SURF LIFE SAVING®
NEW ZEALAND

Rescue Water Craft

Training Manual
2020


SURF LIFEGUARD
SURF LIFE SAVING
107788
SURF RESCUE

Contents

RESCUE WATER CRAFT (RWC)

Start

A Rescue Water Craft (RWC) is a specifically modified Personal Water Craft, sometimes referred to as a Jet Ski, which is designed to effect rescue in the surf zone. An RWC should only be operated by a qualified and refreshed Surf Lifeguard who also holds a current RWC award.

The RWC has multiple applications in the lifesaving context. Primary uses for RWC include supporting patrol operations, and extending the reach of lifesaving services beyond traditional patrol locations.

Rescue Water Craft

As the operator of a Rescue Water Craft you are responsible for the safety of yourself, your crewperson, and any other person that may be affected by your operation of the RWC. It is important that you understand the inherent risks with operating an RWC. You are required to identify hazards and assess the associated risks, then apply necessary controls to manage these risks appropriately. You should refer to the SLSNZ Health and Safety Manual to fully understand your responsibilities and obligations.

You need to remember that the speed, noise and general presence of powered craft and vehicles on a beach can create issues, so always be respectful of the rights of the public to enjoy their time at the beach.
Other beach users have an expectation that the vehicles or craft that you control will be operated safely and responsibly.

Remember, as lifeguards you should promote safety at every opportunity and it is your duty to act responsibly amongst your colleagues and the public at all times.

Operational Use

Uses of the RWC

RWC may be used by SLSNZ lifeguards as additional support to their daily duties. RWC have the potential to improve lifeguard response and capabilities during an emergency when operated by trained, competent and skilled personnel.

RWC are particularly effective when:

- A rapid response to isolated areas and/or where support of a patrol incident is required.
- Navigating safely in large and or messy surf.
- Navigating around rocks and in tight operating spaces.
- Shepherding swimmers (guiding and directing people in a particular direction) in the surf zone.
- Patrolling large open sections of coastline/beach.
- Single person rescues.

Advantages of the RWC

- Agility at low speed.
- Manoeuvrability at low speed, for example around rocks and jetties.
- Effectiveness in large surf.
- Can be operated by one Surf Lifeguard.
- Can be righted and restarted after capsize.
- Can be operated in the shallow water of harbours, estuaries and inlets.

Disadvantages of the RWC

- High speeds increases risks to operators and others that may be affected by RWC.
- Weight makes it difficult to launch and retrieve.
- High speed and weight pose a risk to other water users.
- Significant training and supervision are required to produce competent operators.
- Limited patient carrying capability, depending on craft and rescue sled.
- Increased repairs and maintenance costs.

SLSNZ Policy for Use of an RWC

- RWC may be used for SLSNZ approved activities only.
- Only qualified RWC operators with a current SLA and SLSNZ approval may operate an RWC.

Risk Management

Risk Management is an essential component of risk management and a legal requirement of our duties as RWC Operators.

See the SLSNZ Website for risk management and assessment processes and requirements relevant to this manual.

Public Image

RWC have an obvious 'presence' due to their size, weight, and speed compared to other craft operating in the surf zone. A near miss by an RWC could be traumatic for a board rider, surfer or swimmer. Therefore, care must be taken when operating RWC to ensure the safety of others that may be affected by the presence of an RWC.

RWC must only be used for their intended purpose and no person may, without reasonable excuse, propel or navigate a vessel at a speed exceeding 5 knots. Speeds in excess of 5 knots (9km/hr) should only be considered where the safety of the operator and others is not compromised, and where a rapid response is necessary to prevent loss of life. See the Maritime Regulations section of this manual for further information on "speed" and "reasonable excuse".

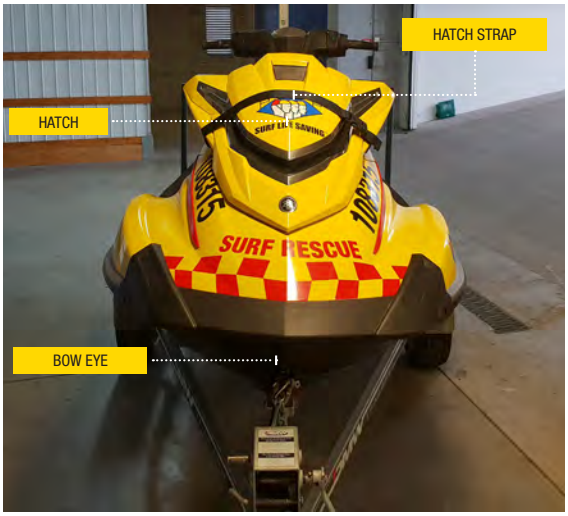
A Equipment

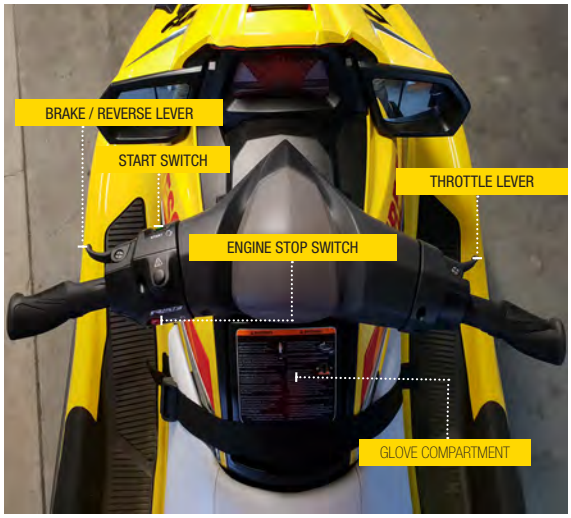
This section details the design and features of an RWC.

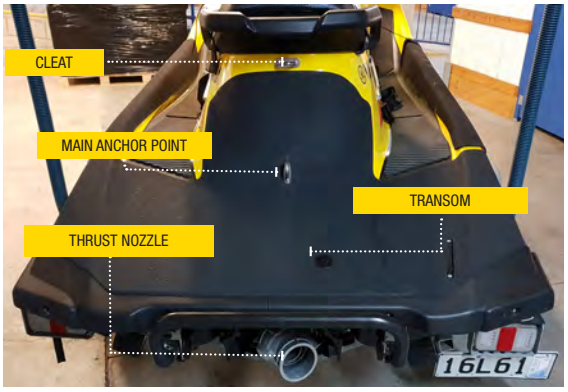
Equipment

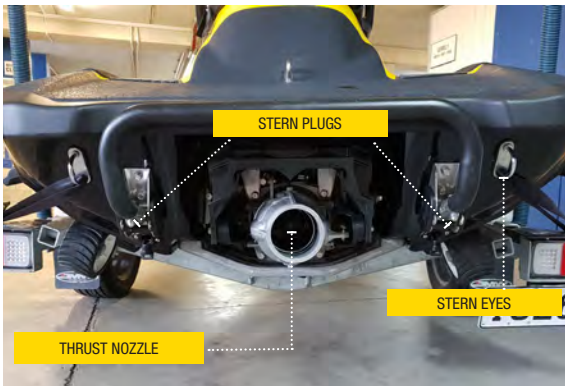
The design and features of an RWC

Yamaha Rescue Water Craft









Design and Attachment of a Rescue Sled

There are two types of rescue sleds we use:

- Inflatable rescue sled **A1**
- Rigid rescue sled **A2**

The rescue sled must be checked regularly to ensure that towropes are not damaged or fraying and that there are no sharp areas. The attachment clips should be gate locking, stainless steel carabiners and free from rust. The rescue sled base should be inspected for cracks and tears before each use.

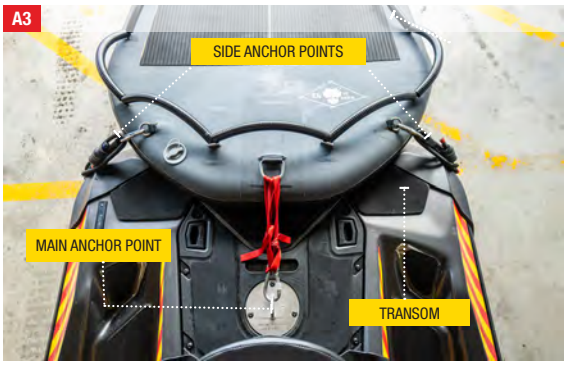
The rescue sled should be securely attached to the RWC by three points of contact. **A3**

The middle clip attaches to the main (central) anchor tow point on the RWC – behind the seat. Two side connections should be under tension but not weight bearing – they are solely intended to provide stability of the rescue sled in turns.

Once attached the rescue sled should then be resting on the transom of the RWC – not hard up against the rear of the seat.

Filling the Oil Tank

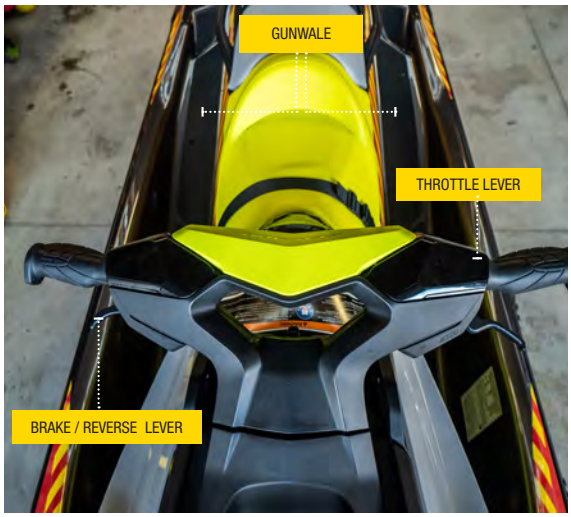
Checking and refilling of oil are only allowed to be carried out by the appointed Power Craft Officer as per the manufacturing guidelines.

