Mt Pleasant Yacht Club Inc
PO Box 19-519 Woolston
Christchurch 8241

Club Safety Boat Operator Manual

- Arrive at MPYC at the appropriate time (At least 1hour before race start).
- Have equipment ready for use, (Serviceable Rib and its equipment checked and fuelled).
- Have Rib on water 30 minutes before race start. Be mobile on the water as soon as first sailors start to launch.
- Situational awareness – assess the tide and know where the shallow areas are.
- The **Rib crew must not** leave the water until authorized by RO and must not leave the water until all sail boats are off the water and accounted for.

Patrol boat operators' primary task – ensuring the safety of **everyone** on the water in the club's area of operation.

Hazard Management

Liaise with Race Officer to make sure you have the same understanding of what the day may bring.

- Assess wind and weather (including temperature)
- Assess ability of sailors.
- Assess number of sailors to be on the water.
- Check everyone on the water is wearing a life jacket.
- Check sailors are wearing adequate clothing – hypothermia.

<u>Ensure Adequate manning</u>.

Sometimes an assistant crew member is not available therefore you need to assess whether or not you can handle a rescue or recovery situation on your own. If the wind is light and

there are few inexperienced sailors, it may be safe to do so. **Discuss the situation with the Race Officer**.

Yachting NZ's recommendation is to have one patrol boat to every ten race boats. Check that there is enough coverage. Note, Peikatini is counted as one patrol boat.

<u>Hazards to yourself</u>

- Hypothermia
- Personal Injury (fall in the RIB)
- Mast or Boom
- Ropes
- Trapped fingers (consider gloves)
- Cuts and Grazes
- Sunburn
- Fuel
- Fire
- Hunger
- Dehydration
- Hazards when launching and retrieving the RIB.

<u>Hazards to Sailor</u>

- Drowning
- Hypothermia
- Injury from the boom, ropes
- Entrapment Under boat or sail
- Crashes
- Cuts and Grazes Rib Propeller
- Hunger
- Dehydration
- Tiderness

Hazards to your RIB

- Abrasion to pontoons inside and out.
- Abrasion to pontoons against the pontoon.
- Puncturing to pontoons by the anchor.
- Puncturing to pontoons by parts of the boat you are trying to rescue.
- Damage to propeller by hitting the shallows.
- Damaging the motor gearbox by changing gear too fast.
- Rope in prop.

Communication

RO is the safety team leader. Keep RO aware of issues.

Communication is vital for the safe operation of the day. Before going on the water ensure your radio is fully charged and working and on the correct channel (usually Chanel 17). Once you are on the water **establish radio contact with the Race officer by doing a radio check**.

Radio procedures

- A RIB operator on MP 4 will call ("Peikatini this is MP4"). Peikatini will answer ("Peikatini receiving go ahead")
- If you didn't hear the name of the party calling you: Say ("Station calling [your name/call sign] say again")
- When you finish your transmissions/conversation using: "[your name/call sign] Over" or "[your name/call sign] Out" if the conversation is finished.

Note – when transmitting **hold radio out of wind** to make sure you come across clearly.

Only use the radio for essential communication.

Keep calls as brief as possible.

Technically everyone who uses a marine VHF radio should hold a radio operator's license.

You may wish to take a **cell phone** out on the water. If you do, ensure that it is in a sealed plastic bag, or contained in watertight case. Advise the RO that you have it and your phone number.

Rescue Situations

Be constantly vigilant. If you see a boat on its side start moving slowly towards it. As soon as you reach a capsized boat look for the sailor and ensure they are alright. There is a slight possibility of a sailor being trapped either under the sail or under the upturned hull or the sail. The sailor may also have their legs tangled in the ropes. Be aware the sailor may have a medical issue. Your help may not be needed, but if you are close by and things don't go right for the sailor you are on the spot to help.

A sailor who needs assistance will hold one arm straight up.

Methods of assistance.

