred by lifeboat to Whitehaven hospital, suffering from shoulder, facial and rib injuries. Eventually he made a full recovery.

1.7 SINGLE-HANDED OPERATION (FISHING VESSELS)

Single-Handed Operation, a safety leaflet published by the Maritime and Coastguard Agency, contains the following safety advice:

Getting it Right

- *Telling someone ashore where you intend to operate and when you intend to return.*
- *Considering using a safety harness while you are working on deck.*
- *Dressing to keep warm, dry and safely protected as possible.*
- *Fitting machinery emergency stops and maintaining them.*

Getting it Wrong

- *Taking unnecessary risks. There is no one to help you if you make mistakes.*

1.8 FISHERMEN AND SAFETY

Fishermen and Safety, a guide to safe working practices for fishermen, also published by the Maritime and Coastguard Agency, contains the following advice:

Fishing Dangers

- *Before shooting or hauling make sure that all gear on the deck is stowed properly so that there is nothing to trip or fall over.*
- *Have a sharp knife to hand, to enable clothing caught in moving fishing gear to be cut free.*
- *Be alert when gear is being shot or hauled and watch out for shackles or swivels which may jam in blocks. If you are not directly involved in the operation - keep clear!*

Winches, Haulers, Deck cranes, etc

Each year, at least one UK fisherman is killed by being caught in the winch or by other accidents with deck machinery. Many are injured, losing fingers or limbs in accidents with pot haulers, net haulers, power blocks and net drums. Such accidents do not only happen with inexperienced fishermen; many experienced men, with years at sea, also suffer such accidents.

- *If you are operating a winch or similar machinery, do not leave the controls until the task is complete and the winch is secure.*
- *Think about the equipment on your vessel: can it be made safer by the addition of a guard or other safety measures?*

1.9 RISK ASSESSMENT

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997, which came into force on 31 March 1998, require all fishing vessels to carry out a risk assessment. The concept of a risk assessment is to ensure the health and safety of workers so far as is reasonably practical, by the application of certain principles. These principles include the avoidance of risks, and the evaluation of unavoidable risks and the taking of action to reduce them.

However, these regulations only apply to employers and workers, and are not applicable to fishermen who own and operate their vessels single-handedly.

SECTION 2 - ANALYSIS

2.1 GENERAL

This accident highlights the dangers involved in the single-handed operation of fishing vessels.

Fortunately it was not fatal. However, it could quite easily have been if the winch had been driven by a more powerful engine or if the skipper had not managed to free himself.

A little more thought about the operation and the risks involved could have prevented this accident.

2.2 MANNING OF THE VESSEL

Because the skipper had elected to operate his vessel single-handedly, no one was available to offer assistance or raise the alarm when the accident happened.

The skipper did not tell anybody when he was intending to return to harbour, contrary to the advice given in "*Single-Handed Operation*". Consequently, nobody was concerned when he did not return later that evening.

It was unwise for the skipper to put to sea single-handedly. Had an additional crewman been on board, immediate assistance would have been on hand, and the alarm could have been raised earlier.

2.3 HAZARDS ON DECK

It was normal practice for the skipper to clear the working deck of any obstructions before hauling. However, on this occasion, because not all the catch had been graded from the previous haul, an unnecessary hazard was created by the six fish boxes on the small working deck aft.

Had the working deck been cleared before commencing the hauling operation, in accordance with the skipper's normal practice and the advice given in *Fishermen and Safety*, the hazard would not have existed, and the accident might have been avoided.

2.4 UNNECESSARY RISK

The skipper decided to continue grading the catch while hauling the gear. By doing so he placed himself in immediate danger and was vulnerable to falling on to the moving warp as it was being heaved on to the winch.

Had the skipper remained at the controls on the fore side of the winch until hauling was completed and the winch made secure, in accordance with the advice given in *Fishermen and Safety*, the accident would have been avoided.

2.5 THE WINCH

The winch was not fitted with a dead man's handle, a device requiring the operator to apply pressure to the control lever during operation. Because of this, it was possible for the skipper to leave the winch while it was heaving.

Had a device, such as a dead man's handle, been fitted to the winch control, the skipper would not have been where he was, with the winch running, when the accident occurred.

2.6 RISK ASSESSMENT

Although not required by regulation, had the skipper carried out even a basic risk assessment, the risks taken which led to this accident could have been identified.

Appropriate control measures could then have been introduced to prevent the accident.

It would be prudent for all fishermen owning and operating their vessels single-handedly, to carry out a risk assessment.

SECTION 3 - CONCLUSIONS

3.1 FINDINGS

1. It was unwise for the skipper to sail the vessel single-handedly. [2.2]
2. The skipper did not tell anybody when he intended to return to port, contrary to the advice given in *Single-Handed Operation*. [2.2]
3. No one was available to raise the alarm.[2.2]
4. The hazards on deck were not cleared before hauling, contrary to the advice given in *Fishermen and Safety*. [2.3]
5. The skipper put himself at risk unnecessarily. [2.4]
6. The skipper did not remain at the winch controls, contrary to the advice given in *Fishermen and Safety*. [2.4]
7. A dead man's handle fitted to the winch control would have prevented the accident. [2.5]
8. A risk assessment, and the introduction of appropriate control measures, might have prevented the accident. [2.6]

3.2 CAUSE

The cause of the accident was the skipper losing his footing on deck and falling on to the trawl warp while it was being heaved on to the winch.

3.3 CONTRIBUTORY CAUSES AND UNDERLYING FACTORS

1. The skipper's decision to operate the vessel single-handedly. [2.2]
2. Not clearing the deck of hazards before hauling. [2.3]
3. The skipper placing himself in immediate danger. [2.4]
4. The absence of a dead man's handle fitted to the winch control. [2.5]
5. The lack of a risk assessment. [2.6]

SECTION 4 - RECOMMENDATIONS

The Maritime and Coastguard Agency is recommended to:

1. Consider advising fishermen who own and operate their vessels single-handedly to carry out a risk assessment.

The skipper/owner of mfv *Wakil II* is recommended to:

2. Consider carrying out a risk assessment.
3. Consider fitting a dead man's handle to the winch control on board his vessel.

**Marine Accident Investigation Branch
December 2000**