# Club Rescue Boat Course Marine Operator Safety System(MOSS)

#### **COURSE OUTLINE**

Marine Operators Safety System(Moss Exemption)

All club patrol boat skippers need to be signed off as competent drivers. Who in the club is responsible and qualified to deliver this course.

Who in the club is responsible for logging boat usage.

YNZ Recommended Rescue boat to yachts ratio: Learn to Sail 1 x 6, racing/coaching 1x10

### Preparation, Boat checks & Safety Equipment

First Aid Kit - Life Jackets — VHF — Knife — Shackle key — Towline — Bailer — Anchor - Bowline length so not able to reach prop — Second form of communication

**VHF Radio:** VHF Course. Check which channel yacht club operates on and do a radio check with club or RO - when transmitting hold radio out of wind – talk across the mic– call person (or boat name) you want three times and your name(or boat name) once – use radio only when required. Ask race officer permission to leave the course for any reason.

**Emergency procedure** see Attached Safety Card, each boat has a copy of this on board

Bungs: always check.

**Tube Inflation:** Inflatables should be quite firm (most club ribs are underinflated)

**Clothing:** Inflatables can be wet boats and yacht racing is sometimes held in rough conditions where you cannot just come in when you want, so make sure you have good wet weather gear on board even on calm days. Clubs could look at supply of wet weather gear to volunteers.

**Manning:** Rescue boats would normally have two people aboard whereas a coach boat may only have one

Kill cord: Must be warn! Consider using and piece of 2mm spectra and a Velcro strap to go around your ankle to allow you to move around the boat. Use a piece of 3mm braid to replace the kill cord if it goes over the side attached to a person.

If hand throttle, make sure it rotates to low speed when let go.

Make sure the motor is in neutral when around sailors in water.

**Fuel:** All Plimmerton Boats are 4 Stroke. Never leave shore unless tank is full (you never know how the day will go)

Motor Start: make sure in neutral and travel lock is off

Water Flow: Make sure there is a tell-tale flowing

**Towing:** make sure you have enough tow line out to be able to go head to wind when windy.

### **Basic boat handling (practical):**

check for telltale - figure of eight - coming alongside (forward and reverse) - picking up a buoy (life jacket) - handling in confined spaces - anchoring getting someone back onboard, don't slam into reverse unless you have to, ride on the back of the wave

**Basic give way rules**: Check local regulations – boats should pass left to left - 5 knots within 200m of shore, only in an emergency can you go faster within this limit - Keep well clear of commercial traffic - Guidelines will differ from area to area as to distance - Stay out of commercial channels - Reduce speed - "take early and substantial action to keep well clear".

**Launching Boat**: - Slipways – ramps (can be slippery) – don't unhook boat from winch until boat is in water (can roll off trailer)

**Retrieving Boat:** If in waves be sure not to get between the boat and the trailer when hooking up – Plimmerton does not drive boats onto the trailer, dock the boat, turn off and lift motor, then float boat onto trailer and winch. Make sure safety chain is on.

**Laying Buoys:** If laying start pin trail buoy out behind boat holding onto the anchor, when in position drop anchor into water – when laying other marks run anchor to the bottom rather than throw the whole lot over at once.

**Retrieving Buoys:** Approach buoy from leeward of the buoy - Retrieve buoy and motor slowly to windward to ease the weight on the warp – in deep water use anchor puller – ensure warp is well clear of prop

Assisting yachts in difficulty: In flat water you can approach from windward of the yacht to assist, in swells or waves approach from the leeward side of the yacht – aim to get bow to bow

When seeing a yacht capsize manoeuvre into a position where you can spot the sailor(s) without too much disruption to others still racing.

When towing loop the tow line around the mast once with the sailor holding the tail.

When towing lift the centreboard up a bit, don't take them right out in case they capsize.

**Optimist:** If inflatable is big enough remove centreboard and slide onto pontoons, derig and if in front of the console tie it down – all optimists should be fitted with their own painter (towline) – make yourself familiar with the mast clamps now mostly used on Optis – If removing the rig in waves hold one foot on the boat to stabilise then remove rig in one go – most optis now have a loop tied in their painter approx 1mtr in front of the bow to link the next boat onto.

### Get the kicker off in the following boats.

**Starling/Laser:** do not have a tow line so you will need your own one (or use their mainsheet) ensure it is not too thick – you will need to loop the tow line around the mast once and let the sailor hang onto the other end – if no rig up loop around the bow handle and then back to the sailor – tow with centreboard half up.

**Note:** the bow handles on the starlings are not made to be towed from, but the laser is.

**420:** will have its own tow line – centreboard up – get sailor to steer.

**Trailer Yacht:** if full of water you would need the biggest tow boat available, hook onto towing eye, some may come back upright

### Righting a multihull

The boat is likely to be upside down rather than on its side. If upside down:

- First stand off some distance and check whether the sailor wants help or whether they can manage themselves.
- Position your boat to windward.
- If they want help, it is likely they will have their own rope to pull the boat upright. This should be attached to the leeward hull, it should pass around the leeward hull, across the boat and travel out to the rescue boat. It may be necessary to extend the length of the righting rope with one from the rescue boat or if they don't have their own, to use a tow rope from the rescue boat.
- It is best to attach the rope to the main beam just next to the leeward hull, passing it under the hull and around the outside.
- Have the sailor sit on the windward hull by the main beam.

