



**Yachting New Zealand
Rescue Boat Skipper Training Programme
Version 2
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Introduction

This training programme is designed to give users of yacht club rescue vessels a basic understanding of the vessels they will be using and enable greater levels of safety and proficiency for rescue boat operators.

This is not a qualification and YNZ encourages drivers to take part in further formal training to grow their capabilities.

This programme is to be delivered at your club, with the vessels you will be using, by experienced members of your club who are registered with YNZ as suitably qualified to teach you about how to be safe rescue boat drivers. (Guidelines can be found as part of the YNZ Rescue Boat Safety System)

It is recommended that all club rescue boat skippers obtain a first aid qualification.

Remember: The person driving the boat is the Skipper and has legal responsibilities, which includes being responsible for the safe operation of the boat and the safety and wellbeing of all passengers and crew.

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1. GETTING TO KNOW YOUR CLUB VESSELS

Is it important to be familiar with the different types of vessels used by your club and to be aware of their various features and what may be different or special about each boat that you need to know about to operate it safely.

What different types of boats does your club use?

- Inflatable vs. Rigid Hull (Metal, Wooden, Fibreglass)
- Outboard vs. Inboard vs. Jet
- 2 Stroke vs. 4 Stroke engines
- What are the Oil/Fuel Ratios for the different engines

Fuel should not be stored in the boat when not in use. Often this will be an insurance requirement also. Many clubs will have an exterior fuel locker. (You should be aware of your club's fire procedures.)

What safety equipment should be on board?

The following is a list of required equipment to meet the YNZ Standards:

- Personal Floatation Devices (PFD's)/Lifejackets, one for every person on board (Should be worn by all on board – in most cases it is a requirement)
- VHF radio
- Knife
- Towing line
- Bailer
- Anchor (Many clubs cut the sharp tips off the Danforth Anchors to stop piecing the tubes of inflatable rescue boats)
- Alternative means of propulsion (i.e. oars)

Depending on the weather conditions or how far from the shore you will be operating, there are other recommended items carry:

- Bowline (of length so not able to reach the propeller)
- A spare line
- Shackle Key
- Spare engine kill cord
- Basic First Aid Kit containing the following:
 - Hypothermia blanket
 - Scissors /Tweezers
 - Strapping tape
 - Band aid dressings
 - Sunscreen
 - Bandages / Sterile gauze pad
 - Cleaning solution / Latex Gloves



2. HAZARD MANAGEMENT

Your club will have Safe **Operating Procedures** for the use of the club safety boats, you must read these and be familiar with them.

Risk Assessment

List the risks associated with the use of club rescue boats. Once listed go through each risk (hazard) and identify how you would prevent, isolate or minimise each risk.

You should include risks both on and off the water.

Your club will have a risk management as **risk assessment plan** for all the activities of the club. This plan will include the use of rescue boats. Once completed you should compare your list with the plan in place at your club, has anything been missed? This is a good opportunity to update the club plan.

You must be familiar with the risks associated with the use of the boats and the methods to minimise these risks.



3. PRE LAUNCH PROCEDURES

You should **check your vessel thoroughly** before every use.

Check the hull of the boat;

If you are using an inflatable (RIB) make sure that the tubes are properly inflated. Underinflated tubes reduce the boat's buoyancy, it can make it harder to manoeuvre and without proper buoyancy the vessel is more likely to take on water and cause the boat to founder.

Check the hull for any signs of damage, cracks in the gel coat or fibreglass, cracks in the hull welds or for any holes through the hull.

Ensure that the **bungs** are properly fitted and that any drainage systems work properly.

Check your engine;

You should check your engine before launching.

All engines have a set of per-use checks and will differ depending on the engine type.

The **oil level** should be checked. Most inboard engines will have a dip stick. For outboard engines you will need to check if it has an oil tank or if the oil needs to be mixed with the fuel (and if so what the oil/fuel ration should be).

You should check under the engine cover for signs or dampness, deposits or corrosion.

Inboard engines will have a coolant tank which the level of fluid will need to be checked. If it is too low or empty the engine will overheat.

Check you are using the right **fuel**, and make sure the fuel tank is full.

Ensure that your **steering system** is operational and moves freely. If hydraulic, check for any leaks.

Some boats will have a **Battery**; ensure the battery is switched on. Batteries should be checked for charge and recharged as required.

Safety Equipment Checklist

Ensure that the boat has the required equipment on board and any other equipment needed for the day. Refer to the list in the GETTING TO KNOW YOUR BOAT section.