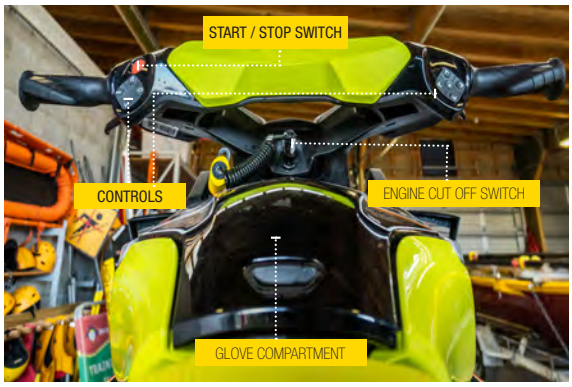


Equipment

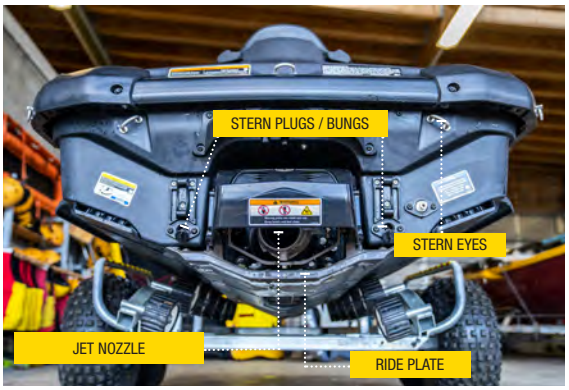
The design and features of an RWC

Sea-doo Rescue Water Craft






CLEAT
MAIN ANCHOR POINT
TRANSOM


STERN PLUGS / BUNGS
STERN EYES
JET NOZZLE
RIDE PLATE

Equipment

Personal protective equipment while operating an RWC

Personal Protective Equipment (PPE)

PPE must be worn correctly while operating an RWC.

Essential PPE

Essential PPE is to be worn at all times whilst operating an RWC.

Operator A4

- Wetsuit (minimum wetsuit shorts)
- Lifeguard branded rash vest or SLSNZ branded wetsuit or branded personal floatation device (PFD)
- Helmet
- VHF radio
- Fin belt and fins
- Personal floatation devices (PFD)

Crewperson

- Wetsuit (minimum wetsuit shorts)
- Lifeguard rash vest or SLSNZ branded wetsuit or branded personal floatation device (PFD)
- Helmet
- Fin belt (with personal fins)
- Personal floatation device (PFD)

It is **compulsory** for the operator and crewperson to wear New Zealand Standards approved PFDs and helmets at all times when operating an RWC.

Optional PPE

- Spray jacket
- Full body wetsuit

Minimum Equipment Required for Operation

The following items must be carried at all times when operating an RWC:

- Rescue sled
- Rescue tube (secured to the RWC)
- Spare engine shut-off cord (lanyard)
- VHF radio
- Goggles or dive mask
- Knife
- First aid personal protection (gloves, face shield)

Recommended:

- Flares (a requirement for search and rescue mode operations, but a recommendation only for operations within 700m of land).
- EPIRB (if operating off shore)
- First Aid Kit (bag valve mask, gloves, oropharyngeal airway-OPA)

Note: Please refer to regional operational procedure

A4

B Fuel

This section gives information on fuel type and how to safely fuel an RWC.

Fuel

Information on fuel type and how to safely fuel an RWC

Safety Around Fuel

Fuelling must be conducted following the procedures outlined below. Additionally, national standard operating procedures (NSOP and CSOP) may apply. No fuel premixing is necessary, except during the engine break-in period.

Fuel Type

Recommended fuel:

- RWC generally use 91 unleaded fuel. Refer to the manufactures guidelines.
- It is recommended that RWC fuel be clearly labelled and stored separate from other fuels to avoid any mix up with pre-mixed fuel.

Note: Do not use fuels that contain ethanol as this can cause significant engine damage.

B1

Fuelling Procedures

Fuelling should always take place at the facility where the fuel is stored. B1

NOTE: Under certain circumstances, re-fuelling will need to take place on the beach. In such cases, where practical, the RWC must be removed from the sand and positioned on either a grass or concrete/tarmac surface.

When filling the fuel tank it is important to observe the following:

- Ensure safety goggles / safety glasses are on before commencing re-fueling. B2
- Always have a dry powder/AFFF foam fire extinguisher, fuel spill bag to hand during fuelling.
- A minimum of one person is required for each fuelling operation.
- Ensure all cigarettes (including e-cigarettes) and naked flames are safely extinguished. Refrain from using mobile phones. Choose a suitable flat site with adequate ventilation. Ensure that passers-by do not come close to the fuelling area.
- Ensure that the RWC is securely on the trailer and is level. Open fuel cap and carefully transfer fuel using an appropriate spout and funnel with filter. Replace cap securely, wipe up any spills and check for leaks.
- If you should swallow or inhale fuel seek immediate medical attention.
- If you get fuel in your eyes, flush out with warm water and immediately seek medical attention.
- If any petrol spills on your skin or clothing, immediately wash the affected area with soap and warm water and change your clothes.

B2

C Communication

This section details effective communication with, and from an RWC.

Communication

Effective communication with/from an RWC

Signals

Signals are a common method of communicating between lifeguards and shore. Radio communications are not always available, therefore the RWC operator and crewperson must know and understand these signals.

When signaling to the RWC the following should be taken into account:

A location should be used on the shore which will ensure that the signals can be clearly seen, i.e. patrol tower, higher ground or sand dunes.

Signals may include the use of arms, rescue tubes, paddles, flags, or signaling discs. Ensure that you select a signal method appropriate to the location and environmental conditions to maximise the visibility of the signals.

Signaling From Sea to Land

Shore signal received and understood
One arm held vertically, then cut away sharply.

Assistance required
One arm waved to and fro above the head.

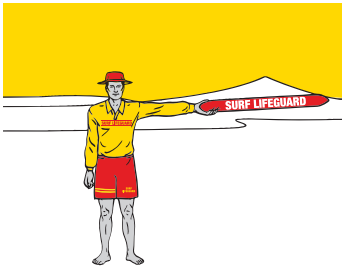
Ok signal
Internationally recognised diver's signal. One arm is curled round the top of the head to form an "O".

Signaling From Land to Sea

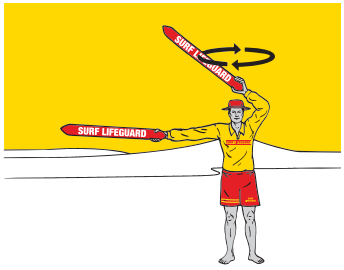
To attract attention between RWC and shore
Two rescue tubes waved to and fro, crossing above the head.

Return to shore
One rescue tube held above the head.

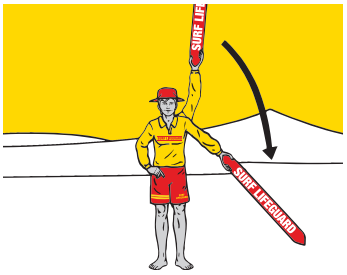
Proceed further out to sea
Two rescue tubes held above the head.



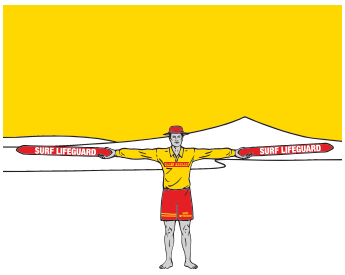
Proceed in the direction indicated
One rescue tube held at arm's length parallel to the ground and pointed in the required direction.



Pick up swimmers.
One rescue tube waved in a circular manner around and above the head and a second held parallel to the water's edge and horizontal to the ground.



Message understood-clear.
One rescue tube held stationary above the head and cut away quickly.



Remain stationary
Two rescue tubes held at arm's length parallel to the ground.

D Maritime Regulations

This section outlines the rules and regulations RWC operators must abide by on the water.

Maritime Regulations

The rules and regulations on the water

Operator Responsibility

The operator is responsible for the safe operation of the RWC, the safety of the crew, and must abide by Maritime rules and regulations at all times.

Coastal inshore waters are used by many recreational and commercial operators, all of whom must abide by statutory maritime regulations.

In the case of an accident, or breach of maritime rules, limited knowledge or ignorance of the Maritime Transport Act 1994 and regional maritime bylaws are not acceptable excuses. Heavy fines are possible for breaches of maritime rules. Additionally, a lifesaving standards breach is likely to be issued to the operator and club by SLSNZ.

The RWC must not enter the patrolled flag area unless the operator has a reasonable excuse (see the MNZ definition of "reasonable excuse" on the next page) in service of preserving life.

Code of Conduct

Safe operation of the RWC is required at all times.

The operator needs to:

- Consider others that may be affected by the presence of the RWC.
- Minimise speed wherever possible.
- Operate RWC appropriately at all times. Note: Aggressive manoeuvring and speed should be applied as required to safely negotiate the surf zone or in the provision of life.
- Racing of any form is not acceptable on an RWC at any time.

Profile

The RWC is regarded as 'high profile' and will therefore draw attention, the driver has a responsibility to the community and Surf Life Saving to act in a considerate and safe manner at all times.

Understand your Limitations

Respect and understand the limitations of operator and crewperson in varying conditions. Care must be taken by crew when assessing risk.

It is an offence to maintain or operate an RWC (or any other maritime product) in a way that causes any unnecessary risk to another person or property.

Operational Details

Operators must understand the rules and regulations that relate to boating and water-based activities in their specific region and be familiar with the application of the following legislation:

- Maritime Transport Act 1994
- Regional Maritime Bylaws
- Health and Safety at Work Act 2015
- Additionally, operators must be familiar with the application of the following SLSNZ documents:
- NSOP (National Standard Operating Procedures).
- CSOP (Club/Service Operating Procedures).
- Patrol Captains Report Form – weather and surf conditions.
- SLSNZ Incident Report Form.
- SLSNZ Event Safety Policy.
- SLSNZ Buoyancy Support in IRBs Policy.
- Lifesaving Activities around Rocks Policy.
- SLSNZ Helmet use in Powered Craft Policy.
- RWC Service Provider's Club 'Health and Safety Manual
- RWC Service Provider's RWC Safety Case' submitted for the current season.
- SLSNZ RWC Equipment Specifications Manual.
- SLSNZ RWC Operation Log - record details of all usage.

