



Deviot Sailing Club

Rescue Boat Operations

Emergency Contacts

Deviot Sailing Club operates on VHF radio channel 76. We use this channel for all club activities. All on-water emergency activity is to be co-ordinated through the Race Officer (RO) on Channel 76 in the first instance.

Telephone / VHF Radio

Deviot Sailing Club 6365 4058, VHF Channel 76
Police, Ambulance, Fire 000 (112 if using a mobile phone)
Tasports Bell Bay Emergency Channel 16

Other Yacht Clubs

Tamar Yacht Club VHF Channel 9
Port Dalrymple Yacht Club Channel 77

Notes:

Channel 76 is an open VHF channel. If you have an on-water medical matter, Channel 76 will reach the Race Officer who will co-ordinate arrangements for medical treatment, calling an ambulance if required, etc. If you call and don't get an answer, check that you are on the right channel and have the volume turned up.

Channel 16 is the internationally recognised call-up frequency monitored by the Tasports Corporation. The radio operator will probably ask you to go to another channel to converse once you have made initial contact. In an emergency this service will make contact with police and other services. If Channel 76 is not monitored for any reason (e.g. private training day), use Channel 16 for emergency calls.

The Deviot phone number above is for the VOIP phone located in the control room.

Introduction

Dinghy sailing in Australia has a great safety record. This is due in no small part to the work done by volunteer rescue boat operators. These guidelines are based on guidelines developed by the Sandy Bay Sailing Club, adapted to the local operating conditions at Deviot Sailing Club.

The guidelines are based on Yachting Australia's Safety Boat Handbook, which in itself is drawn from the UK's Royal Yachting Association. The guidelines do not seek to repeat the material in the Yachting Australia Rescue Boat Handling course, a supplement to the National Powerboat Course, TL3. They do however, endorse that material. These guidelines are designed to set the parameters for the operation of rescue boats at our Club. The numbers of boats referred to below relate to a typical day of racing and not a regatta situation where there are large numbers of boats competing.

Arrangements specific to the larger regattas will be put in place to suit the occasion.

Roles of the Rescue Boats

Ideally, there should be sufficient rescue boats on the course area to allow for at least two fully equipped boats (see below) to be dedicated to a rescue and support role, with a third vessel allocated to mark-laying duties and general errands.

In reality, these roles will be shared and it is the responsibility of the Race Officer (RO) to allocate the duties to fit the needs of the day. Safety is the first priority and the RO will ensure that rescue needs take precedence over course setting.

We aim to have one rescue boat for every 10 competing boats, although where a large proportion of the boats are crewed by competent adults with demonstrated self-rescue skills, this requirement can be relaxed. **The RO has the responsibility to ensure that racing does not commence unless the required level of rescue boat cover is provided, commensurate with the weather conditions, the course and the competency of the competitors.**

Rescue boats do not double as spectator boats. In emergencies, there needs to be maximum amount of carrying capacity (up to the legal limit in the boat) and rescue crews should not have to be concerned for the wellbeing of people other than themselves and the sailors on the course.

Whilst photographs are often taken from the rescue boats, photography is not a priority, and must not interfere with the safety role. DSC takes no responsibility for damage to photographic equipment used on its boats.

Rescue Fleet

DSC has three rescue boats at its disposal. All have centre consoles.

Roger Orr

Sea Jay 4.68 Navigator, Yamaha F60 4 stroke engine. 2017

Maximum capacity 5 persons. This is the only boat suitable for laying marks. It is not suitable for coming alongside dinghies, but can be used for rescuing people and towing. Fitted with VHF radio, and GPS/depthsounder for use in laying marks. This engine uses standard 91 RON petrol and has a built-in fuel tank. The tank has a dip-stick (stored under the seat cushion on top of tank) so level can be checked manually.

Gill Chapman

Mercury 460 Ocean Pro Hypalon RIB, Mercury 60 ELPT CT Seapro 4 stroke engine. 2021

Maximum capacity 9 persons (but effectively 4 persons). This boat is not suitable for laying marks as the rubber sides can be damaged by anchors and chains. This is the best boat for general rescue work as it is fast and easily manoeuvrable, and having rubber sides it can come alongside a sailing dinghy if necessary. This engine uses standard 91 RON petrol. This boat is stored in the downstairs part of the club house. Spare fuel in a labelled tank can be stored in the new boatshed on the rack just inside the door. For safety reasons do not leave spare fuel in the club house.