It is a good idea to have a laminated checklist on the boat to easily see what needs to be carried and the crew can easily identify if all the equipment is on board.



Ensure that you are wearing appropriate **clothing** for the conditions when you go on the water. Remember that often the weather is changeable and be prepared in case of deteriorating conditions. You should also wear **sunscreen**.

Before you go on the water you must check the **weather forecast**. It is important to know what the current wind and sea state is, also if it is going to worsen or if the wind is going to drop away completely. This will help you plan your session and be prepared in case of a change in the weather. You can maintain a check on the weather using the VHF Nowcasting Service, the channel for this will differ depending on location (for Auckland it is CH21).

As part of your clubs operating procedures the club should complete a daily log as to who is manning the rescue vessels which should be readily available in case of emergency. If the club's current roster is not adequate, Yachting New Zealand has prepared a template as part of the Rescue Boat Safety System.



4. COMMUNICATION

Ensure that you always have a means of communication with the shore while on the water. The most common method of communication is a **VHF radio**; either handheld or mounted in the rescue boat.

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 water tight case.

Before going on the water ensure that the VHF unit has power (or a full battery). When on the water it is a good idea to do a 'radio check' with the club to ensure that it is transmitting and receiving properly. As part of the radio check you should confirm the number of crew you have on board.

You should be familiar with how the radio you are using operates (volume, squelch, frequency bands and transmission). You should be aware of what channels your club operates on and what the emergency frequencies are.

Below is a basic guide for making radio calls:

When Calling:

- Say the name of the party you are calling,
- Slight pause
- Say the name of the party you are calling again
- Say "From [your name/call sign]"

This enables the boat you are calling to recognise that their attention is needed and identify who is calling them

The response to acknowledge their call should be:

"Receiving, go ahead [Their name/call sign],

Or if you didn't hear the name of the party calling you:

"Station calling [your name/call sign]"

When you finish your transmissions/conversation using:

"[your name/call sign] Over" or "[your name/call sign] Out" if the conversation is finished

A note to remember: when transmitting hold radio out of wind to make sure you come across clearly.

There are courses available where you can obtain a radio operators license including Coastguard Boating Education.



Maritime New Zealand provides resources and information on the use of VHF radios, operators should read and be familiar with these guidelines (<http://www.maritimenz.govt.nz/Publications-and-forms/Commercial-operations/Shipping-safety/Radio-Handbook-2012.pdf>).

It is often a good idea to carry a **whistle** whilst on the water. It is a good method to attract attention from boats close to you. It is also a valuable coaching tool.

Know the club procedures in the event of an accident

In the event of an accident your club will have set procedures around how to communicate in emergency situations. You should discuss these procedures as a radio operator for the different scenarios below:

- boat-to-boat
- shore-boat-shore

You should also discuss verbal and hand distress signals with sailors.



5. LAUNCHING AND RETRIEVING

Whether you are launching from the beach or a ramp ensure you are aware of the hazards specific to your club's launching area. Hazards can be to the boat and your own personal safety. These can include but are not limited to:

- Public in the launching area
- Slippery ramps
- Dangerous objects in the launching area (sharp rocks, metal rods, oysters)
- Power lines
- Swell surge
- Rocks to the side of the ramp
- Poor water visibility to gauge depth
- Traffic from other boats using the ramp

4 Things to check before launching your boat:

- Check the bungs are in
- If the boat has an outboard engine make sure the engine is titled fully up
- Make sure the fuel is in the boat
- Make sure the boat is ready to come off the trailer (any tie downs are disconnected), however make sure that the bowline stay connected/secure until the boat is in the water

When launching:

- Slowly reverse the boat in to the water until the trailer is submerged enough that the boat can be floated off the trailer
- If you are using a car or tractor, try and keep the vehicle out of the water
- Disconnect the bowline and push the boat in to the water. **Don't disconnect the bow line (or cable) until you are at the water** (many boats have come off their trailer half way down the ramp)
- If you have enough depth you may be able to start then engine and reverse the boat off the trailer
- If you are launching from a beach be prepared to get wet

When retrieving:

- Ensure someone is on land to help you get the boat back on the trailer
- Slowly bring the boat in and line it up with the trailer
- Maintain your steering ability (engine idling in forwards) until you are within reach of the trailer then use the winch cable (if fitted) to pull the boat on the trailer. For smaller boats you will have to push the boat on.

