



MARITIME OPERATOR SAFETY SYSTEM

SAFE OPERATION

NORTH SHORE RESCUE

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9.1 Bar Crossing Information not applicable

	Tick Box ✓
Communicate with any local bar users for up-to-date bar conditions and information.	<input type="checkbox"/>
Check the weather, tide, and bar condition (often bars are shallow and high tide is the best time to cross).	<input type="checkbox"/>
Ensure you have adequate stability.	<input type="checkbox"/>
Batten down all hatches and secure all cargo or deck gear.	<input type="checkbox"/>
Ensure all vessel scuppers are open when crossing the bar.	<input type="checkbox"/>
Lifejackets must be worn and all crew must be awake.	<input type="checkbox"/>
Approach the bar at moderate speed (not too fast but ensure you have good steerage and reserve power).	<input type="checkbox"/>
Post a lookout to check for breaking waves at the stern.	<input type="checkbox"/>
Once over the bar, confirm the crossing with Ops Room.	<input type="checkbox"/>
Refer to marine notices or your surveyor for more information.	<input type="checkbox"/>

9.2 Crew Watch keeping and Standing Orders

On Coastguard Vessels all Operational Crew members would be classed as watch keepers and will be capable of Watch keeping and conducting Lookout Duties

All Coastguard Crew Watch keepers must be:

- fully trained with records kept
- trained in proper electronic equipment use, eg radar, pilot, sounder, GPS, and plotter
- able to safe navigate at night
- able to plot a position
- able to monitor radios properly
- able to use all forms of onboard communications
- trained on the vessel's standing orders
- able to monitor and manage the vessel's onboard systems machinery
- aware of the rules of the road
- able to hand steer and use the engine controls
- able to navigate safely
- able to manage fatigue
- aware of the need to use their eyes and ears and not rely on navigational aids only

9.3 Trip Reporting and Trip Planning

Trip Reporting	Trip Planning
<p>Your trip reporting should include (but not limited to):</p> <ul style="list-style-type: none"> • reports at regular intervals • an off-vessel contact, eg SAR Person, Ops Room, Designated Person ashore etc • known and agreed frequencies • be made available to all persons onboard if required • the following (pre-departure) information, ie: <ul style="list-style-type: none"> • weather conditions • persons on board • destination • position • ETA • likelihood of being in a no-coverage area and for how long 	<p>Your trip planning should include (but not limited to) ensuring you have:</p> <ul style="list-style-type: none"> • enough supplies for the trip • correct charts for the trip • safe anchorage knowledge • knowledge of the best route to take • knowledge of marine traffic in the area • knowledge of the task

9.4 In Port Checks

See Pre Launch / Post Launch checks and Maintenance Schedules

9.5 Pre Departure Checks

See Pre Launch / Post Launch checks and Maintenance Schedules

9.6 On Water Checks

See Pre Launch / Post Launch checks and Maintenance Schedules

9.7 Stability Requirements

Every Coastguard Rescue Vessel (CRV) must maintain good stability especially in some of the conditions it could be expected to work in. Ensure you are aware of and address stability at all times.

Stability
Restrictions
and Details (in
brief):

Considerations that impact stability include (but are not limited to):

- Weather conditions now and forecasted
- On board kit is kept secure
- free surface effect is reduced (keep tanks full and water off decks)
- Towing impacts on stability so extra care should be taken and care taken when attaching the tow e.g. to the vessel centre

Vessel stability restrictions and requirements may be (but not limited to):

- This vessel is allowed to take a total of 11 passengers and crew
- This vessel is covered to carry the Kit required to carry out its task and should not be subjected to undue loading by carry additional kit or equipment.

