

# Part 3 – Leisure Craft



This issue of Safety Digest features a flyer to the leisure industry from the most publicised yachting accident in recent times, the loss last August of the yacht *Ouzo*, and her three crew, after an incident with the P&O ferry, the *Pride of Bilbao* 6 miles south of the Isle of Wight.

As editor of Britain's biggest-selling boating magazine I am very aware of the impact the *Ouzo* disaster has had on boat owners who sail in the vicinity of shipping routes. There's a new air of caution, even among seasoned yachtsmen. The fact that the ship's watch did not see the *Ouzo* by eye, or on their radar, blows away the general assumption by many yachtsmen that ships will see them and that a radar reflector guarantees you will be seen.

The advice to yachtsmen in the 'leisure' flyer is about making your yacht as visible as you can, and ensuring you have the equipment necessary to call for help and to survive in the water. Until the *Ouzo* disaster, many boat owners did not think of an expensive EPIRB, or liferaft, or lifejackets with all the 'extras', as necessary for coastal cruising. Yet *Ouzo* was lost just 6 miles off the coast, and any of those items could have improved the crew's chances of survival.

*Ouzo* was not an isolated case. The yacht *Tuila*, lost in the North Sea with all crew, was most likely to have been run down by a ship. Only 4 years ago, the *Wabkuna* was sunk by a P&O container ship in the English Channel, the crew miraculously survived. With these incidents still fresh in our readers' minds, the MAIB's advice to yachtsmen is being taken very seriously.

To its great credit, as a result of its *Ouzo* investigation, the MAIB commissioned a test of yacht radar reflectors. Shockingly, the performance of most was, as Practical Boat Owner reported, 'frighteningly poor'. This knowledge puts an even greater onus on yacht skippers to not assume they can be seen, and for manufacturers to produce better radar reflectors.

Thanks to the MAIB's investigation and report into an incident involving a yacht and a High Speed Craft in this issue of Safety Digest, ship operators are warned again that, 'Even HSCs must obey the COLREGs!' I was once told by a fast-cat ferry skipper that 'yachts are stationary objects' to them. That may be so, but we are stationary objects with the ability to be injured when tossed around in wash, and to feel fear when fast ferries unexpectedly change course.

A day on the waterways turned into tragedy in the blink of an eye, and a child was injured by a piece of cabin furniture. These two accidents in the remaining two reports this month both remind us that we can be a danger to ourselves and our crew, even if no other vessels are involved. Anyone who reads these reports will step aboard a narrow boat, and secure a locker lid, with more thought in future.

The MAIB reports are very much welcomed by the 48,600 buyers and 219,000 readers of Practical Boat Owner. The knowledge gained from the misfortunes and tragedies of others may result in they themselves sailing more safely.

Sarah Norfolk



### **Sarah Norbury**

Sarah Norbury is editor of Practical Boat Owner, Britain's biggest-selling yachting magazine. Matters of seamanship, navigation and safety are given high priority within the editorial pages and boat owners rely on PBO for the latest news and navigation updates.

Sarah has been Editor of Yachting Monthly, Practicals Editor of Motor Boat and Yachting and a journalist on Classic Boat, Yachts & Yachting, and Boat International.

She is a keen keelboat racer and also enjoys cruising.

## Fatal Injuries From Propeller



### Narrative

A family were enjoying their first narrow boat holiday together on a hired boat. The hire company had provided buoyancy aids and shown the family how to manoeuvre the boat and operate the locks on the canal before they set off.

Two days into their holiday, the family approached a lock which was obscured from their view by a bend in the canal and a bridge immediately ahead of the lock gates. Their boat came level with another hire boat moored in the lock waiting area, and the family realised that they needed to move astern to moor and wait their turn for the lock. With the wind blowing down the canal, from bow to stern, the helmsman put the propeller into reverse, but was unable to prevent the bow being skewed at an angle across the canal. The boat then made contact with the stern of the moored narrow boat and a family member jumped from the stern to the bank using the stern

mooring line to help secure the boat safely.

The boat then made contact with the canal bank, and the helmsman was seen to tip over the guard rail, which was at about knee height and fitted round the cruiser style stern. He managed to hold on briefly, with his legs hooked over the rail, before dropping into the water on the outboard side. The crewman with the stern line jumped back on board and stopped the engine, but could not see the helmsman in the water. Although buoyancy aids were available on the boat, the helmsman was not wearing one. A lifebuoy was thrown into the water, but with no sign of the helmsman, the crewman jumped into the canal to assist. The crewman quickly found the helmsman's leg, but could not pull him free. Another family member and the helmsman of another boat jumped into the waist deep water to assist, but the helmsman was entangled in the propeller.

