

## 1. Document purpose

The purpose of this manual is to capture an 80% fit generic procedures for a “typical” ocean racing boat. It is derived from the Wild Side Training manual, written for a 36ft 7 crew member yacht. The procedures will change based on number of crew.

This just covers safety related procedures, other procedures (tacking/gybing etc) have been removed. Any reference to males, eg Helmsman should be read as gender neutral and apply equally to females.

## 2. “Hands on” crew positions

### 1. Watch lead

The Watch lead will have overall responsibility on deck, unless they feel the need to escalate a decision to the skipper. They will take input from the crew and decide if a procedure will be carried out. The Watch lead may also take on one of the roles below.

### 2. Helmsman

The Helmsman will be responsible for steering the boat during a procedure in a safe manner. Unless short crewed and/or an autohelm is available, they should not get involved with the procedure.

### 3. Main trimmer

Responsible for all aspects of the main sail, but may request adjustments to be made by the Pitman.

### 4. Headsail & Spinnaker trimmer

Usually a pair, responsible for all aspects of the headsail or spinnaker. Again they may request others to make adjustments on their behalf.

### 5. Pitman

Responsible for all aspects of cabin top adjustment, including Halyards, Reef lines, Topping Lift, Kicker, Barbour hauls etc.

### 6. Bowman

The Bowman is responsible for changing sails at the front of the boat, and is heavily involved with Gybing a spinnaker and poling out the headsail. Only experienced people should undertake work on the bow, particularly in rough weather.

*On many cruising boats the roles above are combined or vary depending on the layout of the boat.*

### 3. Secondary crew positions

#### 1. Navigator/Radio

Navigation, tactics, radio operation, log keeping – fairly self explanatory. Primary role is to ensure those on deck know “the plan” and where to steer. Often shared so people can go off watch.

#### 2. Cook(s)

The Cook’s role is also self explanatory. Needs to be people who don’t get seasick. Their main requirement is to monitor the crew’s food and drink and ensure all are getting some nourishment and plenty of fluids, even in a rough sea. A particular focus should be on the helmsman. The cook should ensure all crew coming on watch are offered a hot cup of tea/coffee and something to eat. Safety is an issue, often working on one’s knees is a good option in a heavy sea as it lowers the centre of weight. The cook is responsible for provisioning prior to the race, ensuring food is practical and flexible (eg adjusting food for heavy weather).

#### 3. First aid

Again self explanatory. The First aid person must know the background of all the crew – allergies, pre-existing health issues, medication etc. The First aid person will liaise with medical staff on shore via the radio if necessary and will liaise with the skipper if a return to shore is required. The First aid person must check the first aid kit prior to race and ensure they are comfortable with any existing medical conditions.

### 4. General policy and procedures

#### 1. Policy statement

1. Off shore sailing is potentially dangerous. Our first priority is to get home safely, this will govern all decisions made on the boat. All crew are responsible for their own and other crew members safety. If you see something unsafe speak up.
2. The Skipper (or second in command who becomes skipper if primary skipper is incapacitated) has overall decision making responsibility with respect to safety and crew are required to follow the skipper’s decisions even if they disagree. If you don’t accept this requirement, do not step on board.

#### 2. PFDs and tethers

- Crew must supply their own personal safety gear and be responsible for its maintenance
- Crew must wear PFD/Harness at all times when on deck, with strobe at night
- Crew must have on their person at all times their PLB and knife when on deck
- Crew must use tether at night and/or when instructed to by watch lead. Crew may elect to tether on at any time they wish
- Crew must not wear, use or move someone else’s personal safety gear without their permission

#### 3. Watch system

A watch system will be determined prior to each major off shore trip. This specifies a period of on watch, a period of off watch and sometimes a standby period. Each boat is different, typically stand by means downstairs but in wet gear. It is imperative that people:

- manage their fatigue – avoiding temptation to stay up and burning themselves out, overloading others
- set their own alarms for 10mins prior to changeover time and wake up without prompting
- are ready and are on deck at changeover time
- look for and receive a full briefing from others
- give consideration to those on deck, eg put the kettle on, offer food

- familiarise themselves with the situation (eg position on course, wind trends etc) before coming on deck
- do not go to bed wet. A wet bunk may be allocated in some circumstances, otherwise those wanting to sleep in wet weather gear should sleep on the floor on sails

#### 4. Abandon ship muster

An abandon ship call will only be made by the skipper. The most likely scenario will be major fire or sinking via a through hull penetration. If other less urgent circumstances are experienced, eg running aground, then a “preparation only” call may be made. The priority will be to stay on the boat until the situation dictates abandoning. In all such cases:

- A muster of the crew (roll call) will be made.
- Each crew member to first ensure they have adequate clothing, PLB, Tether, Strobe and PLB before coming on deck. Wallet, mbile phone and medication should be taken (if time).
- On deck people will need to secure boat (eg drop sails), noting some “in case of emergency” roles will be a priority.
- Give consideration to using padded PFDs if they exist. In such cases remove cylinder from inflatable pfd's first and keep wearing them as a harness, ideally over the padded pfd.
- “ICE” (In case of emergency) roles will be assigned before the trip to define responsibility for:
  - Skipper/watch lead to remain on deck to manage securing the boat and maintain overall control of situation
  - Radio Mayday incl GPS location (usually an experienced radio operator) – they will need to be assisted to ensure they have personal safety gear on.
  - Flares & boat EPIRB deployment (Note boat Wild Side EPIRB is manually switched but will activate if immersed in salt water once removed from bracket holding it. It will work on deck but if in liferaft should be floated clear on the string tether)
  - Liferaft deployment (usually the strongest person)
  - Grab bag & any additions to it (especially handheld VHF)
  - 1<sup>st</sup> aid kit (usually 1<sup>st</sup> aid person)
  - Water and food (anyone else spare if time)

### 5. Basic Manoeuvres – safety related

#### 1. Main sail reefing

The key with reefing is care so main doesn't flog too much. It is generally done upwind, so if boat is reaching or running it should temporarily sail to windward on the headsail. Ideally the boat will remain on course but that decision will be made by the skipper after consultation with tactician and crew. Most of the work is done by the pitman and bowman, assisted by the trimmer who will effectively become a second pitman. The halyard must be tensioned before the outhaul/reef line is tensioned, main sheet and vang must be loose. If using Reef #3 there may need to be a transfer from Reef #1 once Reef #2 is in, using the mouse line and rerunning Reef#1 rope.

The procedures below are based on using the horn cleat. Sometimes the boat is set up with a tack downhaul which negates the need for the mastman to do too much.

Helm	Main trimmer	Headsail trimmer	Pitman	Bowman
Confirm tactician's call to <b>prepare to reef the main</b>	Prepare to ease main sheet.	Move to 2 <sup>nd</sup> pitman, load up reef outhaul winch (one wrap) with a handle, if same side to halyard run around winch base to unused winch. Call <b>ready</b> .	Open Vang, load up main halyard onto winch with handle and flake remaining halyard, open main jammer and call <b>ready</b>	Move to mast, call <b>ready</b>
When all ready, call <b>go reef</b>	Dump main sheet until loose.	Hand pull slack out of reef line as pitman drops main	Ease main halyard working with mastman.	Pull down main and hook reef tack point onto horn cleat, call <b>made</b> when secure on cleat

Steer boat on headsail only, slightly deeper, avoiding getting distracted		Fully load reef line onto winch with handle, pull out slack while halyard is being tensioned.	On bowmans <b>made</b> call, load halyard winch and tension halyard, call <b>made</b> when done	Check Halyard tension for pitman
		On pitmans <b>made</b> call, tension reef outhaul as fast as possible. When tight, call <b>made</b> .		
Steer boat back to course once main is trimmed, feedback to trimmer	On <b>made</b> call, trim main sheet as required. Call for Leach tension if needed.		Either clean up or leave everything on winches	Adjust Leach if needed. Secure foot of sail with small sail ties if needed (usually only for reef 2 and 3). If reef 2 just put in, consider leapfrog of reef outhaul from 1 to 3 using mouse line

## 2. Shaking out a reef

Similar to reefing but in reverse, the key aspect is to ensure all reef outhaul lines run free during manoeuvre and that the outhaul is eased if returning to full main, without flogging the main. Again complete with speed, yet with care. The main halyard must be tensioned before the outhaul. If shaking out Reef #3 there may need to be a transfer outhaul to Reef #1 after Reef #2 is made and main sail is set.

## 3. Storm sail set

### Storm jib

The storm jib is raised in a similar way to normal jibs except that the luff is tied around the forestay and the sheets are already attached to the sail. You cannot change to a storm jib using an in line change, it must be done bare headed. The old sail must be removed from the foredeck, never leave on deck (we have learnt the hard way).

### Trysail

The trysail is raised instead of the mainsail, but is not connected to the boom so that it is safe and easy to gybe. The main may be removed all together or secured with a number of sail ties so there is minimal windage. The boom must be secured, to a strong point not a stanchion base. The trysail luff is similar to a normal main but is fed via a bolt rope, the mast steps may need to be used to get high enough. The clew does not secure to the boom, rather it uses its own sheets which are run to the aft spinnaker pulleys and back to the main sheet winches.

## 4. Heavy weather gybe

Unless absolutely necessary, or if using a trysail, in very heavy weather a “granny gybe” is the preferred method. That is a tack through the breeze rather than gybe.

