

The best way to prepare for any storm is to prudently avoid it. But when the inevitable occurs and you happen to be in a production catamaran then you need to have some strategies. Top delivery skipper **Peter Neaves** shares the benefits of his wealth of experiences.

# HEAVY WEATHER LESSON

**I**n the past two years I have sailed over 22,000 nautical miles on board catamarans, effectively 95 percent of all miles I have logged during this period.

A friend of mine I call the "weatherman", looks after the next of kin details, tracking our position and monitoring the weather forecast for any area I am travelling in. He relays weather information to me via SMS messages over my satellite phone. Duane has probably read every article printed about catamaran designs and sailing them in heavy weather.

He is currently building a catamaran, and interestingly he has painted a black "V" against an orange background (international code for distress) to the underside of his bridge deck. His decision highlights the fact that no matter how hard cats are to tip over, it can happen; and it's much harder to get them back upright.

#### DOCK CHECKLIST

Well before putting to sea it's advisable to work through a checklist such as this: >>





## CASE STUDY – QUATRA DELIVERY



A couple of years ago I was delivering *Quatra*, a 44 foot Fontaine Pajot catamaran from Tahiti to Sydney.

We were six days into the passage when my weatherman noted a low was forming off the Queensland coast. The next day he reported that this cell was deepening and building in strength.

The potential cyclone was tracking across the northern tip of New Caledonia and was expected to head south of Fiji. Winds at the centre of the system were forecast to be blowing at 60 to 70 knots.

At this stage the centre of the low was more than 2000 nautical miles to the north-west and heading in our direction. We were in 20 to 25 knots trade winds, making good progress in a reasonable sea state.

So with the barometer falling, and the wind definitely about to increase, I had to choose a

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course to keep the wind either forward or aft of the beam.

*Quatra* being what I would call a well-performing cruising catamaran we could have skirted across the path of the approaching low and sailed safely to the south. Alternatively, Tonga was some 500 nautical miles to the north-west where a secure harbour or "hurricane hole" could possibly be reached.

However, I opted however for a third alternative: continuing more or less on course well to the south of the low, but at a substantially slower pace.

**De-power early**

We immediately reefed the mainsail while the wind was still moderate and furled the headsail to match the two reefs. This proved to be a bit too conservative overnight, so in daylight hours most of the headsail was unfurled.

Before the next sunset the main was totally lowered and secured. As the wind veered more to the east, it made maintaining our desired course under two sails more difficult.

Over the next two days the seas gradually built to over three metres, (which due to our on-board perspective

tended to look more like four metres). The boat felt very safe and comfortable occasionally surfing down the more significant waves.

**Out of harm's way**

The low continued on its predicted course and fortunately did not intensify further. So, by the end of the third day of monitoring, its risk had been downgraded to that of a 'Tropical Disturbance'.

As it started to dissipate over the following days it slowly moved towards the bottom of Fiji. By the 14th day of our voyage we were around 600 nautical miles due south of the low.

The winds at this stage were south-easterly 25 to 30 knots with the rain bucketing down flattening the seas. We were now sailing away from the depression and the barometer was gradually rising. The decision based in the information at hand at the time had been vindicated.

- make certain the jackstays have already been run, anything on deck is well-secured and the anchor is lashed down or stored below
- check all the recommended safety equipment
- check all bilge pumps including manual pumps
- if you are carrying a sea anchor or a drogue know how to deploy it, especially where to attach it
- make certain you have sufficient warps
- check the equipment and deck fittings are suitable and strong enough
- below deck should also be in an orderly state. Once in bad weather off the New South Wales coast a couple of books and newspapers had found their way to the cabin sole. An earlier undetected hatch problem turned them into paper mache, blocking the strum box of a bilge pump and almost creating severe flooding. It's been noted that no pump works as well as a frightened man with a bucket

#### COMMS IN THE GREEN

One of my final preparations before departure is to make sure all of my communication equipment and devices are up to date and working properly.