Deviot Rescue

Zodiac MkII 4.2m inflatable 2009, Yamaha 30 2 stroke engine.

Maximum capacity 7 persons. This boat is not suitable for laying marks as the PVC sides can be damaged by anchors and chains. This boat is fine for sail training, but due to its poorer manoeuvrability it is not as good for rescue as Gill Chapman. Note this boat has a 2 stroke engine and must use 91 RON petrol mixed with 2 stroke oil (100:1 ratio, 200mL oil in 20L petrol). **The only fuel stored in the bottom shed is pre-mixed 2 stroke petrol.**

Fuel Supply

All fuel for the club boats is to be purchased from Ampol in Exeter. Reimbursement to be obtained from the Treasurer.

Required Equipment

Human Resources

Each boat should have two competent adults on board. At least one and preferably both adults shall hold a current powerboat licence. For a power boat licence, Tamar Yacht Club regularly offers courses. [Motor Boat Licence Courses - Tamar Yacht Club \(yachting.org.au\)](http://yachting.org.au). For licenced operators the Sailing Australia Safety Boat Operator certificate is the ideal qualification. [Find a course - Australian Sailing](#)

Every person on board must at all times wear an approved PFD. It is recommended that at least one person should be prepared to enter the water to affect a rescue. Do not leave or store life jackets under the seats on the boats – they will go mouldy and prevent access to the safety equipment also stored there. Life jackets not worn can be left in the boat sheds or club house.

Qualifications and Other Information

DSC recommends the Sailing Australia Safety Boat Operator certificate is the ideal qualification for rescue boat operation. Australian Sailing has a number of free online courses, including a Mark Laying course [e-Learning Courses - Australian Sailing - Resources \(sailingresources.org.au\)](http://sailingresources.org.au)

Rescue boat on water times

Dinghies should not leave the beach until manned rescue boats are in attendance. On normal race days with club starts it is desirable that rescue boat crews are ready to depart at least 15 to 10 minutes prior to the first warning signal for the day's racing. This usually means a 1310 to 1320 hrs departure from the club pontoon. Similarly, rescue boats should not leave the fleet until all boats are safely ashore on the completion of racing.

On days of committee boat starts and major regattas it is desirable that rescue boat crews that are rostered on mark laying boats (Roger Orr) are ready to depart at least 45 to 50 minutes prior to the first warning signal for the day's racing. This allows time to get to the course area and complete the setting of marks under the ROs instruction prior to competitor's arrival, allow racing to get away at the nominated start time. This timing also allows, if conditions are marginal, for more rescue boats to be free to perform rescues if required as competitors arrive in the starting area.

Essential Equipment Checklist

The nominated skipper of each rescue boat should perform a check of all equipment prior to leaving the club. The following equipment is required:

- ☐ Functioning radio. Do a radio check call to Deviot Control.
- ☐ Tow lines (at least 2 and preferably more).
- ☐ Red and white "Crew Safe" floats to attach to boats, where the crew have been rescued and the boat left for later retrieval.
- ☐ Sharp knife, bolt cutters.
- ☐ First aid kit.
- ☐ Anchor, chain and warp.
- ☐ Sun screen.
- ☐ Adequate fuel for the day's activities with plenty in reserve.
- ☐ Hot/cold (non-alcoholic) drinks and food are desirable.

Radio Use

- a) DSC recommends taking an accredited Radio Operator course.
- b) Ensure radio is working prior to leaving the beach. If it is not working, the club has hand-held VHF radios that can be used in an emergency.

- c) Ensure radio is on Channel 76
- d) Do not touch or stand close to the fixed aerial during transmission.
- e) Ensure radio is on 'Lo' (1 watt) transmission power. If you are outside the Spring Bay area, change to high power.
- f) If the radio is switched off or there is a loss of power ensure it has reset to the appropriate channel when turned back on or power is restored.
- g) Take care not to use inappropriate language or make criticisms of others on radio as one can never be sure of one's audience.
- h) Don't use the radio aerial for support.

Detailed Equipment Checklist and operation procedures

Check lists and procedures.