When retrieving in big waves:

- Prepare engine for lifting before getting close to shore



- Stay just outside the break line looking for a wave
- Pick a nice wave
- Position your boat on the back of the wave in front of you. This helps avoid being picked up by and surfing the following wave.
- Once wave breaks, lift up motor
- Hop out and push boat into shallows
- If you are landing on a beach be prepared to get wet
- If you are landing on a beach carefully run boat on to beach and then winch on to the trailer
- Be sure not to get between the boat and the trailer when hooking up

Launching and retrieving is much harder in rough conditions with onshore wind and waves, know your limits and in these conditions seek help of more experience users. Practice makes perfect.



6. BASIC BOAT HANDLING

Engine Starting

Engines have various starting mechanisms, the two you'll most likely use is a key and a pull rope.

- Ensure the kill cord is attached to the engine and that once engine is running the other end is attached to the driver. **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 with a Velcro tab to go around you angle so you can move around the boat without cutting the engine)
- 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
- 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, once the engine is running push the choke back in.
- Once the engine is running, ensure that there is a steady stream of water coming out of the outboard engine. If not, the water intake may be blocked which will cause the engine to overheat.

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 be released 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 safely operate the boat in shallow water. You should familiarise yourself on land with these settings.



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 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.

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.

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 MANOUEVERING 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 leg (rudder), therefore in order to manoeuvre 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 manoeuvre differently, know or learn the characteristics of your boat; turning ability, slowing speed, throttle sensitivity.

Making 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 on making 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

Discuss: What effect will wind and current have on approaching another vessel?

When coming alongside a sailing vessel:

- Approach from behind the vessel
- If conditions allow, aim to come alongside the windward side of the vessel in order 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

Discussion: How would you approach a vessel in large waves where a windward approach might endanger to boat you are coming alongside?

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.

When anchoring:

- 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
- Lower the anchor first and allow the warp to run out
- 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.
- Let out additional warp as necessary



- 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, then slowly raise the anchor. Again, remember to watch the inflatable tubes 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.



7. LAYING BUOYS

When laying buoys:

- Ensure the buoys are properly inflated
- Make sure the warp and chain (if attached) will run freely and is not tangled.
- Make sure that the warp is attached to the buoy
- Position the safety boat to where you want to lay the buoy
- Slowly lower the anchor and warp in to the water
- Let the anchor reach the bottom
- Allow for a small amount of slack in the warp then coil any excess warp so that it does not float around the buoy where sailors may get caught up in it
- Set out the buoy

If laying a start pin, trail the buoy out behind boat holding onto the anchor, when in position drop the anchor into water. Often the race officer will communicate to you over the VHF where they want the buoy placed.

When retrieving buoys:

- Approach the buoy from downwind, coming alongside the buoy on its leeward side
- Put the engine in neutral
- Pull up warp making sure the anchor keeps clear of the tubes if using a inflatable rescue boat

Course Types

If you are laying courses for racing there is information on the different course types on the Yachting New Zealand website and can be found here

<http://www.yachtingnz.org.nz/coaches-officials/coachofficial-resources>



8. RESCUE SITUATIONS

When dealing with a rescue situation ensure you **prioritise**:

- First ensure the safety of yourself as the rescuer
- Then your boat (you are of no help if you damage your own boat)
- Then the person you are trying to rescue, establish if any of the crew you are rescuing are trapped under the boat. This requires a fast appraisal and prompt action.
- Ensure the other boats you are responsible for are under control
- Lastly deal with the vessel you are recovering

Assess the situation

When approaching or dealing with a rescue situation assess what action needs to be taken. It may be that you 'stand-by' and make sure the sailor is safe while they rectify a situation themselves. Do not rush in to rescue someone if they may not require it, especially if a sailor is racing, as outside assistance will disqualify them from the race. You can usually establish this verbally with the sailor.

If the sailor asks for help or if they are in danger then you can engage and provide assistance.

