

# New Zealand Multihull Yacht Club

## SAFETY MANAGEMENT PLAN – MULTIHULL CAPSIZE

### Section 1: Prior to Departure

#### Preparation of Boat:

- Ensure ability to access handheld VHF if upturned – check that the unit is waterproof;
- Check cockpit setup for capability for helmsman and crew to be able to release sheets quickly;
- Avoid jammers on the mainsheet;
- Ensure EPIRB registered to you;
- Make sure there is access to knives for immediate use;
- Ensure emergency equipment can be accessed in upside conditions;
- Consider painting of underside of vessel in rescue colours. Best colours are yellow, red and orange;
- Consider applying reflector tape, very good for locating at night;
- Consider the ability to remain safely secured to upside vessel including application of non-slip paint to certain underside areas;
- Have a capsize plan. Know what numbers to call VHF and landline/mobile;
- Join Coastguard.

### Section 2: Preparations on Departure

- Check the weather forecast. Numerous sources available including MetService, Nowcast (VHF Channel 21) and private weather forecasters such as PredictWind.com.
- Tell someone when and where you are going;
- Make a trip report with Coastguard VHF Channel 80 in the immediate harbour area, Channel 82 in the Gulf;
- On hoisting sails, make sure halyards are always free to let go quickly and without tangling;
- Leave knots off the end of gennaker sheets;
- Ensure access to EPIRB. Consider smaller personal EPIRBs to be worn by each crew - highly recommended;
- Wear lifejackets. Crotch straps are an essential part of the lifejacket setup.

### Section 3: When Sailing

#### Upwind:

- Ensure mainsheet out of the self-tailers.
- Watch for localised wind changes including strong unpredictable squalls. Have a good general watch out and eye out for breeze at all times. Ensure no overrides on any of the winches;
- In gusts crew or helm to let off traveller, must be easy to do;
- Be prepared to ease jib as well. Be prepared to ease mainsail. Remember the maxim **IF IN DOUBT – LET IT OUT**;
- **Reaching:** This is the **"DANGER ZONE"** of 70-90 true wind angle. Ease a bit of mainsheet but not too much, avoid excess twist, caused by eased mainsheet. Ease traveller. Be prepared to ease jib. If overwhelmed, consider taking jib off. Ensure crew positions are aft as much as possible. If too much wind drop sails;
- Watch waves;
- Try and have some centre board up.

#### Downwind:

- Be prepared to ease gennakar. If necessary to blow the gennakar – consider blowing the tack or tack line;
- Watch for too much mainsail, consider reefing mainsail if being overwhelmed. Try and maintain proper and good sail trim throughout.

#### General:

- Constantly check weather forecast;
- Ensure your rudders are good enough to handle high performance and high stress conditions;
- Try and maintain crew in correct positions, particularly when difficult conditions are encountered;
- Ensure winch handles are kept out when not being used;
- Rotate crew to keep fresh;
- Have plan to deal with fatigue.

#### **Section 4: Summary of factors as to why multihulls capsize**

- Too much sail up for the conditions;
- Failure to ease in gusts;
- Lack of concentration;
- Possible alcohol;
- Inexperience of crew;
- Gear failure;
- Lack of weather awareness;
- Failing to keep a watch on the localised weather;
- Windage from nets with high wind resistance factors;
- Fatigue;
- Not staying warm.

#### **Section 5: In the event of a capsize immediate requirements**

- Do not panic. Stay calm;
- Implement pre-determined plan;
- Ensure location and safety of all crew;
- Everyone should be wearing a lifejacket and appropriate clothing for the circumstances;
- Consider setting up a lattice of ropes immediately to provide handholds under the vessel;
- Locate grab bag which should include waterproof handheld VHF;
- Possibly also waterproof cellphone as an alternative means of communication;
- Note grab bag requirements include flares for appropriate category;
- Consider deployment of anchor if in water shallow enough to try and prevent vessel from drifting any further;
- Consider deployment of EPIRB if necessary;
- Consider deployment of drogue if in open sea to slow vessel's drift progress down;
- Contact Coastguard. Channel 80 or 82, or if the situation is an emergency Channel 16. Coastguard need to know in this order:
  - Your position;
  - Your problem;

