

Extreme weather conditions in the 54th Sydney-Hobart Yacht Race 1998: A personal account.

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Will Oxley (33) has been sailing since he was a child. For his "day job" he works as a marine biologist at the Australian Institute of Marine Science in Townsville, North Queensland. He was the navigator on the 41' yacht B-52.

Preparation

The yacht B-52, a serious contender for handicap honours in the Channel-Handicap Division, was in excellent condition with sound equipment and a highly-experienced crew. Most had sailed together since 1992 and all had experienced winds of greater than 50 knots in earlier races.

As navigator, I monitored satellite images of the East Australian current (EAC), Australian weather charts, long-term weather models, and consulted Dr. Roger Badham, a professional weather-router/forecaster before the race.

Initially, the long range weather models were divergent with one showing a low pressure forming in the Tasman Sea to the east of Tasmania. By race day all models predicted the low but there was no consensus on where it would form.

Roger Badham's forecast for the start was: NNE 16 knots building to 20-25 followed by a southerly change (190-180°)/20-25 around midnight. The Bureau of Meteorology (BOM) forecast was for NE winds of 10-15 knots, reaching 20 by the afternoon. Sunday's outlook was for a southerly change of 20-30 knots early morning, easing to S/SE 15-25 during the day. Discussions with both Roger Badham and a BOM forecaster prior to the start suggested that we might expect the change to come from around 210° rather than 180°. Roger had also previously indicated that squalls of 50-60 knots had been experienced as the front passed through Victoria to the west of the course so it was possible that we would experience winds around 50 knots. His Sunday prognosis was for a SW'ly of around 30-35 knots, slowly increasing to as much as 40 knots, as we moved into Bass Strait.

Race Start 1300 hrs 26th December

We had what could best be described as an "average" start but managed to sail through Sydney Heads in close proximity with our immediate rivals. We all set spinnakers and began a wild ride south. Winds were initially around 18 knots but slowly built to around 25 with a messy sea. We stuck to our game plan and proceeded along the rhumb line with the assistance of 3-4 knots of current. This gave us an average speed over ground of around 17 knots. Winds increased to 30 knots. At around 1700 the BOM issued a Storm Warning which we received over the VHF radio. The Bureau forecast W/SW winds of 30/40 knots by 0800 Sunday morning and increasing to 40/50 by 1400 with very rough seas and a heavy swell: a typical "bad" Hobart.

I was able to plot the latest position of the front from radio reports and to estimate that we would encounter the change around 2400. We steered a course to position ourselves inshore just prior to the change. At around 2350 we changed sails with the

sky suggesting the change was close. The front hit at about 0015, spot on 210° but about fifteen minutes late! The change had just put us ahead of our direct competition who were further to seaward of us.

At around 0630, using the laptop PC hooked into the VHF radio, I poll faxed the BOM in Melbourne for the latest coastal observations. The observations were variable with light winds in southern Bass Strait while the 0600 report for Wilsons Promontory was WSW 71 knots with rough seas. I also listened to the Oil Rig forecast for eastern Bass Strait. They forecast the following.
0600 W winds 25/35 with gusts 45, waves 4.0 m (which was what we had)
1200 W/SW 30/40 gusts 50 knots waves 4.5m,
1800 W/SW 40/50 gusts 60 waves 5m,
2400 W/SW 40/50 gusts 60 knots seas 5.5m then gradually abating.

At 0930 I got the latest weather observations for Wilsons Prom. They were reporting WSW 79 knots and very rough seas. The Wilsons Promontory station tends to over read surface conditions because it is located at a height of 89 m but still, in my 12 years of sailing in Bass Strait, I had never seen Wilsons Prom. record that sort of a wind strength.

Winds continued to rise to around 45 knots and we changed down to just a storm jib. At this time we had some discussion about our options. We were already into Bass Strait and so decided to shift from "race mode" to "survival mode" around 1200 when conditions were expected to be at their worst. We took the opportunity to charge the batteries and to prepare the boat for worse weather.

As expected, around midday winds rose to above 50 knots and the seas increased to around 8 metres. Periodically we experienced sustained wind speeds of 68 knots and the seas rose to a conservative 10-12m. We decided to listen to the latest weather update then reassess our options. The 1700 report indicated that we were currently in the worst of it but that conditions should moderate by early morning.

Around 1830 we heard a large roar then a slap as a breaking wave smashed into the side of *B-52*. The boat rolled to 180° very quickly and then stayed there. It was actually pretty quiet after the roll. We did a quick check of everybody below decks and all were OK: there was nothing we could do about the two on deck. We had around 1m of water in *B-52* and she appeared to be slowly sinking. After about 3-5 minutes we were hit by another wave and the boat rolled back through 180°. During the roll back gear again went everywhere and one crew member got trapped under the sails under the stove. She emerged with blood streaming down her face and her blond hair blood red. A bandage stemmed the bleeding.

When we rolled back the two crew members on deck were located: one in the water hanging on to the stern of the boat and one crawling onto the foredeck. There was about 1 m of water in the boat. The broken mast was hanging over the port side and threatening to punch a hole in the hull. Immediately we divided into teams and one team bailed while the other cut the rig away. I tried to send out a MAYDAY call but both radios had been immersed during the roll and were inoperative.

It took about 15 minutes to get rid of the mast. At this stage we assessed our situation and decided to activate the 406 EPIRB. We bailed for about two hours and managed to reduce the amount of water significantly. The deck had been damaged during the roll and water continued to flood in each time a wave swept over the boat however we were able to keep pace with it. During the night we were located by a search plane then at around 2230 a Navy Sea King helicopter arrived. They attempted to winch our injured crew member off but conditions were too treacherous and the helicopter left after one hour of trying. [We later heard from the pilot that he was on auto hover at about 80' and then suddenly found himself at 10' such was the height of the seas.]

We had been working on the engine in the hour before the helicopter arrived and managed to start it after the helicopter left and slowly limp towards Eden 78 miles away. The wheel was damaged so we had limited steering. The seas were too great to set a course directly for Eden so we ran north for several hours. Just before dawn one of the huge seas breaking across the boat punched the port side windows in leaving two large holes and water pouring in. We quickly boarded these up and continued bailing. The deck continued to collapse and we shored it up to prevent it collapsing completely. Eventually we limped into Eden at around 1430 some 20 hours after the roll.

The insurance company subsequently declared *B-52* to be a total loss because of the extreme structural damage she suffered. We were very lucky to get her to Eden.