When **approaching someone in the water** consider following:

- Keep a lookout and always have the person in sight
- Approach a person in the water from downwind of them (i.e. make sure that you are downwind of the person in the water and make your way towards them moving towards the direction the wind is coming from). This will give you greater control of your speed and direction as you approach them.
- Ensure the bow of your boat does not land or blow over the person in the water
- Make sure the person keeps clear of the engine propeller, and if possible switch the engine off when you reach the person
- If the sailor is still beside or close to their boat do not place the person between the coach both and their own boat. This increases the risk of squashing them in between the two.
- When pulling people from water use life jacket shoulders or lift sailor from the back under arms.
- If bringing someone in over the side is too difficult; get them to hop into the boat over the transom using the cavitation plate on the outboard as a step. The electric trim can be adjusted to make it easier. Ropes can also be used.
- When the sailor is on board the rescue boat, assess them for signs of injury, exhaustion, cold shock or hypothermia. Follow your club's procedures in the event of injury or hypothermia*.



- Ensure you remain in contact via VHF with the club and or race committee

* - It is recommended that all rescue boat drivers have a basic level of first aid training.

Missing Person

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 and secure the yacht to the buoy.
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 up wind 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.
10. If the search is unsuccessful at this stage the Race officer may abandon the race and allocate rescue boats to the area.
11. Shore Base to advise Authorities.
12. Mark laying boat will take GPS co-ordinates of anchored yacht and under the guidance of the race officer co-ordinate a grid search utilising 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.

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, a china marker or orange danger tape)



Remember: If you are taking a sailor ashore make sure you radio the club and or race committee to let them know that sailor is safe and that they are going ashore (i.e. Sign them off the water).

What happens if you fall in the water?

- Will you float in the gear you are wearing?
- Can you swim in the gear you are wearing?
- Is there a spare kill cord on the boat? You might have lost your kill cord when you went in the water
- Do you know how to make a new kill switch clip?

Assisting yachts in difficulty

In flat water you can approach to the windward of the yacht to assist, in swells or waves approach from the leeward side of the yacht. Come alongside and provide assistance. Establish with the sailors as you approach their need for assistance. When seeing a yacht capsized manoeuvre into a position where you can spot the sailor(s).

Righting a capsized dinghy

Firstly identify any hazards (The sailor, the boom and sail under the water, ropes in the water, where will the boat go once it is upright, falling in the water whilst trying to pull boat upright).

How would you manage these hazards?

Righting the dinghy

- Come alongside the upturned dinghy once it is clear of anything under the water that might foul the propeller
- Ensure the boat is pointing head to wind
- Use the centreboard to slowly right the dinghy, ensuring you are able to maintain a hold on it and that the boom will not injure anyone on the rescue boat.
- Alternatively, if the sailor is able to partially right the boat to the point where the mast is near the surface of the water, you can assist by lifting the mast allowing the boat to be righted.
- If the centreboard has fallen through the centre-case a rescue boat oar can be used as an alternative

Right a multihull

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

- Ensure that all sheets are loosened and the boat is pointing head to wind
- Position yourself to windward of the multihull



- Take your towline (or theirs if they have one) and pass it over the leeward hull and tie it to the main beam (just next to the leeward hull),
- Use the entire length of the towline. You must be careful to avoid getting hit with the mast if the boat continues to roll and tips over again
- If the conditions allow have the sailors sit on the windward hull by the main beam (the closest to the rescue boat)
- Motor slowly to windward
- Carefully take up on the line and motor to windward to start bringing the boat upright.
- Ease off the power as the mast and sail comes to the surface and the boat is now on its side.
- The sailor(s) 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

Rescue methods for particular classes

Optimist

If using a RIB of a sufficient size, remove the Optimist centreboard and slide the boat onto the RIB pontoons, de rig the Optimist and if in front of the centre console tie it down.

If towing; all optimists should be fitted with their own painter (towline). If you need to remove the rig, make yourself familiar with the mast clamps now mostly used on Optimists. If removing the rig in waves hold one foot on the boat to stabilise then remove rig in one go. Many Optimists now have a loop tied in their painter approximately 1mtr in front of the bow to link the next boat onto.

Starling

If using a RIB of a sufficient size, remove centreboard and slide onto pontoons.

If towing, Starlings 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 hold onto the other end. If the boat has no rig standing, loop the tow rope around the bow handle and then back to the sailor, tow



with centreboard half up. Note: the bow handles on Starlings are made to handle the load from the forestay pulling up not the tow line pulling forward.

Laser

You would struggle to get a laser on board a RIB. Use the same towing method as towing a Starling.

420

A 420 will have its own tow line. Have the sailors lift the centreboard up and steer behind the rescue boat.

Kites

If a kite boarder requires assistance, allow them to gather their lines and kite before approaching them and assisting them to get themselves and equipment in to the RIB.