Rules of the Sea

It is compulsory for the operator and crewperson to wear a NZ Standards approved (or equivalent) personal flotation device and helmets at all times when the RWC is on the water.

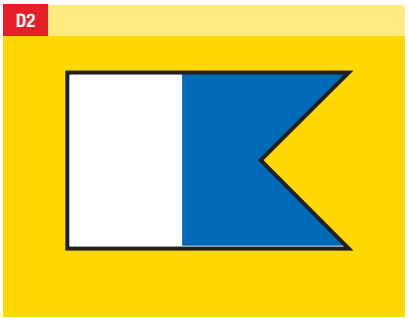
Speed

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 (9km/h) in these circumstances:

- Within 200m of the shore or of any structure. D1
- Within 200m of a vessel or raft that is flying Flag A of the International Code of Signals. D2
- Within 50m of any other vessel, raft or person in the water.

D1

D2



Reasonable Excuse

All RWC operators must ensure that they operate to the requirements of the Maritime Transport Act 1994 (the Act) at all times, except where reasonable excuse exists. Examples where this applies to SLSNZ's rescue operations are defined below:

For example, where the rescue craft is being operated to:

a) rescue a person or

b) assess that person's safety in the water, or

c) prevent immediate danger to a craft, including the rescue craft from capsizing within the surf zone.

At all times reasonable speed must be applied during these situations which does not endanger any water users, the operator or crewperson.

Operating a craft in excess of 5 knots just to get to a destination quicker is not a valid or 'reasonable excuse' to breach Navigation Safety Rule 91.6.3. If you need to operate at speed, do so at least 200m off shore and outside of speed limited areas.

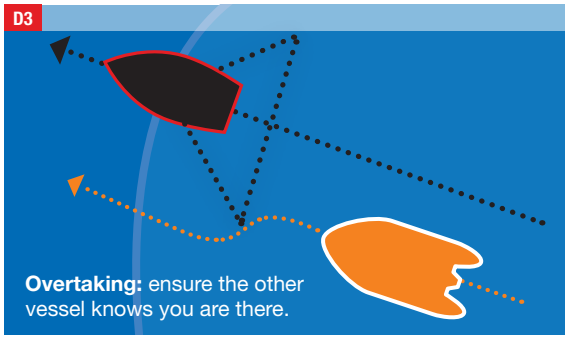
When Two Boats Meet

Overtaking:

You are overtaking if you are approaching another boat anywhere in a 135 degree sector at its stern. You can overtake when approaching from behind, on the right or left of the craft, however we recommend overtaking on the right where possible.

When overtaking you must keep clear of the vessel you are overtaking. You continue to be the give-way vessel until past and well clear. If being overtaken, maintain your course and speed. D3

D3



Head on:

Power vessels approaching head-on should alter course to starboard, passing down each other's port side. D4

Crossing:

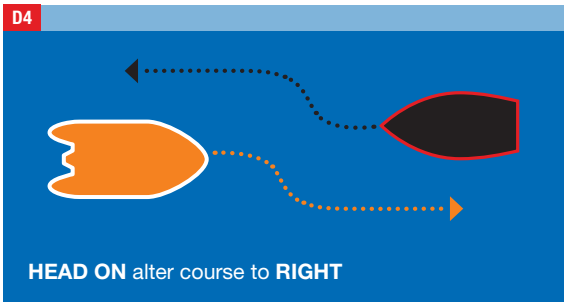
If two power vessels are crossing, the vessel with the other on its starboard side should steer clear. Think of a roundabout. Give way on the right. D5

Collision avoidance:

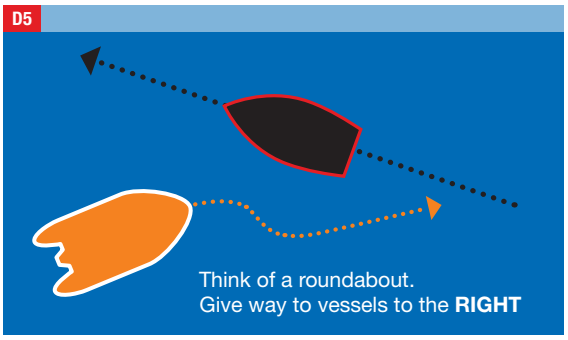
Always turn to the RIGHT to avoid collision. D6

When an un-powered vessel, the powered craft is required to give way to the un-powered craft (unless it is a sail boat that is overtaking).

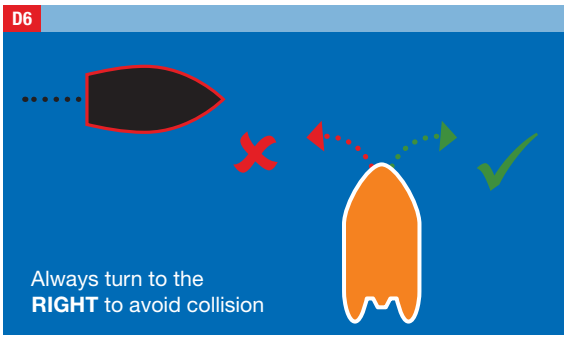
D4



D5



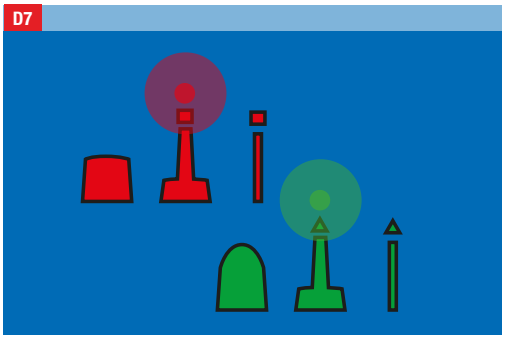
D6



Buoys and Beacons In and Around Harbours

- These are the road signs on the water.
- Channel markers indicate port (left) and starboard (right) sides of the channels:
  - Port mark, a red can shape (at night a red flashing light may be shown). D7
  - Starboard mark, a green conical shape (at night a green flashing light may be shown).

D7



Maritime Regulations

The rules and regulations on the water

In Channels and Harbours

All boats must keep to the starboard (right) side of any channel, estuary or river.

Inside a harbour, the RWC must keep out of the way of any ship (large vessel) and should not attempt to pass when the ship is operating in a narrow channel.

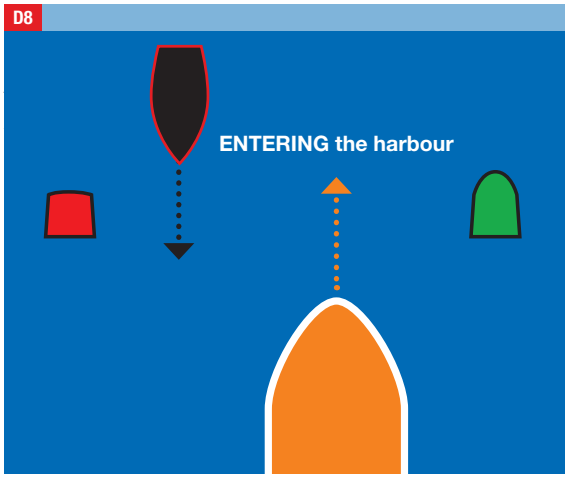
You must not create a wake which causes unnecessary danger to other boats or people.

Entering and Exiting Rules

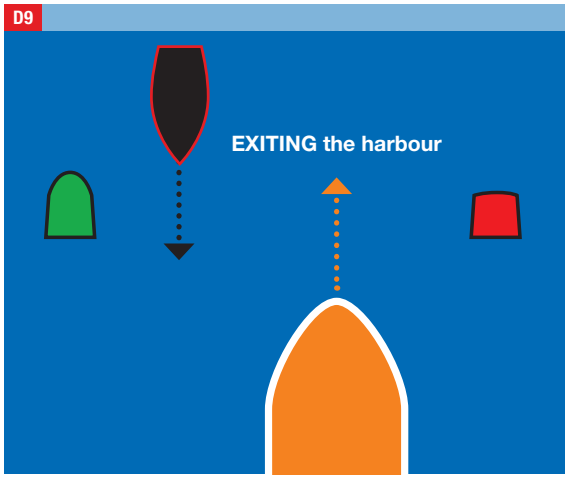
When ENTERING THE HARBOUR the port (red) lateral mark should be kept on the boat's (left) side. D8

When EXITING THE HARBOUR the port (red) lateral mark should be kept on the boat's (right) side. D9

D8



D9



Distress Signals

RWC operators and crew should be able to recognise and respond to common distress signals from vessels on the water such as:

- Orange smoke flare.
- Red flare, hand held or parachute.
- Radio signal.
  - "Mayday-Mayday-Mayday" used in a life threatening situation.
  - "Pan-Pan" used to indicate assistance required.
- Waving arms to attract attention.
- Continuous sounding of a whistle or similar.

E RWC Setup

This section provides procedures for the correct setup of an RWC start up

RWC Setup

Procedures for the setup of an RWC

Pre-operational Checks of the RWC

The following is a guide to preparing the RWC for use. It is important to follow the steps below to ensure longevity of the craft and safety for those operating it. The RWC operator is responsible for all equipment checks prior to use. The following pre-operation checklist should be used as a guide to systematically check the RWC.

If any item in the pre-operation check list is not working properly, have it inspected and repaired before operating the RWC, otherwise an accident could occur.

Radio Pre-operation Check

1. Turn to correct mode (see radio channels list).
2. Check for breakages, cracks or loose fittings.
3. Check lead fitting into the radio is secure (if applicable for helmet communications).
4. Perform radio check with base patrol and/or beach.
5. Fit radio into PFD and radio bag if applicable - check radio is secure.