The crewman climbed back on board and

removed the weed hatch in the engine compartment to gain access to the propeller. He could see the helmsman was trapped by torn clothing, with his head and arm caught in the propeller. Using scissors, he managed to free the helmsman, and with the assistance of

the emergency services, who had quickly arrived at the scene, the helmsman was recovered to the canal bank. He had suffered severe injuries to the back of his shoulders and head, and his left arm was very nearly severed. He was pronounced dead at the scene.

## **The Lessons**

1. Although serious accidents are rare on the inland waterways, boaters, and particularly those new to boating, should be aware of the potential hazard posed by a rotating propeller.
2. All responsible people on board should be familiar with the actions to take in an emergency, and be able to stop the propeller quickly if needed.
3. Boaters should check canal maps for potential obstacles such as locks and bridges, and slow down if the view ahead is obscured to avoid having to make difficult manoeuvres at short notice.
4. Although hand rails are not required on narrow boats, where they are fitted, they should be of an appropriate height to prevent people from falling overboard near the propeller.

## Mind Your Fingers



### Narrative

A 10.6m yacht was returning to its home port with its owner at the helm. The boat had been recently purchased by the owner. As the yacht neared the entrance to the harbour, the wife of the skipper was down below getting their 14 month old son ready for bed in the forward cabin. The infant was laid down on a bunk adjacent to a storage unit with a lid that was secured open by a rigid spring mechanism. As his mother turned her back for a moment, the boy rolled over and sat up and, in doing so,

deflected the spring that was keeping the locker lid open. The lid came crashing down, trapping one of his fingers.

The owner called the emergency services and requested an ambulance on arrival in the home port. The harbourmaster came out in his launch to meet the yacht, and he took the injured boy and his mother to a waiting ambulance. Fortunately, the little boy did not lose any bone from his finger and was expected to make a full recovery.

### The Lessons

1. Make sure any heavy locker lids or chart tables can be secured open and do not pose a significant hazard.

2. Special care needs to be taken where children can easily reach securing mechanisms. If children travel on your vessel, it is worth considering your craft's arrangements from a child's perspective to avoid potentially nasty accidents such as this.

