

On the matter of capsizing

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Halo Autumn 2009



First off, the best time to learn your capsize drill is BEFORE you capsize – hours and days before if possible. To avoid confusion, in this article I shall assume that the reader is the helm, and that the helm is better at pulling the boat back up. It might be that in your circumstances the roles are reversed. I also assume that the wind strength is somewhere in excess of force four. (i.e. between force three and force five). Always, during a capsize and after righting, be attentive to possible injuries. If there is doubt, better to get the rescue first. If the weather is cold and your crew becomes belligerent or uncooperative, quickly get them to shore with the rescue and put them under a warm shower in their wetsuit until thawed out, and get medical attention organised straight away.

In all capsize situations, be sure that you and the crew are completely free of any sheets or ropes. A hook-bladed knife is best for quick release in an emergency. If climbing back in over the rear transom, do not grasp the transom horse slider track, because a wave can push the rudder, spinning the tiller with tremendous force, and your fingers will not stop the tiller. This is the number one reason why nowadays I always fit a strop for the mainsheet.

In the instance of an off wind capsize, the crew has an extra job. The kite must be pulled down and the pole stowed before righting. You will want to get it back flying straight away, but this is the quickest way of resuming the race. Righting the boat with the kite up is usually very slow, and you are liable to capsize again immediately.

After righting the boat on an off wind leg, always try to get the kite going first, then the mainsail and jib as balance is restored and water starts draining. It helps to get both of you well aft of the thwart to get water flowing from the front to the back, and often a great amount quickly goes out over the transom.

Q>How much centreboard?

A>Enough to stand on when you capsize.

Q>When to put bailers on?

A>Force 4 and above - one or both on always.

Both your drill and the crew's drill should cover (at least)

- A} Capsize to leeward
- B} Capsize to windward
- C) Man overboard,

If you do not know the basic procedures for the above situations, I am sure that there are club sailors around who will be happy to help get you started.

Having got the basics, here are some points to consider.

Leeward capsize - If you are quick to get a foot on the centreboard (cb), the crew, hopefully being somewhere near the cockpit should NOT put weight on anything that might invert the boat (eg the mast). The crew should also make sure that the cb is fully extended. Then the crew floats near the cb whilst it is righted (against the wind), so scooping the crew into the boat, as with the usual drill.

Windward capsize - You will probably both be near the cockpit. If you swim to the bow to pull her head to

wind, the boat will have inverted, and that is NOT good. So – quickly the crew tries to hold the mast from going under, whilst you leap over the gunwale onto the cb. As you pull the boat up, at about 45 degrees the wind will catch under the sails, the boat half turns away from the wind, so now you pull it up more carefully, whilst the crew keeps full weight on the gunwale opposite you, and uncleats the jib. The crew stays in the water until the boat is completely righted, keeping all their weight on the gunwale next to the cb. The helm then pulls the crew back on board. This way you can usually avoid the reverse capsize. If you get a reverse capsize at this point, the crew should be sure to land and stay on the cb, and the helm join them quickly.

Helm falls out - This happens mostly upwind, and sometimes on a reach. You will usually end up yards behind the boat, and the boat may not capsize but continue sailing away much faster than you can swim. If the crew is really good at helming, they can come back for you, but they do have to be REALLY good.

If your crew is not able perform a rescue, then:

- Try to catch the main sheet and pull yourself back towards the boat. The crew already knows that this will almost certainly capsize the boat to leeward as the mainsail closes towards the centreline, and so should be prepared to get over the side onto the cb early.
- If the mainsheet cannot be caught, the crew should have been taught how to pull in the mainsail or balance to leeward a little to cause a capsize and get onto the cb early. You will then be able to catch up with the boat. If you were on a beat, it comes back to you, albeit downwind, so swim on a course to meet it.

Two things you could do to the boat.....

- A) **Delay inversion.** Fill the top of the mast with closed-cell foam rubber. It is watertight and lightweight. Roll up a section moderately tight and insert from the top to reach the hounds. A copper wire through the hound rivets will hold it in place. The main halyard will make its way through with little restriction. Alternatively, use enough table tennis balls to completely fill the same space.
- B) **Fit a 6mm - 8mm soft covered righting rope** under each gunwale, fixed to the shroud mounting plates, above deck, at one end, and make a loop at the far end for your foot. Finally extend the loops with enough shock cord to reach screw heads positioned each side of the rear transom. In a capsize, if you miss the cb, then you are usually near to the transom where the shockcord is unhooked, and using the foot loop you can get back to the cb quickly. If the boat is inverted, keep off the cb initially, and use the righting rope for purchase to get a better angle to prevent the mast digging into the bottom. Hook the righting rope back when you have recovered your crew and sorted things out.

Seven techniques you could try in heavy airs.....

- A) More speed equals more stability, so off wind use the kite.
- B) Always gybe at maximum speed with the boat level and trimmed off the bow.
- C) Near to dead downwind in really heavy airs, leave both tweakers on. Keep the kite in the centre of the boat. To kill a death roll pull both kite sheets at the same time. Keep some kicker tension on, enough to stop the top of the mainsail leech falling forward of the mast.
- D) On a broad reach the apparent wind goes ahead in the gusts (due to acceleration), so bear away in the gusts with little or no adjustment to trim, and luff back above the rhum line in the lulls.
- E) Flat is fast. Upwind and reaching, always hike out as far as is required, using the mainsheet to fine tune the balance. Downwind, steer for balance.
- F) On a beat, with a big gust, if completely overpowered even though spilling the main, you can steer to feather the jib fractionally and momentarily, but do get back on wind as soon as you are in control – ready for the next big shift. Obviously, this technique requires
- G) practise, but it is not actually that difficult.
- G) You've heard this before, but it is so important. Especially in heavy weather near-to-beam reaches, the leech of the kite must curl slightly two thirds up the leech, and the pole should never actually touch the jib luff. If it does press into the jib luff, you can be sure that virtually all of the kite forces are sideways and backwards.

And that's slow.

And that leads to a capsize

Enjoy your sailing.

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