9.8 Operating Procedures

Start Up Procedures	Tick Box ✓
Check weather	<input type="checkbox"/>
Visual inspection of the RV, Tubes inflated and checking for any obvious damage that may effect the RV's operation.	<input type="checkbox"/>
Carry out visual inspection of engines and associated running gear, eg steering arms, mounting brackets, cables, fuel lines, propellers, engine covers secured.	<input type="checkbox"/>
Check aerials, radar platform and light pole are secure.	<input type="checkbox"/>
Switch on main battery isolators.	<input type="checkbox"/>
Check all instrumentation, electronics and Navigation lights are working including radios.	<input type="checkbox"/>
Check fuel status on daily log and fuel computer.	<input type="checkbox"/>
Check all gear is securely stowed and ready for use.	<input type="checkbox"/>
Contact CNR Communications via VHF with intended movements, or if responding to a callout, ask for details of the incident.	<input type="checkbox"/>
Crew List to be sent to CNR via shed fax machine.	<input type="checkbox"/>
Shut Down Procedures	Tick Box ✓
Close down radio watch (ch 64/16) and advise Coastguard Communications that the unit is reverting back to pager system	<input type="checkbox"/>
Place completed running sheets (fuel receipts stapled to back) and incident (after faxing to CNR) sheets in the box on the wall for collection by the Crew Master. Begin new daily log noting fuel status and engine hours.	<input type="checkbox"/>
Wash and clean CRV/Trailer/Tractor, squeegee dry exterior windows, carry out engine flushing routine, ensure engines are dried off.	<input type="checkbox"/>
Switch off electronics and radios	<input type="checkbox"/>
Forepeak, cabin, lockers and cockpit clear and gear stowed securely,	<input type="checkbox"/>
Daily log and white board left on Navigators console	<input type="checkbox"/>
Crew PFDs left over hand grips on the back of the back rests	<input type="checkbox"/>
Night box left on top of the fire pump box with clips open.	<input type="checkbox"/>
All hatches left open to allow air circulation/ventilation.	<input type="checkbox"/>

Rear cabin cover and dehumidifier put on during winter period.	<input type="checkbox"/>
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Stow CRV in shed, turn off lights, secure main roller door and set 'alarm system'.	<input type="checkbox"/>
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Return tractor back to its own shed and secure.	<input type="checkbox"/>
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Page 'boat back in shed' if a page for a 'tractor driver' is not sent prior (only during the hours 0700-2100).

9.8 Operating Procedures (Continued)

Trailer Use Procedures	Tick Box ✓
Visual inspection of the Tractor & trailer checking for any obvious damage that may effect the operation.	<input type="checkbox"/>
Check trailer hitch coupling is secure.	<input type="checkbox"/>
Check hydraulic lift lever is at 3.5 to the forward edge of the lever.	<input type="checkbox"/>
Gear ratio is to be selected as per the 'gearing' note below.	<input type="checkbox"/>
Hazard lights to be on at all time the tractor is moving (turn off for boat retrieval to preserve crew night vision)	<input type="checkbox"/>
No person behind the launch vehicle during launch, If necessary a safety walker is to be used.	<input type="checkbox"/>
Survey the ramp and beach condition to determine the best/safest option of launch	<input type="checkbox"/>
Position trailer in water	<input type="checkbox"/>
Once CRV is clear of trailer return trailer to boat shed	<input type="checkbox"/>
Return tractor to its shed and secure	<input type="checkbox"/>

Note: Gearing for launching/retrieval

i) Urgents

Forward gear lever to be in 2nd as per lever indicator.

Rear lever to be in 3rd as per gear lever indicator.

All other

Forward gear lever in 4th as per lever indicator.

Rear lever in 'R' as per lever indicator.

Note:

During severe ramp conditions when the sand has been washed away then you may have to revert to 2nd on the forward lever. Under no circumstances is the trailer to be bumped up off the sand onto the ramp, this will cause stress on the coupling and could result in failure of the connector.

9.9 Fatigue and Human Factors Management

- > Under MOSS and the Health and Safety in Employment Act you are required to manage the effects of fatigue and human factors while operating a Coastguard vessel.
- > The very nature of Coastguard being a Volunteer Organisation, fatigue and human factors play a major role in the work we carry out.
- > The emphasis comes back to the ISC Masters and Coastguard Unit management structure to ensure robust procedures are in place to first of all identify these issues and also deal with them.