- Righting inverted & partially inverted craft.
- Mast stuck in mud. If the sailor cannot touch the estuary bottom and lift the mast themselves – (1) nose the rescue boat bow towards the stuck boat's bow first and get the rescue boat crew to slip a rope through the bow handle (laser) and return the tail end to rescue boat and secure. (2) Crew take the other end of the rope and slip through a connecting point (traveller on a laser) at the stern of boat with mast stuck and returns tail end of rope to the rescue boat and hold by hand. (3) Slowly reverse the rescue boat, gently pulling from the midpoint of the stuck boat's hull using the bridle the rescue crew has just constructed. Release the stern end of the bridle once the mast is free and bring the boat head to wind using the remaining section of doubled over rope from the bow. Release the end of the rope once the recued boat is successfully righted – retrieve and stow rope.

Removing a sailor from their boat

In extreme conditions a sailor may need to be removed from their boat. Some sort of identification needs to be left attached to the boat (most clubs use pink ribbon, a china marker or orange danger tape) to let other rescue vessels know the sailor is accounted for.

Advise the RO.

When pulling sailors from water use life jacket shoulders or lift sailor from the back under arms.

SAILOR MISSING – A yacht without a sailor is an EMERGENCY

Actions

1. Check that sailor is not trapped underneath yacht.
2. Scan areas visually and pair up sailors and yachts.

3. Advise shore base and Race Officer “Sailor Missing, Sailor Missing”.
4. Drop a marker buoy or anchor and secure the yacht so it won’t drift.
5. Give accurate position with reference to course marks and report the yachts sail number.
6. Do not put on “Crew Safe” tape on yacht until sailor is positively identified as being safe and the sailor’s location is known.
7. Start a search upwind over a 60˚triangle from the mark for a distance of 200 meters. Observers standing if possible and check other yachts for 2 people on board.
8. Race Officer will dispatch other available rescue boats to the area.
9. Start downwind search over 60˚triangle from mark for a distance of 200 meters. (Beware not to run over sailor while searching for them)
10. If the search is unsuccessful at this stage, the Race officer may abandon the race and allocate all rescue boats to the area.
11. **Race Officer should advise Authorities (Police) of emergency**.
12. Under the guidance of the race officer co-ordinate a grid search utilizing as many boats as possible. This will be done by forming a line of boats 20 meters apart and sweeping upwind factoring in wind and tide directions.
13. If unsuccessful this process to be repeated in a down wind direction.
14. During this period the Shore Base to check sign on/off sheets and record all boats coming ashore.
15. If still unsuccessful form up at right angles to the course and sweep again.
16. Search to continue until successful in conjunction with the authorities.
17. Debrief in conjunction with the authorities.

MISSING SAILOR – RAISED BY NOT BEING SIGNED-OFF, EMPTY TRAILER, NOT FINISHING

1. RO will advise rescue boats stay on the water and scan their areas of responsibility.
2. Rescue boats will be instructed to go to leeward end of the course, set up visual distance apart. Wait for call from RO to advance together at 5 knots.
3. If unsuccessful, RO to contact emergency services and initiate full search pattern.

Basic Boat Handling

Keep prop clear of anyone in the water.

Engine Tilt

Be familiar with the mechanisms to raise and lower (tilt) the outboard engine.

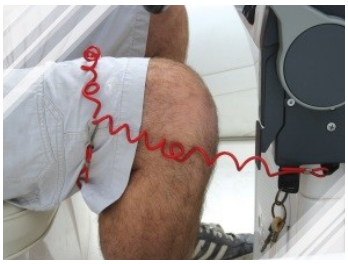
Some engines will have an electric system often controlled by a switch on the throttle unit of a centre console. Others are manually lifted and lowered.

For engines that tilt manually, there will be a lock fitted to stop the engine kicking up when in reverse. This will lock in place when the engine is fully down and will need to release before the engine can be lifted. This lever is in different locations depending on the engine, have your club safety officer show you where the locks are on your club's rescue boats. Some outboards need the motor off and in forward gear for the motor to be raised.

For engines that tilt manually, there is a lever on the leg of the engine that allows the engine to be positioned at different tilt angles. This is often referred to as "shallow water drive" this allows you to safety operate the boat in shallow water. You should familiarise yourself on land with these settings.