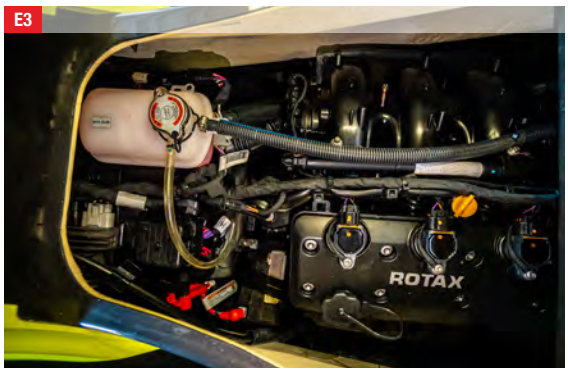
Rescue Water Craft pre-operation check

1. Complete the RWC Operations Log and Patrol Captains Report (if operating independently of a patrol).
2. Check the previous RWC log to see if there are any equipment problems (ensure the Power Craft Officer has been informed if there are problems). E1
3. Inspect condition of hull - inspect hull, engine bay, ride plate and water inlet grate for damages or loose items. E2
4. Inspect and secure bungs, hatch and seat straps.
5. Check fuel and refill if necessary.
6. Check engine bay and components (including checking around the oil filter for oil and rust on hand, water separator) close and secure compartments. E3
7. Steering system - checked operation, jet nozzle moving simultaneously.
8. Inspect the condition of the rescue sled and attachment points (inflate if required). Connect the rescue sled to the RWC.
9. Engine start/stop check (start engine run for 5 seconds then Stop, test kill cord). E4
10. Check lanyard condition - check for spare in glove compartment.
11. Check all operational equipment – rescue tube, helmets, fins, goggles, flares, PFD's.

E1

E2

E3



E4

bp

SLSNZ RWC Operations Log

Previous Operation Log on equipment status checked ☐

SURF LIFE SAVING

Type of Service (Tick Box)	
Patrol	
Callout	
Event Guarding	
Training	
Other	

Location of Service:

Equipment Identification	
RWC #	Rescue Sled #
1	1
2	2

Signed on completion:

Date: / /

Day: (Circle one)

S M T W T F S

Patrol Members	Operator	Crew	Hours
1			
2			
3			
4			
5			
6			

Pre Operational Checks			Post Operational Checks		
Radio Check (Performed Radio check and secured to PFD)	1	2	**Radio Storage** (Remove radio from PFD, Place radio on charge)	1	2
Inspect condition of Hull (Inspect hull, ride plate and water inlet grate for damages, inspect & secure bungs)	1	2	**Inspect and remove Bungs** (Remove bungs and tilt trailer for best drainage)	1	2
Check Fuel & Engine Bay (Refill fuel, check engine bay & components, close & secure compartments)	1	2	**Wash Down** (Spray the RWC, Rescue Sled and Trailer down with fresh water, lightly spray engine bay)	1	2
Steering System (Checked operation, Jet nozzle moving simultaneously)	1	2	**Hose out intake and Jet nozzle** (Hose out sand and any other debris)	1	2
Rescue Sled (Inspect condition of rescue sled & attachment points, inflate if required, Connect to the RWC)	1	2	**Flush Engine** (Flush out with fresh water Sequence Engine on, Water on, Water off, Engine off)	1	2
Engine Start/Stop check (Start engine run for 5 seconds then Stop, test kill cord)	1	2	**Inspect condition of Hull** (Inspect hull, ride plate and water inlet grate for damages)	1	2
Check Lanyard Condition (Check for spare in glove compartment)	1	2	**Check Fuel level** (Refill fuel)	1	2
Check all Operational Equipment (Rescue Tube,Helmet's,Fins,Goggles,Flares,PFD's)	1	2	**Store RWC and PFD** (In Shed with all compartments ventilated)	1	2

Equipment status:	RWC #	Sled ID #
Requires attention		
All OK		

SLS Region Staff or Power Craft Officer advised of problem(s)

Reported to: ☐

RWC Engine Hours # #

Equipment requiring attention identified as 'Not for use' YES / NO

F Basic Skills and Technique

This section details the skills and techniques required to become an effective RWC crewperson and operator.

Basic Skills and Technique

Skills required to become an effective crewperson and operator

Basic Mechanics

Directional control is provided by thrust from the water jet combined with the handle bar position. The jet thrust nozzle at the rear of the RWC is controlled by the handle bars. Water sucked in through the intake grate is pressurized by the impeller in the jet pump. As the pressurized water is expelled from the pump through the jet thrust nozzle, it creates thrust to move and steer the RWC.

No throttle, no thrust = no steer

Launching and Recovery

A fully laden RWC is heavy, and therefore requires good communication and correct handling techniques to prevent injury to handlers. A minimum of two people will be required for this process to prevent damage to the craft and personnel. The RWC needs to be transferred from the trailer to the water before it can be used. When launched correctly, limited lifting is required. Recovering the RWC may require significant handling/lifting to transfer the RWC on to the trailer.

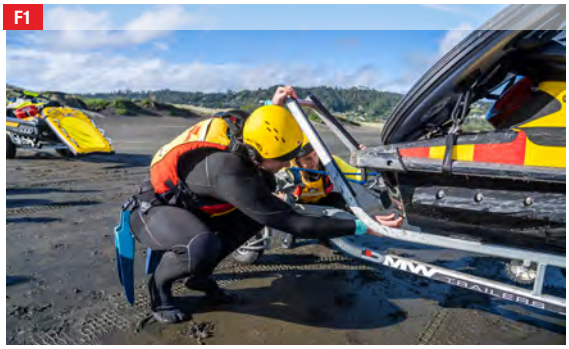
Launch of RWC from Trailer

To remove the RWC from its trailer when not attached to a vehicle follow the steps below. At least two people are required:

Identify a safe launching area away from swimmers, walkers, children, etc – if near a patrolled area ensure you are at least 50m away from flags.

- Ensure bungs are securely fastened and all road/trailer fittings have been removed (light bar, strops).
- Check rescue sled and flip it vertically against the RWC (if possible based on connection method used). F1

F1



- Before lifting begins, agree where you intend to move the RWC to.
- Ensure all lifeguards assisting with the launch are briefed.
- The operator is responsible for giving the commands. F2

F2

- Keep safety (quick release) line secure (if applicable).
- Disengage the winch and disconnect the winch rope from the RWC, leaving the quick release attached to the RWC. F3
- Push RWC down to the water's edge. F4
- When the RWC is in sufficient depth of water to float, pull the quick release safety line and lift the trailer. F5
- When lifting, bend your knees and maintain a straight back whilst crouching, before using your legs to lift the RWC.
- Maintain a straight back as you carry the trailer.
- Look in the direction you intend to move.
- Place your feet shoulder-width apart for improved stability and load bearing.
- Maintain the load as close to your body as possible at all times.
- One lifeguard should move the RWC, the other lifeguard should move the trailer up the beach.
- Once off the trailer move the RWC to launching depth, prior to boarding. This is best achieved by the crewperson standing behind and slightly to the side of the RWC, holding the rescue sled at the rear, or by the bow handle at the front of the vessel. F6

F3

Picture below demonstrates a forward facing RWC

F4

Picture below demonstrates a rear facing RWC

F4

F5

F6

Notes:

- An RWC is very heavy; serious injury could occur as a result of standing shore side (directly behind the RWC).
- If taking the RWC off the trailer using an ATV or beach vehicle please ensure that proper care is taken to ensure a safe launch.

Loading the RWC on Trailer

A minimum of two surf lifeguards are needed.

For Rear Facing Trailers:

1. Brief all surf lifeguards on loading procedure.
2. Position the RWC out of the wave area, with the bow facing out to sea. Flip the rescue sled vertically onto the RWC and secure or remove completely. F7
3. Reverse the trailer down the beach.
4. Attach the winch cable to the stern hook or to both bolts of the stem. F8
5. Lift trailer and place skids under RWC stern. F9
6. While the first lifeguard lifts the trailer, the second lifeguard should assist with the retrieval process by holding the RWC level as it comes into contract with the trailer skids/ railings.
7. Winch the RWC onto the trailer and secure the safety chain or quick release mechanism. F10
8. Disengage the winch handle.
9. If required, secure RWC with tie-downs.

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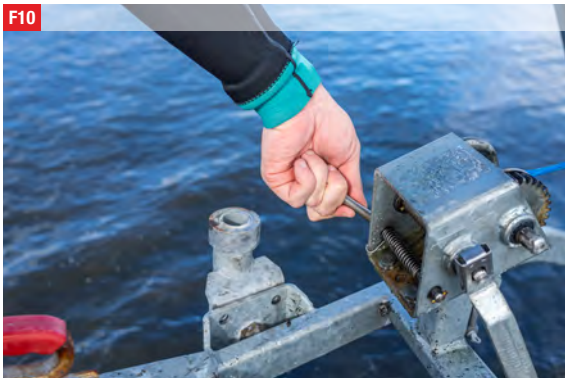

For Forward Facing Trailers:

1. Brief all surf lifeguards on loading procedure.
2. Position the RWC out of the wave area, with the stern facing out to sea.
3. Reverse the trailer down the beach. F11
4. Attach the winch cable to the bow hook. F12
5. Lift trailer and place skids under RWC bow. F13
6. While lifeguard lifts the trailer, the second lifeguard should assist with the retrieval process by holding the RWC level as it comes into contact with the trailer skids/railings. F14
7. Winch the RWC onto the trailer and secure the safety chain or quick release mechanism.
8. Disengage the winch handle.
9. When pushing the RWC clear of the water be sure to bend your knees and push forward. F15
10. If required, secure RWC with tie-downs.