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I update my position via a small text file directly to the internet. My weatherman uses this position to send me updated weather reports and routing information. I use an Iridium system/phone for internet and text messages. A vital part of my equipment is a short-wave radio for weather reports. Much to my disappointment however, the ABC has ceased transmitting on short wave since the beginning of 2017.

I check the satellite system is downloading correctly and also download the latest weather forecast before departure. Be aware that this data could be six hours old or more when you access it.

Today's phones, tablets and computers have a large selection of weather routing software and apps, the graphics and detail on these forecasts are improving all the time and can be remarkably accurate for even up to two weeks.

Most of these weather services get their data from other agencies and the forecasts they produce can sometimes be very different. So, when a low develops somewhere in your vicinity it's important to know where to go to get up-to-date information on the position, speed and direction that the low is moving.

This position needs to be marked on a chart either on paper or electronic or both.

#### TACTICAL DECISION TIME

Most gale conditions are forecast well in advance. You need to be able to position yourself to either avoid them or sail in the downwind quadrant of the low.

If you're unfamiliar with the design of your catamaran then online forums, catamaran builders, and various sailing websites should give you an idea of how different types and makes of cats will perform in storm conditions. Familiarise yourself with what has worked for other skippers in a similar situation.

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Different designs perform differently in adverse weather. High performance catamarans may have a chance of skirting the storm whilst maintaining a good speed and course.

For production catamarans the best tactic is to reduce sail and slow the boat down. You can't outrun a storm, so put the brakes on before the catamaran starts feeling dangerous for the conditions.

If your desired course to your destination puts wind and waves on your beam then it's necessary to choose a course that will put the waves and wind either forward or aft of the beam.

#### HANDS-ON

I will generally run a watch system with short hours on the helm, should hand steering become necessary. Modern autopilots tend to cope quite well in most conditions, but don't trust them.

Keep an eye on the amount of load being applied (helm balance) and try to adjust your sails accordingly. I encourage my crew to hand steer as often as they like, in all types of conditions, to get a good feeling for how the boat will react.

With multi-hulls, higher speeds equate to higher loads and this requires the crew to be extra alert and attentive while on watch. Prepare meals in advance, as hand steering can be tiring and good sustenance is important during rough weather.

#### STORM SENSE

In big wind and sea conditions my preferred option is running before the seas and wind with minimal sail, as the general choices available are:

- to carry on sailing with shortened sail
- heaving to or lying ahull
- running off before the wind with minimal sails,
- towing a drogue behind the vessel or using a parachute sea anchor.

Running off the wind puts less stress on the boat but may keep you in the weather system longer. Also, hand steering downwind can be exhausting for crew.

Sailing to windward can also be hard on crew though generally I don't find it too uncomfortable if you slow the boat down. Heaving-to or lying ahull are handy for fatigued crew, or to make necessary repairs, but slowly making forward progress is my preferred option.

The use of drogues and parachute sea anchors are well documented, perhaps due to good or maybe lucky weather routing so far, I have not needed to deploy either.

#### TIMING QUESTION

On long passages it is only a matter of time before you will run into heavy weather. Catamarans are safe, fast and exhilarating downwind, upwind though they can be quite tedious.

If I was not constrained by time, as is often the case with my work, I wouldn't even bother putting to sea for short trips if there is a forecast of strong wind forward of the beam. ⚓

Peter grew up in the western suburbs of Sydney. An uncle first took him sailing on a "Corsair" dinghy on Botany Bay at around the age of 10. He subsequently went on to race in "Mirrors", "Flying 11's" and "Manly Graduates" through his teens and later bought his own Corsair. Since then Peter Spent more than 10 years instructing sailing on Sydney harbour and has now been delivering yachts for almost 25 years, he has over 240,000 nautical miles logged, crossed the Atlantic, Pacific and Indian oceans and circumnavigated Australia multiple times. He is a member of the CYCA and Ocean Cruising Club.