Engine Starting

Lower the engine into the water. Engines have various starting mechanism, the two you'll most likely use is a key and a pull rope.



Kill Cord:- The driver must attach the Rib kill cord to their person.. **The kill cord is an emergency shut off for the engine**. If the driver falls overboard, when the cord is pulled from the engine it will stop running. (Kill cords can also have a 1mtr long piece of spectra cord with a Velcro tab to go around you ankle or knee so you can move around the boat without cutting the engine).

- Ensure the kill cord plastic tab is properly inserted under the engine stop button.
- Ensure the vent on the fuel tank is **open**
- Pump the bulb in the fuel line several times to prime the fuel supply.
- Check the engine is in neutral. Most engines won't start unless they are in neutral
- Start the engine.
- If the engine is older, or it is having trouble starting you may need to use the choke, which is usually a lever that is pulled out from the engine, one the engine is running push the choke back in. Our Honda engines have a automatic choke. The Yamaha on Ngarie J has a pull cord start system and a choke.

- Once the engine is running, ensure that there is a steady stream of water coming out of the outboard engine. If not, **STOP THE ENGINE** the water intake may be blocked which will cause the engine to overheat.

Be careful in the shallows, raise motor, look out for weed especially Kelp. Weed can block the cooling water intake and cause the engine to overheat.

Throttle and Gears

The throttle and gears on the engine will differ depending on whether the engine is tiller steered or controlled from a centre console.

For centre console controlled engines:

- There will be a combined gear and throttle unit on the side of the console.
- These will usually have a trigger. Pull the trigger up and ease the lever forward to engage forward gear; the engine will exert more power/revs the further you push the throttle forward.
- To go back in to neutral, pull the lever back to centre, the trigger will click when in place.
- To reverse, pull the trigger and pull the throttle back slowly.

For tiller steered engines:

- The throttle is controlled using a twisting handle at the end of the tiller. Increase or decrease revs on the engine by rolling the handle towards and away from you. The gears are usually on the side of the engine; when the gear lever is upright the engine is in neutral; pull the lever toward the front of the engine to engage forward gear and push towards the back of the engine to engage reverse.
- Remember to take all the revs off the throttle before changing gears. Failing to do this can damage the engine.

All engines will have a stop button (usually red). Make sure you know where this is located on the engines you are using. You can stop the engine by pushing and holding down this button.

There are no brakes on a rescue boat, so be careful as you approach other boats or objects in the water. As a driver you need to judge how much room you need to slow the boat down. Modest use of reverse can be used, only when necessary to control forward momentum.

PRACTICE MANOUVERING IN AN OPEN SPACE BEFORE INTERACTING WITH YACHTS AND OTHER VESSELS

Steering

The main thing to remember is that a boat steers from the back (as opposed to car which steers from the front wheels); this causes the stern of the boat to swing as it turns.

The water propelled by the propeller and the direction of the engine controls the direction in which the boat will move.

The boat will not turn unless there is water moving across the rudder, therefore to maneuver the boat the engine must be engaged in either forwards or reverse.

Using a tiller steered engine is the same as using a tiller/rudder on a sailing boat – the boat will turn the opposite way of which you push or pull the tiller.

Using a centre console with a steering wheel, the boat will steer like a car, turn the wheel in the direction you want to go.

When in reverse be aware that **there is an increased risk of water entering the boat** from the stern posing a flooding danger. When reversing start slowly and avoid reversing in heavy seas.

All boats will steer and maneuver differently, know or learn the characteristics of your boat; turning ability, slowing speed, throttle sensitivity.

Make sure the **inflatable pontoons** on the rescue boat are **fully inflated**. Soft pontoons will waddle at speed and can be dangerous, causing you to lose control of the boat.