- 1) Safety Equipment
 - a) PFD for each person (Supply own or club PDFs).
 - b) First Aid Kit.
 - c) Fire extinguisher.
 - d) Anchor, rope and chain.
 - e) Paddle.
 - f) Bailing bucket on lanyard
 - g) Knife and bolt cutters
 - h) Operating Radio (visually confirm radio is on CH76 and set low power small Lo in bottom right of display, to change to low power press and hold lamp button to Lo appears with beep).
 - i) Turn on depth sounder (essential for mark laying duties).
- 2) Boat and trailer preparation
 - a) Full fuel tank. Note: removable fuel tanks must be taken out of the boat prior to topping up as spilt fuel can be damaging to the inflatable boats, and is a dangerous fire risk.
 - b) Drain plugs secure.
 - c) Tyres inflated.
 - d) Boat is secure on the trailer (safety chain and winch strap forward).
 - e) Motor tilted up.
 - f) Sun shade erected (if fitted).

Note: ensure that the jockey wheel is wound in (boat lowered on jockey wheel) before pushing the boat around. Moving the boat around when the jockey wheel is extended will scrub the tyre out and is dangerous due to the excessive force applied to the extended wheel. Don't put your feet under the drawbar whilst moving the boat in case the jockey wheel breaks. Swing the jockey wheel up when the trailer is connected to a tow vehicle.

- 3) Loading equipment into each boat (for on-water starts using Committee boat).
 - a) Mark Laying boat (Roger Orr) will be carrying:
 - i. Windward, leeward mark and wing marks and change of course marks.
 - ii. Course details
 - iii. Change of course signal flags and whistle
 - iv. Personal equipment (protective clothing, sunscreen, drinks)
 - b) Committee boat will carry:
 - i. Second anchor
 - ii. the Orange Pin flag for the starting line.
 - iii. Distance mark to protect committee boat (if applicable)

- iv. Starting horn
- v. NOR, SI, Course details
- vi. Finishing Sheets
- vii. Pens/Pencils
- viii. Personal equipment (protective clothing, sunscreen, drinks)

4) Launching the boat

- a) Boats are generally launched at the Northern ramp, unless the tide is low, in which case the southern ramp is used.
- b) Be aware of slippery ramp surfaces.
- c) Ensure rear drain plugs are in.
- d) Back boat into the water.
- e) Lower engine into the water maintain at 10-15 deg up tilt on motor till clear of ramp. Note: in Deviot Rescue the motor is either up or down, so launch in the up position and lower once the boat is in the water, ensuring the tip of the motor is clear of the ramp.
- f) Pump fuel up to the engine using the hand squeeze bulb in the fuel line (only for first start of the day). Loosen the air screw on the top of the fuel tank (portable tanks only).
- g) Check gear lever is in neutral position.
- h) Generally the hand throttle will be in the down position. This can be lifted to warm up the engine once it starts, but has to be down again before the gear shift is engaged.
- i) Engage the choke in the case of Deviot Rescue.
- j) Turn the key and start the engine, release the key. In case of Deviot Rescue, pull the rope start. Ensure that you don't hit the tow pole or another passenger as you pull the cord. If the engine fires but doesn't start the choke should be pushed half way back in.
- k) Allow the engine to warm, revs displayed will drop from 11-1200 to 800 when engine is warm, ensure water is flowing from the tell-tale (check LHS of motor when facing, tell-tale exists just below engine cover. Push the choke back in (Deviot Rescue only).
- l) Disconnect the boat from the trailer and reverse off.
- m) If engine doesn't turn over check the following:
 - ix. Gear shift is in neutral
 - x. Kill cord is connected
 - xi. Battery connected and charged
- n) If engine turns over and doesn't start after a couple of tries, check the following:
 - xii. Fuel line connected
 - xiii. Try increasing throttle setting.

Mark laying

5) Laying marks for starts from Club House.

- a) For normal club racing, starts are conducted from the Control Box at the Club house, using flags erected on the club house.
- b) The course typically utilises the fixed marks, A, B, C, E and G. These generally need no attention week by week, except a visual check to ensure that they are present.
- c) The start line is set directly off the club house using a yellow or yellow and black inflatable mark. This should be dropped with guidance from the RO (see instructions in next paragraph on laying marks).
- d) An inner distance mark is set between S and the Starting box, as close to the starting line as possible. This is an orange flag on a polystyrene float.
- e) Occasionally additional inflatable marks are set as required.

