Rough weather at sea in a motorboat

Gilbert Park undertakes some training for riding out heavy seas and wind in his Mitchell 28-but first has to find some rough weather

arely in 50 years have I been caught out in rough weather at sea. Indeed, in recent years it has become even rarer with improved weather forecasting. However, not only does avoiding rough weather mean longer stays in harbour, it also means I'm not experienced in dealing with it if caught in a localised area of rough seas; such as happened recently when approaching Portland Bill. I decided that perhaps it was time I got some training so I could handle big (for me) waves. I approached various training schools - some wouldn't do it - but in the end I was able to settle on Mendez Marine.

My boat is a Mitchell 28, only 8.5m long and just under 3m in beam, similar in design to a Nelson semi-displacement hull with a sharp raised bow. She is built to the Recreational Craft Directive (RCD) classification B, which means wind up to 40 knots and waves 4m high.

Before booking the instruction I thought I should just check with the insurance company if it was OK to deliberately go out in weather and waves up to the RCD classification of the boat. They were happy so long as an instructor was with me.

There was a little delay in getting the course organised and finally a date was set for late October. Kai was to be my instructor. He had the right qualification for this, being the second coxswain for the Freshwater Lifeboat. As my boat lives on a tidal mooring and it was springs with lunchtime tides, I had to go to Haslar



Gilbert took his Mitchell 28 out into rough seas and the overfalls off St Catherine's Lighthouse as part of his training

Marina the day before. Having the afternoon there was enjoyable with the first of many rainbows appearing to greet me. Later the Emirates Tower was all lit up and visible from the cockpit of my boat.

Finding rough conditions

As I turned in that night the weather forecast looked good for some rough weather the next day... but it was wrong! When I woke there was no wind and a mirror-like sea. Kai arrived and after some discussion, peering at wave forecasts and charts we decided to go to the overfalls off St Catherine's Lighthouse on the south



No wind or waves at Haslar, but that changed south of the Isle of Wight



side of the Isle of Wight.

I'd carefully checked the boat before Kai arrived, to make sure the engines wPLease move OK and everything was stored away. Withe photo over Kai, I went through the safety briefing to the right as checklist on the boat and showed him where all the safety equipment was we are cutting stowed and how to use it. Then it was tir out the pyramfor off.

As we left Portsmouth Harbour we didal wave (far radio and AIS check with Gosport Natio Coastwatch Institution and then, once the engines were at their operating temperatures, a wide open throttle test for three minutes. If something was going to break I'd rather it happened here, than out at sea. Both the engines and all the

electronics performed flawlessly. As we went out towards the Nab Tower it was a lovely day, perfect for motor boating-smooth sea, no wind, even the sun was shining - but hopeless for rough weather training.

As we lost the shelter of the Isle of Wight, however, waves started to appear and these gradually increased in height. This was a good time to test out the Humphree Lightning interceptor stabilisers fitted to the boat by switching them off: the difference without them was very noticeable and they were quickly switched on again.

Wave education

The waves kept on increasing in size. reaching a maximum height of about 2.5m. The boat performed flawlessly with its high bow cutting through the waves. the Lightnings automatically keeping the bow up as she went into the waves.

I learned that the best way to approach the waves was not to head at 90° to them, but to travel at about 45° to the wave, as this reduced both the angle of rise and fall over the wave. Where possible, avoid the breaking water on the top of a wave and instead head for the shoulder.

There is no textbook answer to what's the right speed when going into the waves. You need enough power to climb up the wave, but not too much that the boat is driven off the top of the wave and slams down into the trough or even buries the bow in the next wave.

Conversely you need enough speed to maintain steerage all the time. Once you understand what you are trying to do it becomes easier to manage your speed in this situation.

Eventually, we decided to head back to Sandown to run before the waves.

To turn around, Kai got me to look ahead and wait until there was a relatively flat series of waves and when we were in a trough, turn the wheel quickly to the way I wanted to go and give a burst of power to the opposite engine to turn powerfully, to be at right angles to the next wave.

What you want to avoid is being parallel to a wave on the face of a wave.

The beam of my boat (2.8m) was roughly the size of the wave height. If





you're broadside on to a wave equal in height to the beam of the boat then the wave may capsize you.

Engine problems

In the middle of this, it all went wrong! The starboard engine would not maintain its cruising speed of 3,000rpm. At first, it was 2,500rpm eventually decreasing to 1,800rpm. In 2.5m waves there isn't a lot you can do to find the cause and correct it. It was either fuel or air supply that would cause a problem like this.

Speed was now reduced to only 6 knots and the current was changing to 4 knots against us as we headed to Sandown, meaning we had a speed over the ground



Earlier we'd discussed going all the way around the Isle of Wight and now we decided this was the time to do it.

of just 2 knots in rough conditions.