Boat Handling at Speed

A boat will handle differently at speed which requires you to consider additional factors:

- Increased speed increases the element of risk; you need to take more care in terms of crew safety as the likelihood of injury in an accident is much higher at high speeds.
- Sharp turns can cause the crew on board to be pushed to the side of the vessel. Make sure you communicate with the crew if you plan to make sudden changes in direction.
- At higher speeds the boat will turn more sharply, ensure that you adjust your speed going in to turns to maintain control of the boat.
- Because the boat is moving faster, things happen more quickly, at high speeds it is critical to maintain a lookout for other vessels and objects in the water.
- Operating at high speeds in waves can cause the boat to become airborne and unstable; you must alter the throttle (speed) to maintain control.
- A boat moving at speed will create wake, so make sure this will not affect other boats around you.

Coming Alongside

When approaching other boats in the water either to coach or to provide assistance:

- Ensure that you keep clear of any lines in the water (or if approaching a capsized or swamped boat keep clear of rigging and other objects in the water).
- Be aware of where the boat you are approaching might choose to go.
- Be aware of where the boat will go if the skipper loses control.
- Be aware of the direction the wind and current will push your boat when stationary.

<u>Remember effects of wind and current on approaching another vessel</u>

When coming alongside a sailing vessel:-

- Approach from behind the vessel.
- If conditions allow, aim to come alongside the windward side of the vessel to keep clear of the boom and sails. If possible, instruct the sailing vessel you are approaching to sit stationary with sails eased.
- Control your speed, do not approach too fast.
- Once alongside, put your engine in to neutral.

Anchoring

- Ensure your anchor is ready to deploy BEFORE you need to use it. Make sure the warp and chain (if attached) will run freely and is not tangled.
- Make sure one end of the warp is attached to the anchor and the end of the warp is attached to the boat.
- Keep the anchor clear of the boat's tubes if using an inflatable rescue boat. Many clubs cut the sharp tips off the Danforth Anchors to stop piecing the tubes of the boat.

<u>When anchoring</u>**:**

- Align the boat head to wind (or current depending on which is having the most effect on your boat).
- Make way to slightly forward of where you wish to anchor.
- Put the engine in neutral.
- Make sure the tail end of the anchor warp is securely tie to the boat.
- Lower the anchor first and allow the warp to run out (4 times depth of the water).
- Once the anchor is on the bed of the sea/lake/river slowly reverse (depending on the sea state) and let the anchor take hold.
- Secure the warp to a strong part of the boat and make sure the anchor is holding.

When hauling your anchor up**:**

- Start your engine and have it idling before you raise your anchor.
- Motor forward slightly on the warp, the idle and slowly raise the anchor. Again, remember to watch the inflatable pontoons if you are using a RIB.

Never use a rope that floats as a warp; this includes polypropylene and polythene rope. Any floating rope may get caught around your propeller or someone else's.

Towing

Boats can be towed in several different ways. The bow fitting on some boats may not be strong enough to stand the loads involved with towing so take care if attaching to this point especially in rough or windy conditions. The simplest way is for the RIB to draw alongside the stationary sailboat and for the skipper of the sailboat to hold onto the side of the RIB. It is quite safe to tow one sailboat each side of the RIB. A safe way of towing with a line is for the sailor and or the RIB crew to wrap the line around a cleat or the mast base and hold the end of the line in their hand. This way if something goes wrong with the tow the line can be easily released.

For an Optimist, secure the rope to the fitting at mast base and then once around the mast and forward to the towing boat. The second boat in a string is secured the same way and towed from the mast of the 1st boat.

Different boat/techniques with and without helm, multiple and single tows.

When towing a boat:

- Slowly come alongside the boat on their windward side.
- Use the painter (towline) on the boat if it has one. If not use the towline in your rescue boat.
- If you are using a towline from the rescue boat secure it to the boat being towed around a secure/strong point on the boat. You can wrap the tow line around the mast at the lowest point to the deck, then have the sailor hold the end of the rope, this way it can be easily released in an emergency.
- Ideally the towline should lead from the centre of the stern (i.e. from a bridle) and not from one of the quarters. This will reduce the amount the boat may sheer to one side. Attach the towline to the rescue boat using a knot that can be easily released in an emergency eg sheet bend.