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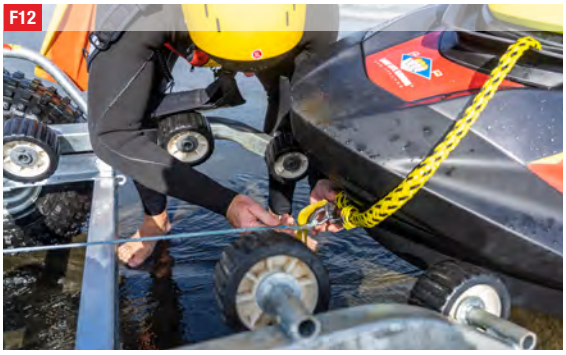
F12



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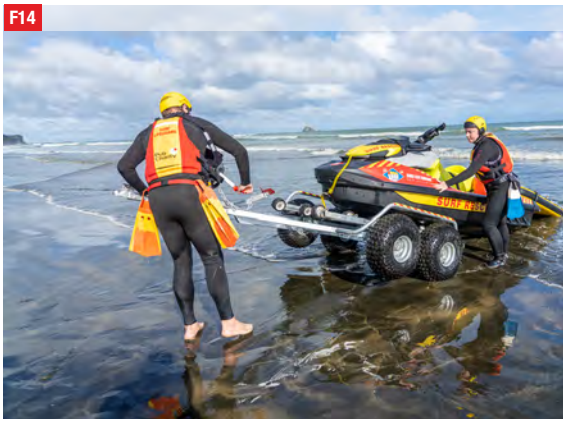


F15

Operating the RWC

Boarding and Starting

The operator should never stand between the shore and the RWC as this presents a risk of injury due to the weight of an RWC. F15

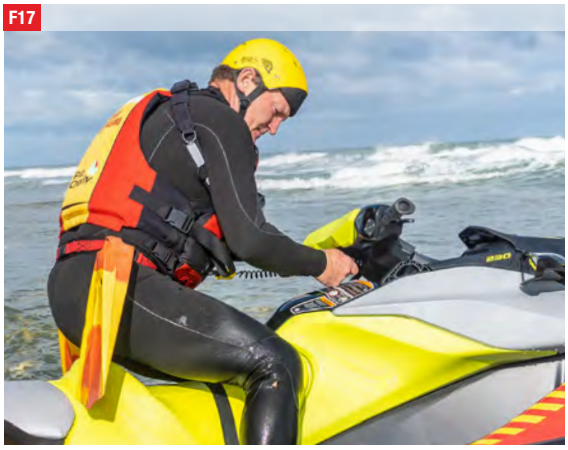
F15

As soon as the RWC is clear of the trailer, the operator will ensure that the RWC is facing bow into the conditions.

1. Observe the surf for the safest moment to board. F16
2. Board the craft from the side. F16
3. Fit and secure safety lanyard to right wrist, or to your PFD. F17
4. When the RWC is deep enough (60cm), the operator should rock the RWC from side-to-side in a bid to remove any sand that has settled in the jet unit. F18
5. Conduct a visual check to the rear/stern of the craft before starting. F19
6. Assume the correct operating position.
7. Ensure the RWC is at a minimum depth of 60cm before starting the engine.
8. Start the engine.
9. If crewperson is present, order the crewperson to board immediately from the side of the rescue sled and proceed out to sea once the crewperson gives the okay. F20
10. Never activate the throttle when someone is standing directly behind the RWC as this can cause serious harm.

F16

F17



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Operator Position

The RWC operator should stand in order to reduce potential impact while maintaining a good look out. The safest position is to stand with a straight back and legs slightly bent in order to absorb the forces generated when moving through the swell and surf. F21 F22

It is the operator's responsibility to ensure the crewperson is fully briefed on the risks of crewing the RWC.

Note: If you are traveling beyond the surf break or in a non-surf zone, crew can position themselves behind operator on the seat. When operating the rescue sled in surf please ensure crewperson is positioned on the sled.

There are situations where it is appropriate for the operator to be seated on the RWC. For example, navigating very large surf. F23

F21

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F23

Crewing the RWC

Basic crewing position

The crewperson should lie face down on the centre of the rescue sled and grasp the handgrips with arms forward of shoulder level. F24 Avoid lying too far back on the rescue sled as this may cause excessive drag on the RWC.

Crewing the RWC

A lifeguard can crew the RWC if:

- They are a refreshed lifeguard, and
- Have been inducted by the RWC operator prior to the commencement of duties (one induction per day, per crewperson may be sufficient (depending on operating conditions and requirements).

Therefore, prior to entering the water, the operator must ensure that the crewperson has been correctly inducted. This must include; correct clothing and PPE, crewperson positioning, dangers of the craft and emergency procedures, patient pick up procedures.

Proceeding Through Surf as a Crewperson

It can be dangerous for a crewperson in surf conditions if the correct technique is not used. The following points below should be used as a guide for the crewperson in surf conditions:

- Be prepared to brace against forces from all directions. By holding one handgrip at the top of the rescue sled and one along the side, the crew can then brace against forces from all directions.
- Upon impact with large waves keep your head down as your body may slide forward causing your head to connect with the back of the RWC.
- If the crewperson becomes airborne after hitting a wave they should tense their abdominal muscles and bring their thighs towards their stomach to reduce impact to the groin area, and possible injury.
- The crewperson should attempt to anticipate the direction of each turn, and lean into the turn where possible. They may have to adjust their handgrips to maintain a suitable position on the rescue sled throughout the turns.
- The crewperson should always be aware of the dangers of hitting the back of the RWC, and ensure they are positioned to minimise the risk at all times.

F24

Basic Skills and Technique

Skills required to become an effective crewperson and operator

Driving the RWC

The operator will:

- Apply the principles of risk versus benefit throughout operations.
- Continuously check on the crewperson while operating.
- The ideal operational position is standing, with both feet level, knees slightly bent to absorb any impact. Body weight should be positioned to trim the RWC appropriately. F25
- Poor positioning can compromise safety and affect the handling of the RWC, reducing the RWC's stability and turning capability. Refer to basic skills pg 30 for correct techniques. The correct positioning and timely movement of the RWC crewperson will greatly enhance the RWC's capability.

F25

Basic Manoeuvres

Prior to operating an RWC in surf conditions, all trainees must practice the following basic skills in a suitable still water environment, including launching the RWC, returning to shore and basic manoeuvres such as port (left) and starboard (right) turns, coming alongside an object and picking up an object such as a rescue tube.

Turning/steering

- Large radius turns
- Tight turns
- Figure 0's
- Figure 8's

NOTE: Insufficient throttle can result in slow steering response. No throttle will result in no steering. Excessive throttle during a turn can cause the RWC to spin-out during a turn.

F26 **Large radius turns** - From the standing operator position, maintain throttle position (power), turn handle bars in the intended direction of turn whilst transferring weight towards the direction of the turn. Large radius turns can be safely completed at both low and high speeds where practicable.

F27 **Tight turns** – When initiating a tight turn, caution must be given to the entry speed. Initiate a tight turn with mid to low speed, maintain power, turn handle bars in the direction of turn. Once the turn has commenced, apply more power to drive through the turn. A tight turn can be tightened further by applying more power throughout the turn whilst leaning further into it.

F28 **Figure 0's and Figure 8's** – The key element for effective figure O or figure 8 turns is transferring weight from one side of the ski to the other.

Reduce speed prior to turning handle bars, turn handlebars and shift weight towards the direction of the turn, then apply sufficient throttle to complete the turn. Thrust is required to steer the RWC. To turn sharply, apply more thrust.

If the operator needs to stop suddenly, a sharp turn can be used by accelerating into the turn and releasing the throttle abruptly. This will cause the RWC to continue to move sideways slowing the craft over a much shorter distance.

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F28

Proceeding Through Surf

Before operating in the surf take time to assess the surf conditions from an elevated position on the beach. This will enable you to determine the height and strength of the waves, the intervals between them and the intervals between sets. Also look for any inshore currents that may exist as this can affect the path the RWC may take; it may also help in determining the most appropriate place to proceed out through the break using a rip, or non-break zone.

Unbroken Waves

When approaching unbroken waves the operator should reduce speed near the bottom of the wave to minimise the likelihood of the RWC becoming airborne as it crests the wave. Damage to the RWC and/or injury to the operator and/or crewperson may occur if the RWC becomes airborne.

Broken Waves

When negotiating surf, the operator should consider the crewperson and minimise punching through waves while the crewperson is positioned on the rescue sled to avoid crewperson injury. F29

When approaching a wave, it is important that the RWC has sufficient momentum to propel it through the wave, without the RWC becoming airborne on exit from the wave. Therefore the operator should throttle back just before the RWC reaches the base of the wave with sufficient momentum so that it rises over the white-water. Alternatively, the RWC can remain stationary in the surf zone and at the last moment, accelerate appropriately towards the approaching wave just prior to connecting with the wave which will lift the bow of the RWC over the wave rather than through it. This also stabilises the craft throughout the manoeuvre.

In large surf (over 2.5 metres), the operator should negotiate the wave after it has broken, or position the RWC to go over the wave before it has peaked.

F29

Parallel Running - Operator

When parallel running it is essential that the correct technique is used, as detailed below. Practice in small surf should be conducted prior to attempting this in large surf. When the RWC is about to come into contact with a parallel wave the operator should:

- Plant feet firmly onto deck.
- Adopt a crouch position, still holding handle bars.
- Accelerate to ensure just enough speed to pass over the wave.
- Turn into wave on a slight angle.
- Lean body into the wave.
- Lean into or away from the wave (if you lean away from the wave, lean back towards the wave as the wave passes). F30
- Be prepared to absorb the shock by landing with legs bent. F31

F30

F31

Returning to Shore

Select a suitable wave to follow and move in behind it. Ensure that you remain in zone A F35 between waves, without slipping back into the wave behind. The operator should watch carefully how the wave forms and breaks to ensure the RWC is capable of maintaining a position behind the wave in front, yet remain ahead of the wave behind, particularly with patients aboard. If the RWC is not safe between waves, abort the attempt and try again.

The operator should be standing at all times where practicable when returning to shore to increase their field of vision. Operators should not over run the wave in front unless absolutely necessary to do so, e.g. undertaking a rescue, or if the wave behind is travelling faster than the wave in front and is likely to catch up the wave in front, causing a double up.

Care must be taken to ensure the way ahead is clear of others users, and where available and practicable, an onshore spotter should be engaged to guide the RWC ashore using hand signals and/or radio communication.

As the RWC approaches shore, the RWC should move to zone B F35 immediately prior to beaching the RWC, but only if it is safe and practicable to do so, i.e. ensure the way ahead is clear of other users. By moving to the back of the wave ahead, there should be sufficient time to beach the RWC before the next wave arrives.

In certain conditions, it may become necessary to over-run a wave. If this occurs the operator shall:

- Drive the RWC over the wave and down the face, slightly faster than the wave's speed, make sure the bow of the RWC is lifted by transferring your body weight to the rear of the RWC and accelerating. F32 F33 F34
- Do not allow the following wave to catch the rear of the RWC as it will result in capsize.
- Do not allow the RWC to become airborne at any time.