Changing direction to go straight to the Needle Channel meant we had the sea on our beam as we headed for the Needles: both dangerous and uncomfortable. It was time to learn about tacking. We aimed south of the Needles Channel going at 45° to the waves and our speed increased to 10 knots. We knew where the Needles were because a rainbow appeared right over them. It took us just over an hour to get about two miles offshore of the entrance, a not too uncomfortable journey.

Avoiding surfing

Then it was time to tack into the channel with the sea behind us. Running before the waves has its own hazards. The risks include the wave lifting the stern out of the water so that the propellers and rudders no longer have any effect. The wave can then turn the boat parallel to the wave (broaching), risking capsize. The risk will be increased if the bow \Im

> The Needles Lighthouse seen after Gilbert started manoeuvring his boat around the Isle of Wight







digs into the wave in front. It was not too bad at first and Kai instructed me that when a wave lifted the stern, I must avoid the boat surfing as this makes the boat go faster with more risk of the bow digging in. I had to get the speed adjusted so that the stern wasn't completely lifted out of the water and still have steerage to enable me to counteract the turning effect of the wave on the stern.

Keep watch astern

I also learned to look behind me to see when large waves were heading for the boat. I don't know what the speed was because I didn't have time to look at the

chart plotter, I was too busy looking forward and aft out of the windows. I could also have used the throttles to steer, but with one engine on the blink, we

didn't think it was wise to adjust throttles. This training proved invaluable a few minutes later.

We were heading to cross on one side of the channel where the rocks continued out, well clear of the wreck of the steamship *Varvassi*. With the shallowing of the water and the rocks below, the waves became quite big, violent and confused. It was hard work and needed lots of concentration to prevent any mishaps. Once through the channel, the sea started to calm down and I was able to check that a fender or the like was not blocking the air inlet. Checking the first fuel filter (between the tank and the engine) meant lifting part of the floor; the filter bowl was nice and clear, full of red diesel. Erroneously, I thought the filters were fine. Time to call in the experts, Sea Start. We agreed to rendezvous at Lymington, where another rainbow greeted us.

Expert advice

Michael from Sea Start was very prompt at arriving and taught me a lot about fuel

'Look behind when large waves are heading for the boat'

filters. Looking at the bowl on the primary filter will only tell you if there is water in the fuel, not necessarily that the filter is blocked. Off came that filter and

it was squeaky clean, but as I had spares on board it was changed anyway.

The next point I learned was that even if the primary filter is clear it doesn't mean that the engine filter can't be blocked. I had a spare engine filter on board and that was changed as well. What's more, it solved the problem. The total delay was only about 30 minutes.

From Lymington to Haslar was plain sailing and we got to the marina in time

for Kai's ferry home. It was a great day, I'd learned a lot but was tired from all the concentration. I decided to stay in Haslar Marina rather than go back to Chichester Harbour. It was just as well I'd done the training, though, because the next day was blowing a Force 6 with 1.5m waves and the tacking principle I'd learnt made the trip much more comfortable and, dare I say it, enjoyable.

TOP TIPS

What did I learn?

Although I can cope better with rough weather it's still better to avoid it where possible.

When going into the waves look perhaps six to eight crests ahead to see the really big waves.
When waves are behind you look behind, again so you can see the big waves before they hit you.
In big waves (equal to or greater than the beam of your boat) never allow the boat to be beam on to the wave - that risks a capsize.
Waves inshore are not of a uniform size and the direction they come from can change unexpectedly.

6 Stabilisers work and make travelling in even big waves more comfortable and safer. They can respond several times to the condition of each wave, more than is humanly possible and automating this means you have more time to concentrate on other things.

Concentration is needed when there are big waves around, this can be tiring when added to the physical stress of movement.
Changing filters in big waves isn't advisable. Not only can the movement make it difficult, but the engine will be hot, risking burns. In my boat you first have to move and safely stow the table (or on the other side, the cooker), a piece of the floor the same size and two parts of the cabin sole.

9 If you think it's a fuel problem change the filters - I could have done this but was misled by what I thought I knew!

10 I carry a set of engine spares and in this case, they saved time and frustration, even though I didn't use them myself.

11 No matter how careful and thorough you are, things will still go wrong. I had the engines fully serviced earlier in the year by a Yanmar main agent. Every time I put fuel in, I add a dose of fuel treatment. Two days before the training I spent a whole morning going over both engines with my grandson and I did a wide open throttle test in the morning.

12 If you need to construct a Plan remember the mnemonic STOP. Stop what you are doing, Think about what's going on, Observe what's happening and Plan how to resolve the situation. Don't panic.