Note:

- A smaller boat with a broken rudder may need to be brought alongside the RIB and slowly towed if you are having trouble towing using a tow line.
- A larger boat a broken rudder can still be towed, create a drag point off the transom of the dingy will centre/steer the boat when towing (you can use a bailer, bucket or even a crew members legs)
- Ask the sailor to bail as you tow if the boat is full of water
- Pull dinghy in close to the rib when approaching shore (so not to hit other boats when turning)



9. TOWING

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 hitch or a knot that can be easily released in an emergency.
- 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 manoeuvrability
- If you are taking a sailor ashore make sure you radio the club and or race committee to let them know that sailor is safe and that they are going ashore.

Discuss: How would you go about towing the following?

- A dinghy with sails up and the sailor is on board
- A dinghy with no sailor
- A dinghy with no rudder
- A dinghy full of water
- A windsurfer

Discuss: Where would you attach the tow line to the following boats?

- Optimist
- P class
- Starling
- Laser
- 420
- Windsurfer (Techno, RSX)



10. 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 (<http://www.maritimenz.govt.nz/Rules/List-of-all-rules/Part91-maritime-rule.asp>).

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;
and
 - 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.

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.



- Monitor speed and take early and substantial action to keep well of other vessels.

Maritime Rules Part 91: Navigational Safety Rules – Relevant Rules

(Note: Local Bylaws may require a higher standard than what is listed below i.e. wearing of PFD's, ensure you are familiar with your local bylaws)

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.

Yachting New Zealand recommend PFD's are worn at all times while afloat on club rescue vessels. (in some areas this will be a legal requirement for all vessels under 6 metres in length i.e. Waikato)

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.

91.7 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.

More information including videos can be found on the Maritime New Zealand website here: <http://www.maritimenz.govt.nz/Recreational-Boating/Skipper-responsibilities/Skipper-responsibilities.asp>

Video:

<https://www.youtube.com/watch?v=WBSdTfTDL4>



11. END OF DAY PROCEDURES

Follow your club's wash down procedures. These should be clearly displayed.

If using boats in salt water the outboard engines must be flushed out with fresh water in order to prevent corrosion.

Different engines will have different methods of doing flushing; ensure that the person responsible for training or maintaining the rescue boats demonstrates how to properly flush the engines on the boats at your club.

Boats and trailers should be well washed with fresh water once they are done being used.

The boats should be checked for damage, any damage to the boat or engine should be logged in the maintenance log for repair. Similarly any equipment lost or missing should be noted for replacement.

Batteries (if fitted) should be switched off).

Handheld VHF radios should be returned to the club house to be charged for their next use.

Remove fuel tank (if there is an external tank) from the boat and store it in the designated fuel tank storage area.



Trainer Checklist	Completed
1. Getting to know your club vessels <ul style="list-style-type: none">○ Different types of vessels use at the club○ Fuel○ Safety Equipment	
2. Hazard Management <ul style="list-style-type: none">○ Safe Operational Plan○ Risk Assessment	
3. Pre-Launch Procedures <ul style="list-style-type: none">○ Checking the hull○ Checking the engine○ Safety Equipment○ Clothing○ Weather	
4. Communication <ul style="list-style-type: none">○ Equipment○ Making VHF calls○ Emergency procedure	
5. Launching and Retrieving <ul style="list-style-type: none">○ Pre-Launch checks / Hazard identification○ Launching procedure○ Retrieving procedure○ Beach vs. ramp	
6. Basic Boat Handling <ul style="list-style-type: none">○ Engine Start○ Engine Tilt○ Throttle and Gears○ Steering○ Boat Handling at Speed○ Coming Alongside	
7. Laying Buoys <ul style="list-style-type: none">○ Laying buoys○ Retrieving buoys	
8. Rescue Situations <ul style="list-style-type: none">○ Prioritise○ Assess the situation○ Approaching someone in the water○ Missing persons○ Removing a sailor from their boat○ Righting a dinghy/multihull○ Rescue methods for particular classes	



9. Towing <ul style="list-style-type: none">○ Procedures for towing	
10. Rules of the Road <ul style="list-style-type: none">○ Duties of Skipper○ Basic Give Way Rules○ Maritime Rules: Part 91	
11. Anchoring <ul style="list-style-type: none">○ Procedures for anchoring○ Hauling your anchor	
12. End of day procedures <ul style="list-style-type: none">○ Flushing the engine○ Wash down procedures○ Damage and Maintenance Logs○ Fuel	