# A Change of Mind

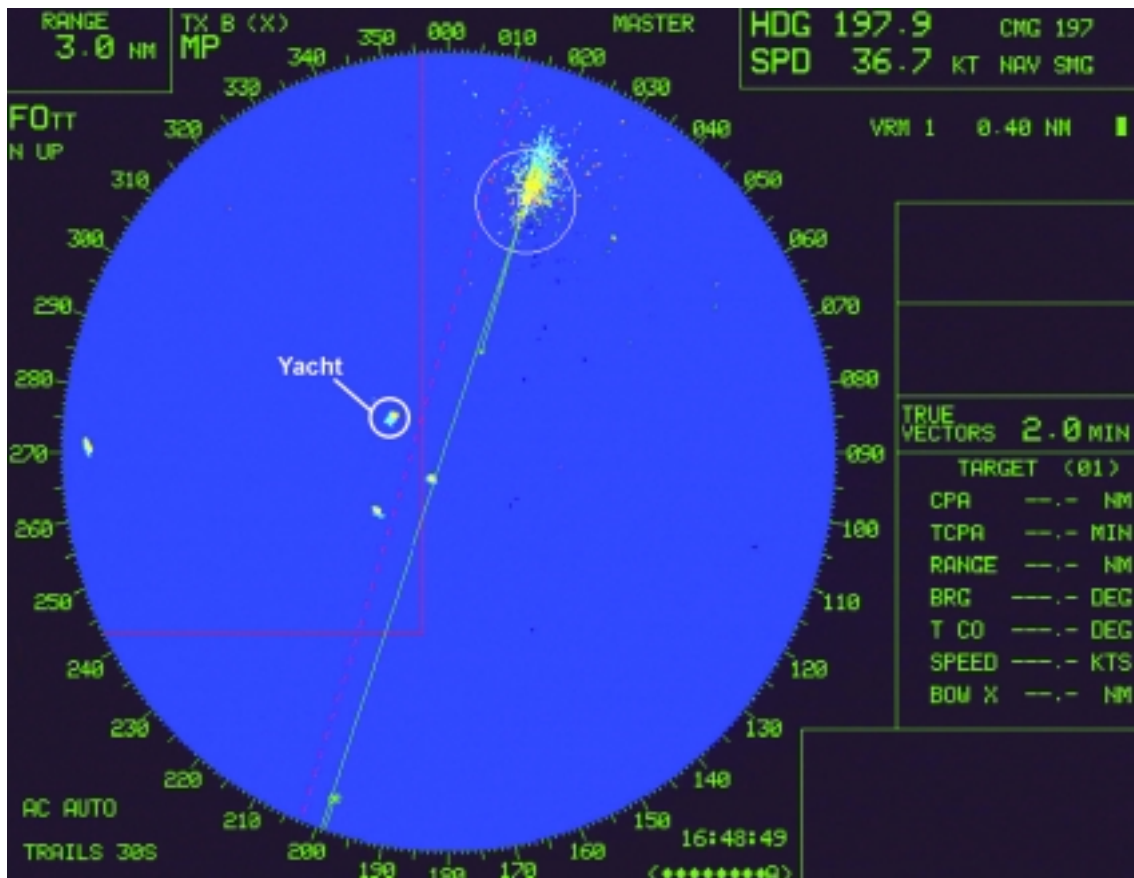


Figure 1: VDR extract of HSC

## Narrative

What started out as a leisurely passage on the south coast turned into a frightful adventure for the skipper and crew of a motor yacht due to the failure of the master of a high speed craft (HSC) to appreciate the situation from the yacht's point of view.

On clearing the entrance of the estuary, the master of the HSC retained the con of the vessel and increased speed to about 34 knots. At this time, the chief officer was assisting the master in executing the passage plan.

Visibility was good, and although there was a force 5 wind blowing, the height of the sea was recorded as 0.5m. Both 'X' and 'S' band radars were working, but unfortunately no targets were acquired for plotting and the present traffic was being assessed by eye rather than by all the available means.

The motor yacht was first sighted at about 10 degrees on the starboard bow at a distance of about 3.5nm (Figure 1) and appeared to be crossing and on a collision course. The master of the HSC, being the give way vessel, decided to alter course 15 degrees to starboard which, by the time he had done so, put the motor yacht 1.6nm away and fine on his port bow (Figure 2).

For some unexplained reason, the master changed his mind at a distance of about 1nm and altered course to port by about 10 degrees (Figure 3). The astonished skipper of the motor yacht stopped his engines to increase the passing distance, and the HSC passed 2.5 cables ahead. The skipper and crew of the yacht had been frightened by the experience, which was made worse by having to brace themselves against the effects of the HSC's wash.

# CASE 25



Figure 2: VDR extract of HSC

The master of the HSC was unaware that his last minute change of plan had caused so much upset on the yacht. He believed he had the situation under control. The yacht skipper reported the incident to the MAIB and, consequently, the Voyage Data Recorder (VDR)

records were retrieved from the HSC. It was only through analysis of the VDR data that exactly what had occurred could be deduced. Several shortfalls in the bridge team performance were identified and measures were put in place to avoid a similar incident.