- 6) Laying the course marks (for on-water starts using Committee boat).
 - a) Note for most dinghy races at Deviot you will be laying marks in 20+ metres of water, with 50+ metres of ground tackle. This means the mark anchor needs to be laid “upstream” of the desired mark location (depending on tide direction). Due to the depth and strong tides, laying marks at Deviot is often challenging.
 - b) Roger Orr will be required to lay and/or retrieve course marks.
 - c) If more than one mark boat available, RO will advise which marks go in which boat. (Typically one boat will be carrying the start and leeward mark and the other will have the windward, wing and change of course marks)
 - d) Have crew check marks are ready to lay with no tangles in the lines. The anchors and weights are permanently attached.
 - e) Proceed to the course area after ensuring that radio contact is established with Race Committee boat.
 - f) RO will direct mark boat to appropriate position.
 - g) Once on the approximate mark location, confirm depth of water you will be laying mark in.
 - h) The length of the line can be lengthened by releasing the extra rope held in loops, or shortened by looping the extra rope up and tying off. If a mark drags, extra length will often assist.
 - i) While drifting, trail the anchor and chain in the water then progressively feed out the mark line until it is all over the side, followed by the mark.
 - j) Do not drop everything at once as it is likely that the anchor will be fouled by the chain.
 - k) Be very careful that your feet and arms are clear of the lines as the mark is dropped overboard.
 - l) Confirm with RO that the mark is in the correct location, and that is not dragging.
 - m) If a mark needs to be moved a short distance, it is often easier to drag the mark than to lift it back into the boat. Take caution when dragging that the line doesn’t drag the boat over.
 - n) Proceed to set further marks or remain on station at direction of RO.

- 7) Setting the Start line
 - a) The aim in laying the start line is to get the start line from the signal mast of the committee boat and the pin end start buoy at 90deg to the wind or with the pin end mark slightly to windward.
 - b) to lay the start mark first confirm the line length (distance from the committee boat) from the RO once at that distance deploy the start buoy and weight, then motor to windward, with boat crew ready to drop the anchor and chain.
 - c) Upon advice from the RO, release the anchor and chain. The anchor will drop to the bottom while the mark should remain in the desired position.
 - d) Remain on station to effect adjustments to the start mark as required.

- 8) Retrieving course marks
 - a) Confirm that the mark is no longer required by contacting the RO
 - b) Approach the mark into the wind or tide
 - c) The crew should pull the mark into the boat; skipper should keep the boat motoring slowly forward to assist in retrieving the anchor.
 - d) The mark line is then pulled aboard, taking care of the boat sides when the anchor and chain come over gunnel. (Take particular care when using privately owned

boats loaned by club members not to scratch the boat). Lay the mark and anchor in a position on the floor of the boat away from other marks to avoid entanglements.

Rescue, assisting and towing

9) Monitoring racing fleets

- a) The rescue boat operators should make themselves aware of how many boats are competing, and undertake periodic counts to ensure that all boats are safe.
- b) The rescue boats should coordinate so that they cover the fleet. For instance one boat may stay near the windward mark, and the other may watch the gybe mark and the leeward mark.
- c) If one boat is involved in a rescue, the second might move to the centre of the course so it can monitor the whole course area.
- d) The rescue boat operators must coordinate with the RO who has oversight of the whole race, and in an emergency situation must follow the directions of the RO.
- e) The first priority is to ensure the safety of the sailors, not to rescue the boat. In an emergency boats should be left and the sailor(s) taken to shore. If time permits a "Crew Safe" buoy should be attached to the hiking straps of the abandoned boat.
- f) Note that if the rescue boat is not under control (stalled motor etc), this can be signalled to approaching racing dinghies by the driver holding both hands up in the air.

10) Assisting a capsized boat

(Note: Once you render assistance to a capsized boat, it is automatically disqualified from the race. We therefore give the crew every opportunity to right the boat and sail on. The following notes relate to a boat that has agreed to accept assistance or where, in the view of rescue boat crew, the crew are in need of assistance.)

- a) It is best that the crew sail the boat home rather than requiring a tow as this takes a rescue boat off the course. A tow should only be offered where it is clear that the crew will be unable to proceed unaided. Alternatively the rescue boat crew might sail the boat home whilst the rescue boat takes the sailor ashore.

Important note: once you are alongside a dinghy being rescued with any crew in the water, turn off the motor to ensure no damage can occur due to the moving propeller. Even when propellor guards are fitted there is still danger from a rotating propeller.