- Motor slowly to windward.
- Ease off the power as the mast and sail comes to the surface and the boat is now on its side.
- The sailor may be able to stand on the hull in the water and pull the upper hull down to right the boat.
- If the sailor can't manage it, continue to motor slowly to windward. It is important to bring the boat up into the wind. If you try bringing it up with the wind it will merely capsize again.

Don't let the rescue boat get close to the catamaran as they are very fragile and a minor collision will put a hole in it. Then that hull will sink and you will have a much bigger problem trying to recover it.

**Note:** any boat with a broken rudder may need to be brought alongside the Rib. When towing a boat with no rudder you will need to pull the centreboard fully up.

Ask sailor to bail as you tow if full of water.

Pull dinghy in close to the rib when approaching shore (so not to hit other boats when turning)

**Removing sailor from boat** – in extreme conditions when a sailor is removed from their boat some sort of identification needs to be left attached to the boat (most clubs use pink ribbon or orange danger tape or Crayon) When pulling sailors from water use life jacket shoulders or lift sailor from the back under arms.

**Multiple tows** – Optimists may have a loop in the painter 1mtr from the bow, also it's possible to get a boat either side of the rib if towing distance not too far.

**Sailors signed off:** Radio sail number of boat you have in tow to yacht club or race committee.

**Engine flushing & wash down**. Club maintenance records & procedures.

**Outboard Motor Troubleshooting:** Clubs can organise to get their local outboard mechanic to run through this

**Boat Log:** Fill in online form each time you use a club boat, and log any missing equipment or issues

https://www.plimmertonboatingclub.org.nz/boat-log

**First Aid:** Where possible you should complete a full first aid course. Clubs should organise a doctor/medic within the club to run a course for all rescue boat personal covering the 5 most likely situations: Hypothermia – Laceration – Concussion – Broken bone/dislocation – Sailor face down in water.

**Documentation:** App. Make sure club keeps a register of all training/Courses and who has completed it, incl LTS, coaching, race management, judging, rescue boat, VHF and first aid etc.

# **SAFETY CARD** Emergency Information

Plimmerton Boating Club - Club Racing

Key Contacts		
	VC Sailing	Warren Coffey 027 565 0005
	Race Officer	Duty RO – On Contacts List

First Aid		
	On Shore	Academy Shed, Bar and Start Box
	On Water	On Each Support Boat

VHF Channels		
	Plimmerton Sports	Channel 17 – Start Box
	All Support Boats	Channel 17
	Emergency	Channel 16
	Coastguard	Channel 16

### **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 17 to shore base with number of persons
	on board (POB) as you depart
Returning to beach or boat	Radio shore base on VHF channel 17 with number of persons on
ramp	board (POB) as you return
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

# **Levels of Operation**

Level	On the water
Level 1	Normal rescue protocols apply.
General Patrol/Rescue	Rescue and mark boats will operate in their allotted sector within the racing area
Wind 0-15 knots	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	Normal rescue protocols apply unless instructed by RO/PRO.
Strong wind conditions	Support boats may enter the course and assist when requested by RO/PRO.
Wind 15-25 knots (approx.)	Rescue and Support boats to stay in the racing area until released by the RO/PRO
Level 3	Emergency protocols will apply - PRO will fly flag "N" or "AP" over either "H" or "A"
Abandon races	and advise over VHF that races are abandoned or postponed.
Wind 25-35 knots (approx.)	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	Rescue and support craft to operate as per Level 3.
Emergency	The PRO will advise Regatta Organiser of an emergency situation and
Wind 35+ knots (approx.)	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.

### 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

# **Plimmerton Boating Club**

## **Pre Use Checklist**

0	Visual Pontoon check (tube inflation- pump is in Keith Stokes Shed)		
0	Visual Prop check		
0	Boat secured to trailer.		
0	Tilt Motor		
0	Bung		
0	Kill cord and ankle strap.		
0	Fuel 91 Octane		
	○ Full Tank		
	○ Vent Open and bulb primed		
0	VHF operational, plus second form of communication (Phone)		
0	Close all Hatch Covers		
0	Safety Equipment		
	<ul> <li>Buoyancy Aid worn by every person afloat.</li> </ul>		
	○ First Aid Kit		
	o Anchor		
	<ul> <li>Multi-tool / tools , incl spare kill cord</li> </ul>		
	○ Tow rope		
	○ Bailer		
	○ Paddles		
	○ Whistle/Horn		
	○ Boat hook		

Visual Hull check

### **After Use Checklist**

- Boat tied to trailer
- o Bung out,
- o Drain water outside the shed or Bucket under the bung hole
- Wash Trailer including trailer wheels and hubs
- Wash Boat
- Remove equipment used (marks, flags etc)
- Wash out motor, motor running with Muff, check water flow
- Visual Hull Check and pontoon check
- Visual prop and check
- Open all Hatch Covers
- Tilt Motor down
- Turn off battery –isolator switch if fitted

Fill in the boat use form online and log any damage/loss or maintenance needed

www.plimmertonboatingclub.org.nz/boat-log