Note: As the RWC approaches the beach, be aware of sand bars.

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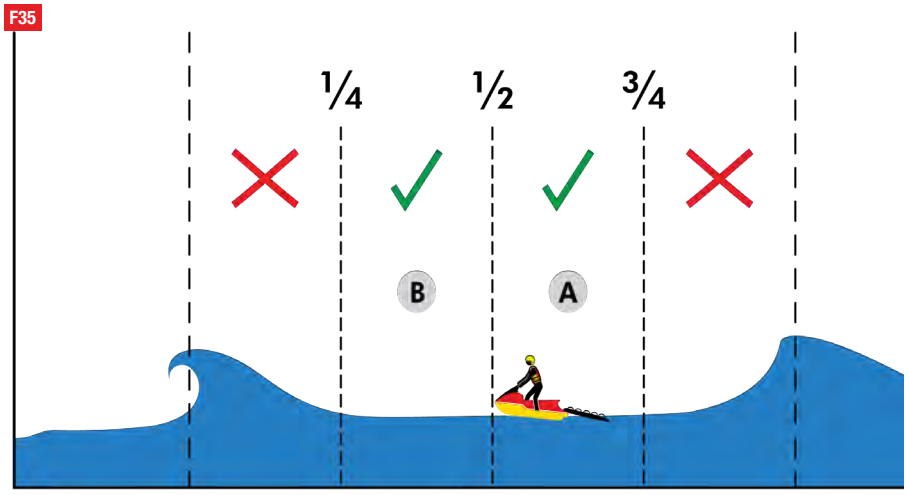
F35



Emergency Manoeuvres

Collision Avoidance

To avoid a collision, the RWC operator will:

- See hazard.
- Steer.
- Use the brake and throttle on with reserve.
- Brace and lean to the inside of the turn.
- Avoid collision.

After avoiding a collision, and when operating with a crewperson, the operator will immediately check the crewperson is present and okay.

Punching Manoeuvre

Avoid punching large green waves whenever possible, as injury may result.

The punching manoeuvre is appropriate to use in some situations where the RWC operator may be rescuing a patient or shepherding members of the public.

If no other option is available other than to punch through a breaking wave, the correct technique must be used. As the wave is about to break onto the RWC, the operator should:

- Plant feet firmly onto the deck.
- Adopt a crouch position, still holding handle bars.
- Keep bodyweight forward. F36
- The operator should throttle off and accelerate at the last moment into the wave with sufficient speed to push through the wave, without becoming airborne.
- Duck head down as the wave passes over.
- As the bow of the RWC exits the back of the wave, the operator should immediately release the throttle to allow the bow of the RWC to drop down over the back of the wave.
- Keep legs bent to absorb the shock upon landing.
- Ensure the crewperson is on the sled before proceeding further.

Minimising the body's frontal area by aligning the body shape with the contour of the RWC (see fig, a–b above) as well as bending the legs to form a triangle (x–y), will minimise the impact on the body from surf as it washes over the RWC.

Crewperson Preparation

It is vital that the RWC operator clearly warns the crewperson of the pending need to punch a wave. By yelling "PUNCH – PUNCH," they can secure themselves to the sled. The crewperson must remain alert to the possible need to roll off the side of the rescue sled should the RWC roll back onto the rescue sled.

F36

Beaching the RWC

The RWC operator should never beach the RWC at speeds that pose a risk to the operator or crew, beach goers or patient safety.

Beaching the RWC, particularly at speed will cause excessive wear and tear on the hull and may cause injury, and should be avoided where practicable.

When beaching the RWC the operator should:

- Give consideration to beach gradient, environmental conditions, scenario, and other beach and water users.
- Select a part of the beach and water that is free from obstructions (at least 50m from flagged area).
- Apply only sufficient throttle to maintain momentum through shallow water and onto the beach. F37
- Sit down and brace themselves by placing their feet at the front of the foot wells and firmly hold the handlebars while keeping arms and legs bent and avoid locking arms or legs straight. F38
- Press the STOP button at the same depth as launching to prevent sucking sand into the intake, and at the appropriate time and speed, to allow enough momentum for the RWC to slide on to the beach.
- Not leave the RWC unattended with the lanyard attached.

After beaching the RWC, always step off on the seaward side, so that a wave will not push or roll the RWC onto you. Before beaching, the operator must give the clear and concise command “Brace, brace” to crew and/or patient (if present).

Beaching the RWC may result in small pebbles, sand, seaweed and other debris being forced into the jet intake grill, which can also damage the impeller. Before restarting the motor, rock the RWC from side to side in sufficiently deep water to remove any debris.

Crewperson Preparation

In preparation for beaching the RWC the operator must clearly warn the crewperson by calling “BRACE! BRACE!” so that they have time to secure themselves to the rescue sled.

F37

F38

Clearing the Jet Intake or Impeller

It is vital that the RWC operator avoids all debris as it is very difficult to clear material from the intake while afloat.
If engine power rapidly reduces, or a change in engine pitch or vibration is heard, then it is likely that some type of debris has affected the intake. Any blockage to the intake will reduce craft performance and can result in engine damage due to overheating.
To clear a blockage, the operator will follow the impeller clearance flow chart:

A Blockage Occurs

The operator will attempt to clear the intake by throttling on and off.

Blockage Cleared

Blockage Not Cleared

Move the RW to clear unbroken water or the shore and radio the Patrol Captain informing them of the situation. Turn the engine off and remove the kill cord before attempting to clear using the blunt ended knife.

Blockage Cleared

Blockage Not Cleared

If still afloat, return to shore and inform your Patrol Captain / Regional Lifesaving Manager.

CAUTION

Heat exchanger in the hull may become very hot.
Avoid any contact with heat exchanger as burns may occur.

RWC Capsize

If the RWC capsizes, turn it over immediately. Be sure to carefully follow the procedures below to prevent injury or damage to the RWC.
IMPROPER UPRIGHTING CAN CAUSE INJURY.
Be sure to shut the engine off by pulling on the engine shutoff cord to remove the clip from the engine shut-off switch.

1. Remove the clip from the engine shut-off switch
2. Swim to the rear of the RWC. F40
3. Pull the RWC over - as per the manufacturer indicated direction label at the rear of the RWC. F39
4. Grab the inlet grate (or ride plate) F41 with one hand while pushing down on the gunwalwith the other hand (or foot) F42 and use your weight to rotate the RWC
5. Board the RWC.

Do NOT attempt to start the RWC if it has been capsized for more than 5 minutes, this may damage the engine due to excess water entering the engine compartment. Contact an authorised dealer as soon as practicable for servicing advice.
It is recommended to operate the RWC for approximately 5 minutes with engine speed less than 5000 RPM to remove any water that might have been accumulated in the bilge. Exceeding 5000 RPM within 5 minutes of a capsize may cause engine damage.

1. At no time should the crew place themselves at serious risk in order to recover the RWC.
2. The RWC crew should endeavor to stay with the RWC until it has stopped moving. The operator can maximise the chances of a successful restart by pulling the kill cord out once the RWC is completely inverted.
3. Once surfaced, both the operator and crewperson should shout one another's names to confirm mutual safety before making their way to the 'surf-side' of the RWC. At this point the operator should check that the RWC kill cord is still attached to their wrist.

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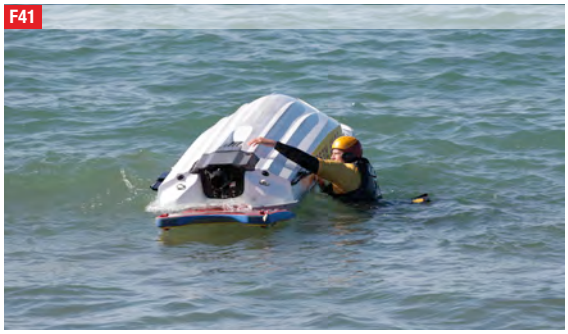

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Reporting an RWC Capsize/Mishap

All capsizes, collisions, mishaps and/or notifiable injuries or illness and serious first aids that occur during SLSNZ Rescue Water Craft operations e.g. during patrol, search and rescue, event safety and training must be reported to the appropriate SLSNZ / SLSNR Regional Manager. However the intentional capsizes of RWC's for training purposes are not required to be reported.

The definition of a 'capsize' for the purpose of reporting requirements is when an RWC is inverted in the water, regardless of whether the craft remains upside down, or is uprighted.

The definition of a 'mishap', for the purpose of reporting requirements; includes but is not limited to incidents when the operator is either ejected from or loses contact and therefore control of the craft, resulting in the craft being washed away from the operator, regardless of whether the craft remains upright or capsizes. Additionally, mishaps may also include incidents which in different circumstances, might have caused any person to be harmed.

Refer to the attached SLSNZ Incident and Injury Notification Flow Chart for guidance on the definition and process of notification here.

Returning a Disabled RWC to Shore

Returning a disabled RWC to shore should not be attempted if there is risk of injury or risk of damage to the RWC. Instead, the position of the disabled RWC should be reported immediately to the Patrol Captain or Regional Life Saving Manager and a request for assistance made.

Procedure for Towing a Disabled RWC

- The RWC is not designed or permitted to tow another vessel.
- Where a disabled RWC requires a tow, this must be undertaken in accordance with the manufacturer's guidelines.
- The tow rope should be a minimum of 10ms.
- If applicable: ensure that the water intake shut-off valve is closed. F45
- Attach the tow rope to the bow-eye.
- When towing an RWC do not exceed 20 km/h in order to prevent water entering and damaging the engine.
- The operator should remain seated in their normal position while maintaining hold of the handle bars while being towed.

Note: Refer to manufacturer's guidelines for specifics.

F45

G Rescues

This section details the knowledge and skills required to respond to rescue situations.

Rescues

Knowledge and skills required to respond to rescue situations

Patient approach

Patients should always be approached from a 7 o'clock angle. This allows the operator an easy option to abort the pick-up by turning their path to face directly out to sea. One of the most powerful tools for an operator is to have the ability to communicate with a patient while on an RWC.