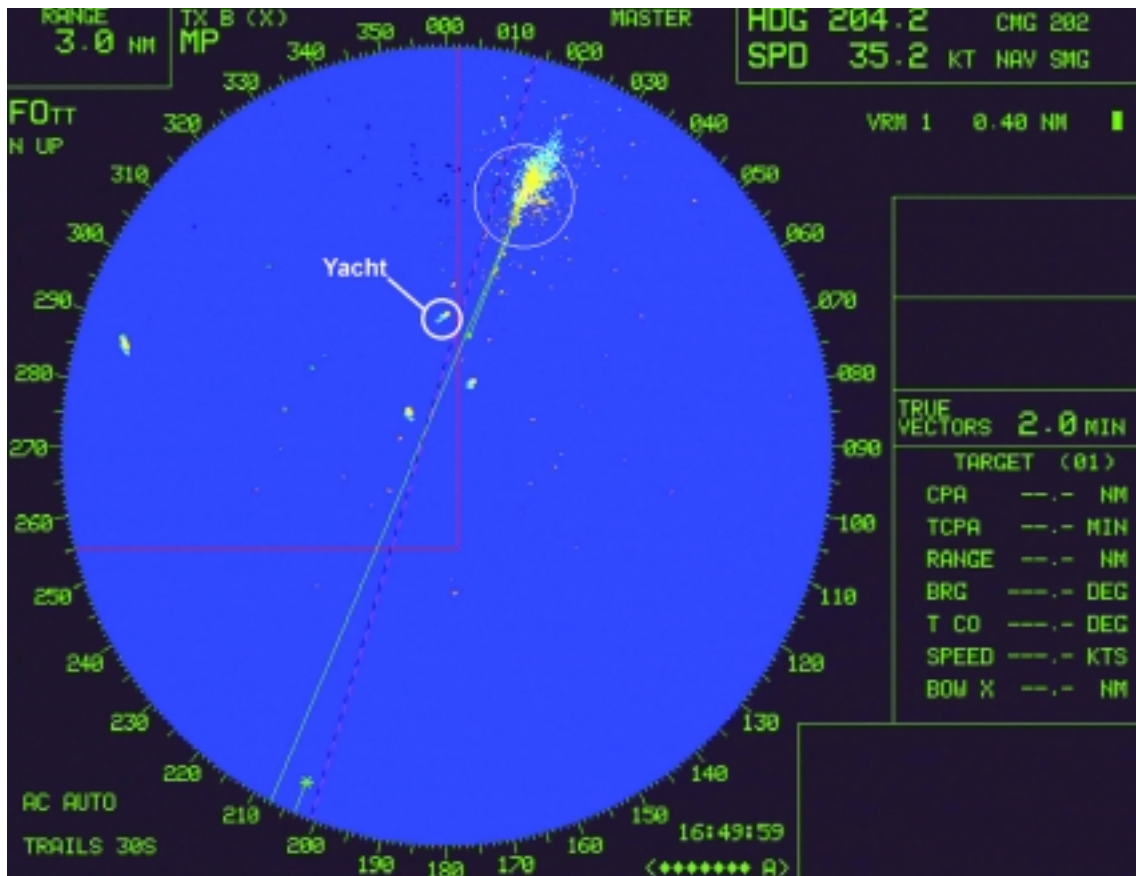


Figure 3: VDR extract of HSC

## The Lessons

1. It is a good idea for ship managers to routinely download the data from the vessel's VDR every now and again to audit the bridge team performance.
2. Masters and OOWs on fast merchant vessels, and especially those on HSC, should consider how their planned actions will be seen by smaller, slower craft, yachts and fishing vessels. Although the master was aware of the yacht, and in his mind had the situation totally under control, the yacht skipper had a very different opinion and desperately needed reassurance.
3. Even HSCs must obey the COLREGs! In this case, the master of the HSC should have taken early action to clearly indicate his intentions. He should then have maintained that course until past and clear and, most definitely, should not have changed his mind and altered at the last minute across the bow of the yacht. There was no navigational reason for him to have to pass closer than, say, a mile from any craft in the vicinity.
4. Good bridge teamwork practices require that actions by one person are cross-checked by another member of the team. In this case the chief officer should have questioned the master's intentions/actions.
5. Wash from HSCs can be a serious problem to small craft, even at sea and in deep water. Bridge teams should be sensitive to this fact and should plan their actions accordingly.

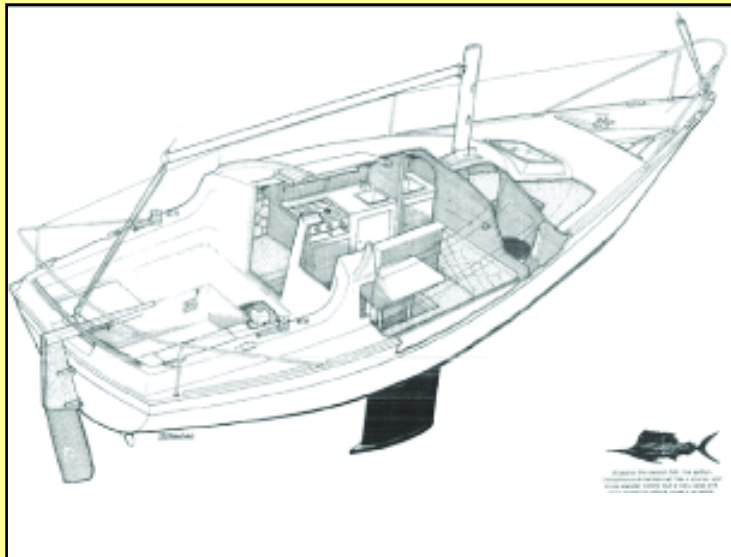
## MAIB

MARINE ACCIDENT INVESTIGATION BRANCH

### FLYER TO THE LEISURE INDUSTRY

#### **OUZO:**

#### **ACCIDENT WITH THREE FATALITIES 21 AUGUST 2006**



#### **Narrative**

The yacht *Ouzo* sailed from Bembridge, Isle of Wight (IOW), bound for Dartmouth, Devon on the evening of 20 August 2006 with her three regular crew on board. The last record of the yacht was at 2230 when she went out of range of the Southampton/Portsmouth VTS radar system in Sandown Bay. At this time it is believed that the yacht was sailing close hauled in a south-south-westerly direction.