- b) "Walking the mast up" by hand may be all that is required to get the boat upright.
- c) Unless in a RIB, rescue boat crews need to take additional care to ensure they do not get too close to people in the water and to avoid damage to boats.
- d) If the crew or skipper is exhausted or suffering from cold, consider getting them into the rescue boat before dealing with the capsize. It is in this instance that rescue boat crew may need to enter the water.
- e) When dealing with one boat, keep a lookout for other incidents which may take priority.
- e) Provide the RO with updates on progress with the incident, especially where one of the rescue boat crew need to enter the water.
- f) Where there are multiple capsizes and conditions are becoming severe, rescue boat crews may be asked by the RO to rescue crews and abandon boats for later retrieval.

In this case rescue boat crews should attach red “Crew Safe” floats to the boats to indicate that the crews are safe.

- g) A knife and bolt cutters are provided on the rescue boats particularly to free sailors who might be caught in the rigging or trampoline. Use of these tools may require the rescue boat crew to dive into the water.
- h) Answering the radio can delay the rescue in progress, so radio discussion should be minimised, and urgent messages can be delivered without waiting for the usual confirmations.
- i) The RO should keep a log of rescue operations.

11) Towing a dinghy safely

- a) Consider whether towing alongside or astern is most appropriate. In light to medium weather either is ok if a short distance. In heavy weather or over a long distance, towing astern of the rescue boat is recommended. Towing alongside Roger Orr is not an option due to the aluminium sides.
- b) Agree arm signals before starting a tow. Generally pointing up means “go faster”, pointing down means “slow down”.
- c) Use a sufficiently long line to keep the boat and line clear of the rescue boat’s engine.
- d) Spread the load of the towline on dinghy strong points. A double wrap around the mast and then the towline held by the crew is often preferable to using the fixed towline.
- e) One end of the towline must be capable of quick release. Either a wrap around a cleat and held by the rescue boat crew, or a wrap around the dinghy’s mast as described above.

Recovery and packing away

12) Recovering the rescue boat

- a) Coordinate with the Deviot Control to have someone back the trailer into the water. In very low tides, the only suitable ramp is the southern-most one, near the pontoon. Otherwise the northern ramp is used.
- b) Back the trailer into water, until the rear-most roller is submerged.
- c) The assistant prepares the winch line by extending approx. 1.5m.
- d) The skipper tilts the motor to 10-15deg then drives the boat onto the trailer. Drive at a steady speed, slow enough to abort the approach if the boat drifts off line.
- e) Power can be gently applied once the boat is engaged with the trailer.
- f) The crew connects the winch line and winches the boat the rest of the way, and connects the safety chain. The crew should be careful not to put their body between the boat and any part of the trailer, particularly the post.
- g) If the tide is low and particularly when there are waves, there is a considerable risk of the motor striking the ramp. In these conditions the motor should be lifted clear of the water and the boat winched on all the way.
- h) There is no shame in winching the boat all the way, instead of driving on – this reduces the likelihood of damage to the boat or motor. This is particularly recommended with the NEW Rib as the hull is fiberglass.
- i) Tow the boat to the top of the ramp, and undo the bungs.
- j) The skipper should exit the boat whilst it is towed back to the apron.

Recovery and packing away continued

13) Wash down and cleaning out

- a) Connect engine ear muffs to the hose fitting, and flush motor at idle speed for 3-5 minutes. With Gill Chapman the motor is flushed using a hose fitting to connect the hose directly to the rear of the motor. The motor is flushed whilst turned off.
- b) Remove the boat drain plugs, and wash down boat hull, deck, inside hull, console, motor (ensure you wash down around the tilt ram area of the motor, and the steering cables or shafts) and trailer. Ensure water drains out of the hull. Avoid wetting the radio and gauges.
- c) Tidy up ropes, lines and equipment.
- d) Unload all rubbish. Note that leaving rubbish in boat can cause long-term damage. Aluminium can corrode when left in contact with other metals. PVC and Hypalon can be damaged by rubbish that can work its way into crevices and rub on the fabric surface.
- e) Turn the radio and depth sounder off. Lower aerials and canopy.
- f) Roger Orr is pushed frontwards into the boat shed after all the dinghies are in. 2-3 people are required to push it in.
- g) Gill Chapman is pushed frontwards into the Clubhouse storage area. 2-3 people are required due to the step-up at the doorway.
- h) Tilt the outboard motor down so it is almost vertical, but still safely clear of the floor. Check that the boat is clear of the roller door.
- i) Remove excess marks and ground tackle from the boats.
- j) Do not leave life jackets in storage compartments on the boats – they will go mouldy, and also stay wet.**
- k) Deviot Rescue is stored off-site.
- l) Any damage to the boat or its equipment should be reported to the RO.