Rescuing Patient - Solo

Conscious Patient Pick Up - Solo Rescue

Presenting the Rescue Sled

- When proceeding towards the patient, the operator should steer the safest course through the surf in order to minimise the risk to themselves and the RWC.
- The RWC should come alongside the patient just after a wave has passed. This maximises the time available to effect the rescue.
- When the RWC is within 3 metres of the patient, the operator should assess the situation, communicate with the patient, and provide instructions for boarding the rescue sled. G1
- The operator must then turn the RWC so that the rescue sled is made available to the patient. G2
- Once the patient has grabbed the rescue sled, the operator will steer the RWC in order to keep the bow facing into oncoming surf or swell. G3
- Once the patient is aboard the rescue sled, the operator should ask the patient if they were alone or not before providing the patrol with a situation update.
- The operator should maintain the minimum practicable speed to safely transfer the patient to shore while keeping watch on the patient to ensure they are okay. G4

Conscious Patient Pick Up - Assisted Rescue

Wrist to Wrist Approach

- The operator should maintain their line while approaching the patient at low speed. G5
- As the RWC nears the patient, the operator should maintain an idle speed while keeping the bow into the oncoming surf or swell. G5
- At this point, the operator should raise their left arm.
- As the RWC closes to within 3 metres of the patient, the operator should give the following instructions:
  "Stay calm."
  "Left arm up!"
  "Left arm up!"
- The operator grasps the patient by the left wrist before guiding them back onto the sled. G6
- As the RWC moves slowly past the patient, the operator should steer to the right (starboard) in order to manoeuvre the rescue sled towards the patient and keep the RWC bow facing into the oncoming surf or swell. G6
- At the same time, the operator should partially lift and guide the patient onto the sled while instructing them to

G1

G2

G3

G4

grasp the rescue sled loops. G7

- Once the patient is aboard the rescue sled, the operator should ask the patient if they were alone or not before providing the patrol with an update of the situation.
- As the RWC returns to shore, the operator should always use the minimum necessary speed and must frequently look back at the patient to ensure they are okay. G8

G5

G6

G7

G8

Unconscious Patient Pick up - Solo Rescue

Solo unconscious rescues are a last resort situation and are very difficult to carry out. Where possible, a crew-person should be utilised.

Approach

- The operator will maintain a safe distance and attempt to communicate with the patient.
- If the patient does not respond, the operator will decide whether it is best to return to shore and pick up a crewperson or commence a solo unconscious rescue.
- Prior to taking any action, the operator will contact the patrol advising them of the situation, location and planned course of action.
- The operator shall approach the patient at low speed, but with sufficient momentum so that the RWC, once turned off, can proceed to the patient. The operator should then remove the kill cord and place this on the handle bars in preparation to affect a patient pick up.

Patient Pick-up - Gunwhale Technique

- If possible pick the patient up and put them into the gunwhale. G9
- Once the patient is secure on the RWC, the operator will communicate with the patrol team. G10

G9

G10

Rescuing Patient - with Crewperson

Single Conscious Patient Rescue with Crewperson

Approach

- The operator must decelerate in order to approach the patient slowly while maintaining their line.
- As the RWC closes with the patient, the operator must ensure that the RWC's engine revs are reduced to idle and that the bow of the RWC faces into the oncoming surf or swell.
- The RWC operator should indicate to the patient to raise their left arm and face the RWC for a pick-up. This should be completed as far away from the patient as possible by the operator using a loud voice and display by raising left hand.
- Once the patient has their left hand in the air the pick-up can be conducted.

Patient Pick-up

- Firmly grip the patient's wrist and at the same time accelerate the RWC slightly forward and slightly to the right (starboard side).
- The patient's legs will rise towards the surface and the patient will float towards the rescue sled.
- The operator acts as a pivot point with arm outstretched and leaning backward to allow the patient to arrive at the rescue sled and not the back of the RWC.
- The crewperson will instruct the patient to board the rescue sled, stomach down, facing forward and grip the handles tightly. The crewperson will then lie on top of the patient to secure them. G11
- Once the pick-up is completed the RWC will be facing out to sea, into oncoming waves.

Note: Operator to ensure that RWC is facing into oncoming waves after each rescue is conducted, if not the risk of capsizing the RWC and injury to the patient is increased.

G11

Unconscious Patient Rescue with Crewperson

Approach

- The operator should drop the crewperson as close to the patient as possible immediately after a wave has passed, to maximise of the opportunity to safely effect the rescue.
- Once the crewperson has been dispatched, the operator should immediately move the RWC to a safe stand-by position, then radio the patrol team with a situation update.
- The operator should maintain visual contact with the crewperson at all times and be ready to move in to recover the patient once signalled by the crewperson.
- Once crewperson has signalled for a pick-up, the operator should first acknowledge the signal and then slowly move in to make the pick-up immediately after a wave has passed. G12 G13

G12

G13

Patient Pick-up - Technique One

- The crewperson lifts the patient's left arm in preparation for the pick-up, while maintaining the patient's airway. The RWC approaches at idling speed, maintaining a straight-line approach.
- The operator should grasp the patients raised left hand while maintaining the slowest possible speed. G14
- Once the operator has grasped the patient's wrist, they should guide the patient to the rescue sled, while turning the RWC's handlebars to the right, in order to bring the rescue sled within easy reach of the crewperson, while keeping the RWC bow pointing into the surf or swell.
- The crew will reach up and grasp the first rescue sled loop available, then reach underneath the patient, placing their forearm in the small of the patient's back, while also grasping a second rescue sled loop. The operator must continue to hold the patient's arm in order for the patient to be rolled onto the rescue sled easily.
- The crewperson should then pull themselves up onto the sled. At the same time, they will roll their right shoulder and forearm forward, rolling the patient and nudging them onto the rescue sled.
- The operator then releases the patient's wrist.

Once Pick up Completed

- Once the patient and crew are aboard the rescue sled, the operator will radio the patrol team with an update of the situation.
- If the pick-up needs to be aborted for any reason, the operator or crewperson may call: "Break! Break!" requiring the immediate release of the patient by the operator and the rescue sled by the crewperson, though the crewperson should try and retain control of the patient.
- The crewperson will secure the patient with one knee between the patient's legs, and hands either side of the patient's body (not applicable for 'Leg Lock' technique as the patient is on the back of the crewperson's legs).
- When returning to shore with an unconscious patient the operator should signal 'assistance required' (where the operator's ability to safely operate the craft is not compromised) to the shore patrol.
- Care should be taken when carrying a crewperson and patient. No attempt should be made to drive down the face of waves on the return to shore unless absolutely necessary.
- The operator should beach the RWC after communicating this intention to the crewperson.
- The crewperson will brace himself/herself and the patient (if not already done so, as per the 'Leg Lock' technique) during impact with the shore.

G14

Rescues

Knowledge and skills required to respond to rescue situations

Patient Pick-up - Technique Two (Leg Lock)

- The crewperson needs to reach the patient without delay, rolling the patient onto their back so their airway is clear.
- The crewperson then needs to lock onto the patient by hooking their legs under the patient's underarms. The crewperson needs to be on their front (facing down to the sea floor). The crewperson's legs should be kept bent, pulling their heels towards their backside. A small amount of inward pressure at the knees can also be applied to assist in holding onto the patient. G15
- The crewperson will need to skull water with one arm to keep their head above water, whilst signalling to the RWC.
- The RWC Operator needs to approach the crewperson with patient and 'present' the rear of the rescue sled to the crewperson.
- The crewperson needs to grip the rescue sled handles on each side and work their way up the rescue sled, the RWC operator can assist by gently reversing the RWC if conditions are appropriate. G16
- The patient remains locked onto by the crewperson's legs whilst the RWC operator returns to shore. Care should be taken by the RWC operator to monitor the crewperson and patient, and not navigate in a manner that may cause the crewperson to lose grip of the patient (for example, by operating too fast over waves and choppy water).

G15

G16

Tube Rescue with Crewperson

Approach

On approach, the operator will maintain visual contact of the patient.

The operator should drop the crew as close to the patient as possible.

The operator should immediately move the RWC to a safe stand-by position where they will radio the patrol team with a situation update. The stand-by position must allow the operator direct visual contact with the casualty and crew at all times.

Patient Pick-up

- The crewperson leaves the RWC (wearing fins) and G17 secures the patient with the rescue tube, then moves to a position where they can be easily picked up by the RWC.
- Once the crew has reached the line of safe pick-up, they will turn the patient towards the RWC and raise the tube lanyard. (images on following page) G18 G19
- The RWC should approach at idle speed, maintaining a straight line. The operator will reach down with their left hand and grasp the rescue tube lanyard and put it on their left arm only i.e. not over the head and shoulder. G20
- The crewperson should then mount the sled and move to the very front.
- The patient will likely be positioned in the rescue tube at the rear of the RWC. The crewperson person shall take hold of the rescue tube clip with one hand and the sled with the other. G21
- When the crewperson calls "pull", the operator and crewperson will pull the patient onto the rescue sled at the same time. G22
- The crewperson should then secure the patient with one knee between the patient's legs, and hands placed either side of the patient's body. G23
- As the RWC returns to shore, the operator should maintain the slowest speed necessary while maintaining watch for the patient and crewperson to ensure they are okay.

G17

G18

G21

G19

G22

G20

G23

Rescues

Knowledge and skills required to respond to rescue situations

Patient / Equipment Rescue

How to approach and rescue patients with surf craft.

The surf craft referred to here includes:

- Surfboards/body boards
- Windsurfers
- Inflatable craft
- Canoes/kayaks
- Kite surfing equipment

Rescuing patients with surf craft can be hazardous due to lines that may foul the intake grill or entangle the rescuer, as well as equipment that may strike the operator.

The priority is the rescue of the patient. Equipment recovery is not a priority and should only be attempted if safe to do so.

When proceeding towards the patient, the operator should steer the safest course through the surf in order to minimise risk to themselves and the RWC.

When approaching a patient with equipment, approach from an angle where the RWC will not be at risk of being struck by the equipment.