- Any boat with a broken rudder may need to be brought alongside the boat rather than being towed behind or towed with the centreboard all the way up.
- The boat being towed should remove their centreboard if conditions allow.
- If towing downwind or in rough condition you may wish to have the sailor lower and tie up their sails (or in an Optimist remove the rig and lie across the boat or place in the rescue boat)
- When commencing the tow gradually take up the tension on the towline, and then build speed. Try to minimise slackening and tightening of the towline as this can cause damage to the boats.
- Have the boat being towed steer their boat in line with the direction of the rescue boat and try to reduce any sheering.
- If you are towing another rescue boat, their outboard engine should be left down.

Points to remember**:**

- Good communication between the safety boat and the boat being towed is essential. If you cannot verbally communicate, ensure you agree on hand signals to signal the rescue boat to slow down or stop. The boat being towed should place both hands in the air to signal stop and should wave their arms above their head to cut/disconnect the towline.
- Ensure that one person is always watching the boat being towed.
- If the boat being towed is carrying a lot of water on board, ask them to bail it out as you tow them.
- Towing another boat has the same effect as adding a large weight to the stern of the towing boat. This makes the boat harder to steer and manoeuvre. Watch how much your stern settles down in the water as you are moving to avoid water coming in the stern.
- You may wish to fit a bridle to the back of the rescue boat to aid towing and maneuverability.
- If you are taking a sailor ashore make sure you radio the club and or race officer to let them know that sailor is safe and that they are going ashore.

Laying Buoys

- Make sure the buoy anchor doesn't puncture the pontoon.
- Make sure the rope between the buoy and anchor are not tangled or caught on anything.

- Throw the buoy overboard first then the anchor second.
- Take great care not to allow the buoy's rope to get tangled in the prop.
- If the rope between buoy and anchor is too long tie a loop in the rope.
- When setting a race mark the race officer may direct you by radio to "drag and drop". To do this tow the buoy by holding the anchor and driving your boat until it is in the position he/she wants and the RO will tell you to "drop", release the anchor overboard.
- To retrieve a buoy approach it into wind, snag the rope with the boat hook and pull the buoy on board then pull up the anchor. Clean the mud off the anchor before pulling it onboard. Make sure the anchor doesn't puncture the pontoon.

RULES OF THE ROAD

All operators of club vessels shall comply with the relevant local **Navigation Safety Bylaws** (these can be found on your local council website) and the relevant sections of the Maritime Transport Act 1994 and Maritime Rules (https://www.maritimenz.govt.nz/rules/part-91/).

Maritime Transport Act

Section 19: Duties of Skipper –

(1) The skipper of a boat shall a. Be responsible for the safe operation of the boat on a voyage, and the safety and wellbeing of all passengers and crew;

b. Have final authority to control the boat while in command and for the maintenance of discipline by all persons on board;

c. Be responsible for compliance with all relevant requirements of this Act except in an emergency when, in the interests of safety, immediate action in breach of this Act or of Regulations or Maritime Rules made under this Act is necessary;

Basic Give Way Rules

All operators shall obey the right of way rules prescribed in the International Regulations for Preventing Collisions at Sea.

Give way rules

- When two power-driven vessels are meeting head-on both must alter course to starboard so that they pass on the port side of the other vessel.
- An overtaking vessel must keep out of the way of the vessel being overtaken.
- When two power-driven vessels are crossing, the vessel which has the other on the starboard side must give way and avoid crossing ahead of her.
- Keep well clear of commercial traffic, guidelines will differ from area to area as to distance.
- Avoid commercial shipping channels where possible.
- Remember that powered vessels shall give way to sailing vessels.

Maritime Rules Part 91: Navigational Safety Rules – Relevant Rules

91.7 Wake

Subject to rule 91.6, every person who propels or navigates a recreational craft must ensure that its wake does not cause unnecessary danger.

91.16 Duty of master of a vessel under 500 gross tonnage

(1) The master of a vessel under 500 gross tonnage must not allow the vessel to impede the navigation of any vessel of 500 gross tonnage or more if the vessels are in a harbour area.