- The number of persons on board;
- Initial contact with Coastguard is highly recommended as this is the organisation with the most sophisticated communication network on the coast and it is important you contact them first. They will attend to ensure safety of all persons involved. If circumstances require, they will remove people from the vessel and return to the shore. If people are transferring from your boat to rescue vessel in the water, ensure they are attached by tether until safely on the rescue boat;
- If Coastguard have both time, and capacity and capacity in the vessels attending, they may try and render assistance by attempts to upturn the vessel. In all likelihood, this is limited to multihulls no more than 10 metres. They are also constrained by other requirements to attend life situations which may be occurring concurrently. They may not though have much time. You cannot therefore rely on them to right your vessel;
- Ensure you are a member of the Coastguard.

**Section 6: At this stage your options will be to**

- Call Coastguard with the expectation of all being removed safely from the vessel to return for a salvage at a later stage;
- If circumstances permit, once Coastguard attend they may try and right the vessel but there is no requirement for them to do so nor may circumstances allow them sufficient time to render such assistance.
- If racing with a club, contact the organising authority. If you cannot do this, then tell Coastguard. The organising authority cannot be relied upon to send any vessel to provide assistance.

## **Section 7: Possible salvage options**

- There are number of ways with sufficient power, and given the appropriate circumstances a range of multihulls may be righted at sea. These will generally involve trying to right the vessel end over end, rather than on its side as this is likely to cause extensive damage. In many cases, the operation will be better if a diver is on hand, and is able to release the sails of the mast, so that as the righting process starts the sails begin to drop. Other methods such as reducing water to flood holes, or part of the holes may be appropriate;
- If Coastguard are unable to assist, then you will require a vessel large enough to attempt this work. Ideally any vessel engaged needs to be highly manoeuvrable in view of the necessity to pull in a very specific way. It is also thought the heavier and more powerful the vessel the better. In some circumstances smaller inflatable vessels may be sufficient;
- Unless you have a friend or contact who can provide services to you at no cost, if you engage a commercial operator to assist, then you will need to undertake to pay that person for their services in attempting to right you. You should obtain details of their hourly rate and expected costs and extras for engaging that person and agree the terms on which they will perform services for you;
- In some circumstances, a righting of the vessel may not be successful at sea. The vessel therefore will need to be towed inshore where other attempts to right it can be tried. It may be necessary for the vessel to have its mast removed at sea in water deep enough where this can occur prior to towing the vessel into protected waters and alongside. It may, however, be necessary to tow the vessel into a wharf area where a crane will need to be deployed to finally assist in righting the vessel;
- Gear that can be useful: Large fender, floats, drogues, anchors, slings, strops, diving equipment.

**Contacts: Useful contacts for possible assistance are as follows**

- Nick Lewis of Marine Services – experienced in the righting of multihull capsizes. Mobile: 0274 593 57;
- Pelley Boats – 0800 118 845 or Sean Pelley direct 0274 390 100;
- Viaduct Harbour Hardstand Manager Chris Lodge – Mobile: 0272 846 852;
- New Zealand Cranes – 0800 692 223;
- Auckland Cranes – (09) 277 2227;
- Rescue Co-ordination Centre New Zealand – 0508 472 269. Helpful in giving EPIRB information, latest position drift etc. Will be wanting to keep an eye out for any "*navigational hazard*" caused by the vessel and will want to know when it is salvaged;
- Maritime Police – 0800 102 835. They need to be involved if there are injuries involved. They will also be interested in the salvage process and to keep track of any "*navigational hazard*";
- Auckland Regional Council Harbour Master – 24 hour emergency duty officer – (09) 362 0397;
- Coastguard membership – coastguard.org.nz or 0508 RESCUE (737 283);
- Information on lifejackets – [www.maritimenz.govt.nz](http://www.maritimenz.govt.nz).