The RWC should come alongside the patient immediately after a wave has passed to maximise the time available to effect the rescue. G24

Approach the patient with care and then implement the following procedure. Approach the patient with care and then implement the procedure illustrated in the diagram on the following page.

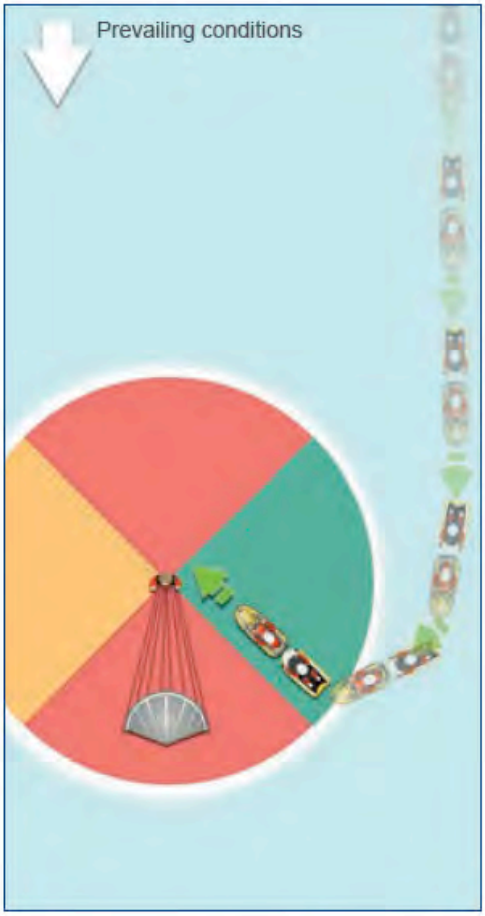
G24

Kite Surfers

The condition of the patient will affect the rescue technique used:

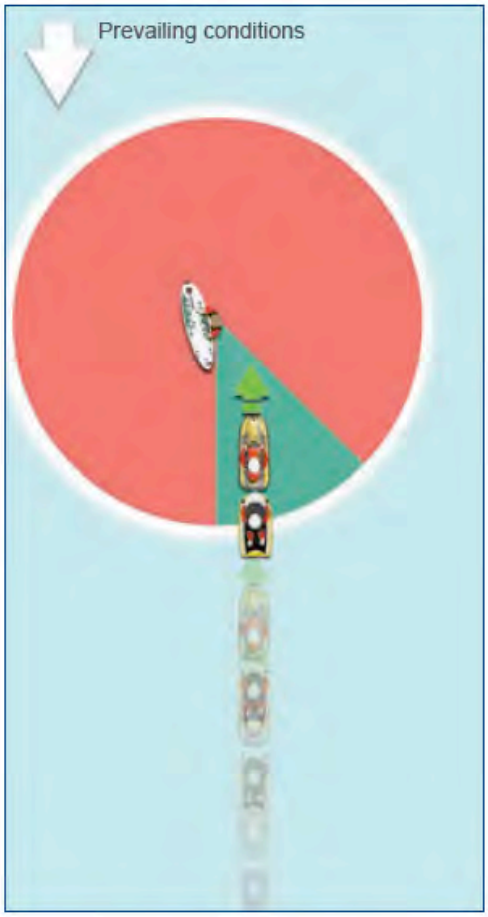
- If they are conscious, ask them if they are able to gather up the equipment (if they haven't already done so). This will enable them to be hauled aboard, complete with their equipment.
- If they are too injured or not in control, ask them to leave behind the equipment.
- If they are unconscious, the crew should enter the water (without a rescue tube). They should then leave behind the equipment. The patient should then be recovered.

Under no circumstances should you attempt to retrieve the equipment while it is attached to the patient as serious injuries may result.



Do not approach anywhere within the red zone

- Danger
- Safe approach angle *(preferred)*
- Safe approach angle *(not preferred)*



Do not approach anywhere within the red zone

- Danger
- Safe approach angle

Patient Transfers

Transferring Patients from the RWC to the Beach

Prone Patient G25

When transferring a patient from the rescue sled to the beach, one lifeguard should go towards the head of the patient. The person at the "head of the patient" is to be considered the lead lifeguard and the second lifeguard is the support.

1. The operator will safely beach the RWC in accordance with the beaching procedure.
2. Once beached, the operator and crew will dismount from the RWC.
3. The lead lifeguard will move towards the head of the patient and the support lifeguard will move to the legs/feet. Lifeguards take their positions.
4. The lead lifeguard will move to the most appropriate side of the rescue sled and straighten the patient's nearest arm
5. The lead lifeguard will support the patient and assist the support lifeguard in rolling the patient onto their back. The support lifeguard will place their hands on the patients shoulder and knee.
6. The support lifeguard will pull the patient up by both arms until in a seated position.
7. The lead lifeguard moves into a position where they can lift the patient (one hand supporting the airway and the other under their armpit) and the supporting lifeguard grabs the patient under the knee.
8. The lead lifeguard will give the command:
   "READY, BRACE, LIFT."
9. Before proceeding away from the water, the lead lifeguard will instruct the support lifeguard to inform them of any obstacles or hazards.
10. The crewperson and operator will carry the patient to a safe position.
11. On reaching a safe position, the lead lifeguard will instruct the support lifeguard to turn the patient so that they are parallel to the sea.
    "READY, BRACE, TURN."
12. The lead lifeguard will then give the instruction:
    "READY, BRACE, LOWER."
13. Once the patient is seated, the support lifeguard will take hold of the patient's wrists and support them in a sitting position so that the lead lifeguard can reposition before laying the patient on the ground for further assessment.

Returning Patients with Injuries to the Shore

When rescuing patients with injuries, the RWC crewperson should recover the patient to the RWC and transport them, in the best (and safest) way possible, to the beach where definitive treatment can begin.

G25

H RWC Closedown

This section describes how to complete a closedown of an RWC once operation is over.

At the end of each day it is the responsibility of the RWC operator to undertake post-operational checks of the RWC. The operator will then inform the appropriate personnel of any defects.

RWC Closedown

Procedures for the closedown of an RWC

RWC Wash Down

Rescue Water Craft Post Operation Checks

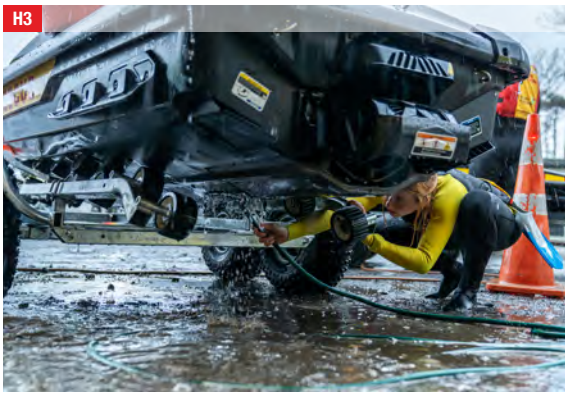
1. Remove radio from PFD, place radio on charge.
2. Inspect and remove bungs - remove bungs and tilt trailer for best drainage. H1
3. Wash down - spray RWC, rescue sled and trailer down with fresh water, lightly spray engine bay. H2
4. Hose out intake and jet nozzle - hose out sand and any other debris. H3
5. Flush Engine - flush out with fresh water sequence engine on, water on , water off, engine off (to manufacturing guidelines). H4
6. Inspect condition of hull - inspect hull, ride plate and water inlet grate for damages. H5
7. Check fuel - refill if necessary.
8. Lubricate winch, wheel rims and tie down ratchet.
9. Store RWC, PFD and helmets - in shed with all compartments ventilated.
10. Fill out RWC operations log book.

Note: It is imperative that the correct sequence of actions be followed to prevent the engine flooding and serious mechanical damage.

H1

H2

H3



H4

H5

Post Operational Responsibilities

Routine Maintenance

RWCs should only be serviced by a qualified mechanic working for a licensed dealership.

RWCs should be fully serviced twice per year – one pre-season and one post season or as advised by the manufacturer's manual and/or licensed qualified mechanic.

I Operations

Control of an RWC for patrol and non-patrol activities.

Operations

Control of an RWC for patrol and non-patrol activities.

Patrolling

Patrolling and Shepherding

When the prevailing conditions and hazards at a beach pose a continuous threat to the public, it is sometimes necessary to maintain a continuous patrolling and shepherding presence afloat. When this situation arises, begin patrolling early and communicate with the shore team at all times.

The rigid hull of an RWC carries a high risk of injury to water users when patrolling and shepherding. It is also intimidating for swimmers when an RWC approaches them, especially if it is at speed. The noise and fumes make for an unpleasant experience for any water user when approached.

When patrolling and shepherding:

- Always leave enough space so other water users are not placed at risk, the craft can be manoeuvred safely but also so you can communicate with them.
- Ensure you wear the appropriate personal protective equipment (PPE) for the conditions as you may be afloat for some time.
- Give clear directions to water users and always take pre-emptive action for those that look tired.
- Always ensure you have an escape route when manoeuvring the RWC close to water users.
- Always have the bow of the RWC facing into the prevailing conditions when shepherding close to water users.

The RWC **must not** enter the patrolled flag area while in use.

Training During Patrol Hours

Any training undertaken during patrol hours must have the approval of the Patrol Captain. The following precautions must be undertaken:

- Use 'Training in Progress' sign. I1
- Operate the RWC responsibly at all times.
- Make it clear to the public that you are training.
- Train during a quiet time of the patrol day.
- Train in an area that does not affect normal patrol operations i.e. well outside the patrol flags.
- Ensure you maintain regular contact and stay within signalling distance of the patrol in case the RWC is needed.

I1

Transporting the RWC

When transporting the RWC on a trailer, secure the tie downs to the trailer through the manufacturers anchor points.

The following check must be completed prior to towing the RWC:

- The winch is tight.
- All seats and hatches are secure and security straps are on.
- Safety chain is secure.
- Rear tie down is secure.
- Tyres inflated.
- Lights tested.
- Registration and WOF up to date.

When towing the RWC on the trailer obey all road rules and never exceed 90 km/hr.

Notes

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