Human Factors - controls may be (but not limited to):

- Stress – time off, talking about it
- Drug use – a no drug policy (ensure you have knowledge of prescribed drugs on board)
- Alcohol use – a no alcohol policy/alcohol controlled by the ISC Master

Fatigue – controls may be (but not limited to):

- Lack of attention to details – ensure a proper rest break
- Lack of common sense or unusual actions – give light duties
- Unusual risk taking – give shorter shifts
- Lack of motivation – give good food and drink

Human Factors Management Procedures:

Coastguard NZ has a Zero tolerance to Crews or ISC Masters turning up for duty either under the influence of drink or drugs.

Any Crew members taking prescribed drugs which could influence their duties whilst on board the CRV should advise the Unit and ISC Master.

Any Crew members who either identify themselves or others to be suffering from stress should raise the issue with the Unit and ISC Master.

As part of the crew brief, human factor issues should be covered and crew members made aware of the implications.

Fatigue Management Procedures:

Fatigue is an issue in the type of work we carry out using Volunteer crews, in that a crew member may have just completed a full day's work then expected to carry out a potentially dangerous operation above and beyond what would normally be expected, by spending the rest of day / night out on a Rescue Vessel carrying out a search etc.

All crew members including the ISC Master should make aware to all crew members prior to embarking on an operation if fatigue could be an issue. Relief crews or rotation of crews could then be either found or a shift system implemented.

As Part of the crew brief, fatigue issues should be covered and crew members made aware of the implications and made aware of the signs checklist below

Fatigue continued in Section 12 - Operational Policies and procedures (SOPs)

9.10 Signs of Performance Impairment

Performance Impairment	Signs and Symptoms	Tick Box ✓
Impaired attention, loss of concentration, and diminished decision-making power	<ul style="list-style-type: none"> • Overlook or incorrectly order sequential element • Preoccupation with single tasks or elements • Exhibit lack of awareness or poor performance • Failure to appreciate the gravity of a situation • Failure to anticipate danger • Failure to observe and obey warning signs 	<input type="checkbox"/>
Diminished memory	<ul style="list-style-type: none"> • Overlook a task or element of a task • Fail to remember the sequence of task or task elements • Inaccurate recall of operational events 	<input type="checkbox"/>
Delayed reaction time	<ul style="list-style-type: none"> • Respond slowly or fail to respond altogether to normal, abnormal, or emergency stimuli • Reduced attention span 	<input type="checkbox"/>
Diminished problem solving ability	<ul style="list-style-type: none"> • Display poor judgement of distance, speed, and/or time • Inaccurate interpretation of a situation • Display problems with such things as arithmetic and geometry 	<input type="checkbox"/>
Mood change	<ul style="list-style-type: none"> • Less conversant than normal • Irritability, tiredness, depression • Distracted by discomfort 	<input type="checkbox"/>
Attitude change	<ul style="list-style-type: none"> • Exhibit speech effects – slur, rate, content • Impaired co-ordination of control skills- key punch entry errors, switch selection 	<input type="checkbox"/>
Impaired alertness	<ul style="list-style-type: none"> • Succumb to uncontrollable sleep – nap, long sleep episode • Display automatic behaviour syndrome 	<input type="checkbox"/>

9.11 Risk Management

Coastguard often works in conditions that are adverse and involve varying degrees of risk.

It is the ISC Masters responsibility working with his crew to identify this risk, quantify the level of risk and then manage it.

The following areas need to be addressed when considering risk management and then reassessed as and when the situation changes.

- The task
- Your vessels capability
- Your crew capability and training
- The environment you will be working in.

CNZ are currently developing a national risk management programme that will include a matrix and training guidelines. Once approved, it will be included in this section.

9.12 Towing procedures

When towing to affect a rescue is required, the following guidelines are to be implemented.

Procedures for Tows

- It is the ISC Masters responsibility to make sure the tow is safe.
- Care needs to be taken to make sure the tow line does not creep over 45 degrees from the tow centre line.
- Tows are to be carried out utilizing the minimum power required to complete the task safely given the sea state, towed vessels construction, current condition and nature of connection point to towed vessel.
- All crew need to work clear from the working live tow line.
- A knife needs to be available at all times to cut the tow line if required.
- It is the ISC Masters responsibility to assess to see if the conditions are right to commence the tow, i.e., environment and vessel size to be towed.