91.17 River safety rules

A person in charge of a vessel on a river must—

(a) ensure that the vessel keeps to the starboard (right) side of the river channel; and

(b) if going upstream, give way to any vessel coming downstream; and

(c) not operate the vessel unless river and weather conditions permit safe operation of the vessel.

NZ Law Basic give way rules and Part 91. Pass port to port

91.4 **Personal flotation devices** (1) No person in charge of a recreational craft may use it unless there are on board at the time of use, and in a readily accessible location, sufficient personal flotation devices of an appropriate size for each person on board. (In Canterbury ECAN's bylaw requires all persons on a boat 6 meters in length or less to ***WEAR*** a personal flotation device at all times.) Yachting New Zealand also requires that PFD's are worn while afloat on club rescue and coaching vessels.

(2) Rule 91.4(1) and (6) shall not apply to— (a) any surfboard or similar unpowered craft; and (b) any sailboarder or windsurfer, if a wetsuit is worn at all times; and (c) a diver on a boat of 6 metres or less in length overall that is used for recreational diving within 5 miles of shore, if a full body wetsuit is worn at all times;

(7) No person in charge of a vessel may use **it to tow** any person and no person may cause himself or herself to be towed by any vessel, unless the person being towed wears a properly secured personal flotation device of an appropriate size for that person.

91.5 Minimum age for operating power driven vessels (1) No person under the age of 15 years shall be in charge of, or propel or navigate, a power driven vessel that is capable of a proper speed exceeding 10 knots unless he or she is under the direct supervision of a person over the age of 15 years who is in immediate reach of the controls.

91.6 Speed of vessels

(1) No person may, without reasonable excuse, propel or navigate a vessel (including a vessel towing a person or an object) at a proper speed exceeding 5 knots: (a) within 50 metres of any other vessel, raft, or person in the water; or (b) within 200 metres of the shore or of any structure; or (c) within 200 metres of any vessel or raft that is flying Flag A of the International Code of Signals (divers flag).

(2) No person may propel or navigate a powered vessel at a proper speed exceeding 5 knots while any person has any portion of his or her body extending over the fore part, bow, or side of that vessel. **Speed**

- Vessels should travel at a speed of 5 knots or less within 200m of shore; only in an emergency can this be exceeded.
- Vessels should travel at a speed of 5 knots or less within 50m of another vessel; only when required to adequately communicate with sailors you are coaching or in an emergency should the 5 knot limit be exceeded. *www.yachtingnz.org.nz*
- Monitor speed and take early and substantial action to keep well of other vessels.

(5) **Rule 91.6(1)(a) shall not apply to:** (a) a vessel over 500 gross tonnage, if the vessel cannot be safely navigated in compliance with this clause; or (b) a vessel powered by sail in relation to any other vessel powered by sail, while the vessels are participating in a yacht race or training administered by— (i) a club affiliated to Yachting New Zealand; or (ii) a non profit organisation involved in sail training or racing; or (c) a craft training for or participating in competitive rowing or paddling; **or (d) a tug, pilot vessel, harbourmaster vessel, emergency response craft or police vessel, if the vessel's duties cannot be performed in compliance with this clause;** or (e) a vessel operating in accordance with a speed uplifting— (i) established under rule 91.19; or (ii) established under rule 91.20; or (iii) continued by rule 91.22; **or (iv) established for any river by navigation bylaw.**

91.17 River safety rules A person in charge of a vessel on a river must— (a) ensure that the vessel keeps to the starboard (right) side of the river channel; and (b) if going upstream, give way to any vessel coming downstream; and (c) not operate the vessel unless river and weather conditions permit safe operation of the vessel.