The body of one of the crew members was found in the sea just before midday on 22 August about 10 miles south of the Nab Tower. At about 1900 on

the following day, the bodies of the other two crew were recovered from the sea. They had all been wearing inflated lifejackets and good quality yachting clothing. Despite extensive surface and sub-surface searches no trace of the yacht has been found.

Voyage data recorder (VDR) records from ships that had been in the area during the night of 20/21 August were recovered and analysed by MAIB inspectors and it was discovered that the ferry *Pride of Bilbao* had been involved in an incident with a yacht 6 miles south of the Isle of Wight in the early hours of 21 August. The investigation concluded that she had either collided with, or passed so close to *Ouzo* at that time, and that the yacht had been swamped or capsized by the vessel's wash.



Just before the incident, *Pride of Bilbao* had made an alteration of course for navigational purposes which might have inadvertently served to confuse the yacht's crew about the ferry's intentions. In any case, any attempts the yachtsmen might have made to attract the ferry's attention were ineffective as the ferry's watchkeeping officer and lookout only saw the yacht's lights at the last minute, by which time they were unable to keep well clear. The yacht had not shown up on the ferry's radars despite probably having a radar reflector hoisted.

## Safety Issues for yachtsmen

1. Yachts cannot be seen easily from the bridges of ships, and yachtsmen need to be proactive in attracting the attention of the ship's watchkeepers. The crew of *Ouzo* kept a powerful torch at hand for just such an emergency but, in this case, were probably unaware of the real danger until it was too late. **Yachtsmen should not hesitate to attract the attention of ships' watchkeepers by whatever means are available.**
2. The lookout on the ferry had not seen the yacht until it was very close ahead. This gives rise to a number of possible factors including, from the yachtsmen's point of view:
  - i. The lenses of navigation light units similar to the one fitted to *Ouzo* are prone to crazing which substantially reduces their efficiency. **(as shown on photo)**
  - ii. The lamps (bulbs) fitted to the navigation lights used on *Ouzo* can easily be inadvertently replaced with lamps of a lower rating.
  - iii. It is quite common for replacement lamps for yacht navigation lights to have damaged filaments, which cause an intermittent fault.
  - iv. If the yacht heels more than 5° the horizontal intensity of her navigation lights may be decreased.



**Yacht owners should make every effort to ensure that their navigation lights are fully effective, and their characteristics understood.**

3. *Ouzo's* small radar cross section, coupled with the moderate sea conditions, made it unlikely that the radars on *Pride of Bilbao* could separate *Ouzo* from the sea clutter even if *Ouzo* had been displaying her octahedral radar reflector. A study of the capabilities of typical radar reflectors that may be fitted to yachts will be published on the MAIB website on 1 May 2007. **Yacht owners should be encouraged to fit the best radar reflector they can afford.**
4. One of the crew members survived in the water very much longer than the others probably due to the fact that he had fitted his lifejacket tightly. The simple addition of a crotch strap would have significantly increased the survival times of the yachtsmen. **Crotch straps should not be optional extras on lifejackets; they should be supplied, fitted and worn.**
5. After the incident, the alarm was not raised by the yacht's crew. The factors contributing to this include:
  - i. There was probably too little time before the yacht's crew found themselves in the sea. **A hand-held VHF set in a waterproof cover could have provided a means of sending a distress alert.**
  - ii. The boat did not carry an EPIRB and/or a liferaft rigged with a hydrostatic release unit. **An EPIRB and/or a liferaft would have dramatically increased the crew's chances of survival.**

A similar flyer has been produced for merchant vessels, identifying the safety issues pertinent to them.

Further details on the accident and the subsequent investigation can be found in the MAIB's investigation report, which is posted on its website: [www.maib.gov.uk](http://www.maib.gov.uk)

Alternatively, a copy of the report will be sent on request, free of charge.

Marine Accident Investigation Branch  
Carlton House  
Carlton Place  
Southampton, SO15 2DZ

Telephone 023 8039 5500

Email [maib@dft.gsi.gov.uk](mailto:maib@dft.gsi.gov.uk)

April 07