## 6. Manoeuvres – Recovery

### 1. Run aground

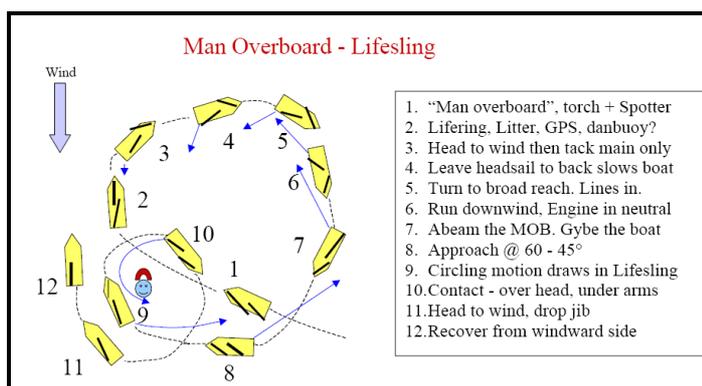
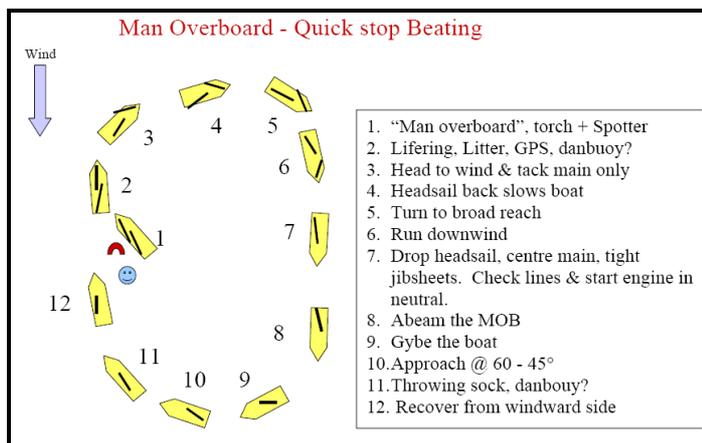
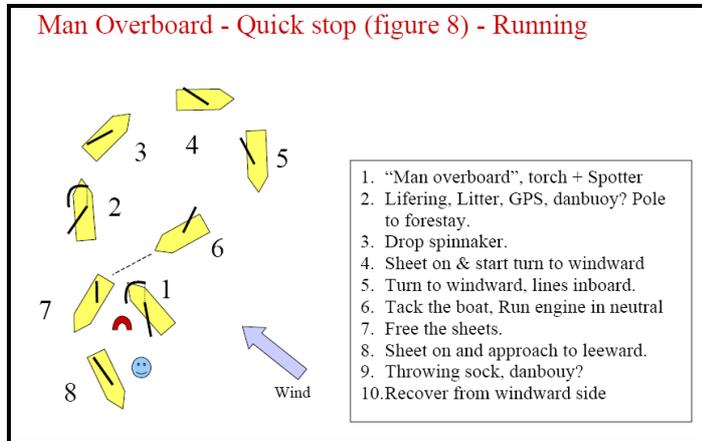
Typically crew sit on the boom, and boom is out at right angles. If not racing use the engine to back off.

### 2. Man over board

Man overboard, especially off shore is life threatening. One person must stay watching the person in the water with arm pointing to person. Throw floatation, danbuoy, torch etc immediately, as well as getting MOB button pressed. Navigator to send PAN PAN alert.

While the manoeuvres below are for retrieval, the key is that it provides the ability to quickly return to verify the person is OK and has floatation. The priority is to ensure only one person needs rescuing, so others must stay safe. The worst case scenario is when spinnaker is up, in that case retrieval is a priority, sometimes heading upwind, sometimes running deep for a quick drop.

The life sling will be used for retrieval, at beam max using a halyard clipped onto on pfd harness or using the MOB retrieval sling.



### 3. Steering loss

This section is highly dependent on the boat in question. On Wild Side we use the following.

If lost steering mechanism but not rudder:

1. Use autohelm (remember to turn on power switch)
2. If that doesn't work, use emergency tiller, which connects to top of rudder stock – inspection plate must be removed first.

If completely lost rudder:

1. Use Drogue onto each main or primary winch, shorten/lengthen to steer. Drogue may need 2m chain (anchor chain has a 2m section with shackle to remaining 8m). Set two wave cycles back.
2. If that doesn't work, use emergency steering set up (instructions/photos in black folder book). This combines two stainless steel sections (pre fabricated) together with two port centre settee timber covers, table steel tube and some shackles and rope. It needs to be bolted together, shackled to backstay plate and roped on with spare sheets. It is strong but will not cope with large force – so if sailing use minimal sails.

Meanwhile put out a PAN PAN message on the radio.

#### **4. Broken mast**

1. Ensure everyone is present and OK – muster list.
2. Ensure everyone is in PFDs (if not already).
3. Nominate a crew member to organise handheld VHF and/or emergency VHF / HF areals and send out a PAN PAN alert after set up. Do not use radios until areal has been set up, note HF emergency areal is the easiest to set up.
4. Do not start engine, too much chance of ropes around the prop
5. Disconnect rigging by removing pins or cut rigging using double bladed hacksaw. Try to keep halyards and boom if possible to jury rig an emergency sail but get mast/spreaders away from hull if rough conditions.
6. If not too rough secure mast above water line on deck, be very careful with ropes in water. Alternatively cut away and let sink.
7. Rope check overboard then start engine, put in gear and re-assess situation once safe motion is established
8. Navigator to determine plan from there