SAFETY CARD Emergency Information

Regatta Name

Key Contacts		
	Regatta Organiser	*Contact name and mobile*
	Race Officer	*Contact name and mobile*
	Shore Manager	*Contact name and mobile*

First Aid		
	On Shore	*Location of kit, first aid contact name and mobile number*
	On Water	*Location of kit, first aid contact name and mobile number*

VHF Channels		
	Open Course	*Channel 17*
	Green Fleet Course	*Channel 77*
	Emergency	Channel 16
	Coastguard	Channel 61

Support Boat Information

Check	Description
Lifejackets	All persons onboard must wear a suitable lifejacket at all times
Kill Cords	Must be worn at all times by skippers
Leaving beach or boat ramp	Radio check on VHF channel 77 or 17 to shore base with number of persons on board (POB) as you depart
Returning to beach or	Radio shore base on VHF channel 77 or 17 with number of

boat ramp	persons on board (POB) as you return
Overnight parking	*Advise location*. Take loose equipment and fuel tanks with you
Launching	*Advise location and any relevant local details*
Sailor launching	*Advise location and any relevant local details*
Support boat pack	Check contents of emergency pack and ensure it is onboard vessel
Speed restrictions	5 knot speed restriction when leaving ramp or within 200m from shore or within 50m of another person or vessel
Shipping	Don’t cross in front of any shipping

Levels of Operation

Level	On the water
Level 1 General Patrol/Rescue Wind 0-15 knots	Normal rescue protocols apply. Rescue and mark boats will operate in their allotted sector within the racing area Support boats to stay outside exclusion area unless instructed by RO Rescue and mark boats to stay in the race area until released by the RO
Level 2 Strong wind conditions Wind 15-25 knots (approx.)	Normal rescue protocols apply unless instructed by RO/PRO. Support boats may enter the course and assist when requested by RO/PRO. Rescue and Support boats to stay in the racing area until released by the RO/PRO
Level 3 Abandon races Wind 25-35 knots (approx.)	Emergency protocols will apply - PRO will fly flag “N” or “AP” over either “H” or “A” and advise over VHF that races are abandoned or postponed. All sailors are to return to the shore. Rescue, support and other available boats will be directed to assist where practical by the RO/PRO. All boats to stay in the race area until released by the PRO. Rescue and support boats may take sailors off yachts “in difficulty” then tag and abandon the yacht.
Level 4 Emergency Wind 35+ knots (approx.)	Rescue and support craft to operate as per Level 3. The PRO will advise Regatta Organiser of an emergency situation and may request outside assistance via Coastguard and emergency services.

SAILOR MISSING- A yacht without a sailor is an EMERGENCY

MISSING SAILOR – ON THE WATER

1. If the yacht is capsized, check that the sailor is not trapped under the boat or under the sail by either righting the yacht or otherwise checking in a safe manner
2. Immediately scan the area and pair up sailors with their boats.
3. Consider the line of drift (wind and tide) and focus on this area first
4. If the sailor has not been located, advise RO via VHF **"SAILOR MISSING SAILOR MISSING"**.
5. Drop a marker buoy or anchor and secure the yacht so it won't drift
6. **DO NOT PUT A "CREW SAFE" DANGER TAPE OR BLACK X ON THE YACHT** until the sailor is positively identified as being safe.
7. Start search upwind over a 60° triangle from the boat to a distance of at least 200m. Rescue boat crew standing if possible.
8. The RO will dispatch other rescue boats to the area.
9. When other boats arrive RO will designate one vessel to control the search
    a. Designated Vessel to initiate a line abreast (20 m apart) search from 200 m downwind of the boat into the wind.
    b. If unsuccessful, form up line abreast as directed and assisted by all other available boats and sweep the whole course down wind.
    c. If still unsuccessful form up at right angles to the course and sweep the course again.
    d. If still unsuccessful form up at the top of the course and sweep down the course centred on the marker buoy.
10. During this period On Land Coordinator to check sign-out and sign-in sheets and physically check sailors ashore to verify which sailor is missing.
11. At any time during the search the RO may abandon racing. RO to immediately contact Emergency Services.
12. The RO will determine which boats will shadow the fleet home. All other boats to stay on the water and carry on with in the search
13. Once a Police/Coastguard/Harbour Master vessel is present, it will take control of the search and all boats involved.
14. Search to continue under the instruction of authorities.