9.13 Crew Transfer Procedures

Transferring crews is potentially a dangerous operation. The following procedures need to be followed keeping safety paramount in everyone's mind:

- It is the Master's responsibility to make sure crew transfers are done safely

Transfer while making way

- Max speed to cross deck transfer is 12 knots
- No lines are to be secured
- Transfer to be as close to midships as possible dependant on construction of vessels.

9.14 High Speed Work

Travelling at speed could be necessary for a Coastguard Vessel to facilitate a rescue.

Closing distances happen quicker with everyone has less time to react to an incident.

The following procedures are to be followed to help mitigate the inherent risk of travelling at high speed.

- It is the ISC Master's responsibility to make sure travelling at speed is done safely
- If any crew members feel that the vessel is travelling using excess speed they need to challenge.
- Extra Lookouts need to be posted
- Helmsman only drives and does not talk on radio etc.
- When overtaking other maritime vessels a good distance should be given and if necessary horn signals.
- Crew members to be paired up if working on deck.
- If in doubt slow down.

9.15 Adverse Weather conditions

Often Coastguard rescue vessels need to operate in adverse weather conditions

The following procedures are to be followed to help mitigate the inherent risk of working in adverse weather conditions.

- It is the Master's responsibility to make sure Risk is managed and it's safe to deploy and to carry out the task safely.
- If any crew members feel that the conditions exceed the limitations of the vessel and crew they need to challenge.
- Extra Lookouts need to be posted
- Helmsman only drives and does not talk on radio etc.
- Reduce speed if necessary to combat the conditions.
- Secure any loose items on-board.
- Crew members to be paired up if working on deck.

9.16 Limited Visibility and Night Operations.

Often Coastguard Rescue vessels need to operate in conditions of limited visibility or at night

The following procedures are to be followed to help mitigate the inherent risk of working in in low visibility or at night.

- It is the ISC Master's responsibility to make sure 'Risk' is managed and it's safe to deploy and to carry out the task safely.
- If any crew members feel that the conditions exceed the limitations of the vessel and crew they need to challenge.
- Extra Lookouts need to be posted
- Helmsman only drives and does not talk on radio etc.
- Reduce speed if necessary to combat the conditions.
- Crew members need to be aware how their eyes react to low light/ limited visibility.
- Crew members to be paired up if working on deck.
- All electronic equipment that could aid the passage is to be used ie Radar, GPS/Plotter, FLIR and the light dimmed to help maintain night vision.
- Impact Vests, Personal Locater beacons and strobe lights are to be worn.

9.17 Helicopter Operations

Often Coastguard Rescue vessels need to operate with rotatory helicopters to perform crew/casualty transfers.

The following procedures are to be followed to help mitigate the inherent risk of working in with Helicopters.

- Communications should be maintained with the helicopter at all times.
- It is the ISC Master's responsibility to make sure Risk is managed and all operations are done safely.
- If any crew members feel that the conditions exceed the limitations of the vessel and crew they need to challenge.
- Extra Lookouts need to be posted
- Helmsman only drives and does not talk on radio etc.
- The helicopter Pilot will determine the operating speed.
- Crew members should be trained and experienced in how to work with helicopters
- Crew members to be paired up if working on deck.
- Crew members are NOT to secure lines from the helicopter to the vessel.
- All lines should be static earth before being handled.
- If helicopter is going to ditch the rescue vessel needs to carry on in a straight course, giving the helicopter chance to ditch either side of the CRV.

9.18 Waste Disposal from Small Craft

This vessel will ensure all garbage is kept on board the vessel and then disposed of into garbage bins on shore. All other sewage and bilge water will either be pumped ashore, or dispensed in accordance with Maritime Rule Part 170 as detailed above.

WASTE DISPOSAL FROM SMALL CRAFT

Help us protect NZ's marine environment –
dispose of all waste correctly

Plastics ■ Not permitted

Oil ■ Not permitted

Oily water ■ Only if less than 15mg/L oil ■ Use oil absorbent cloth to filter

Food waste ■ Must always be reduced to a size under 25mm & should only be discharged over 3 miles from shore

Untreated sewage ■ Only *if* more than 500m from land, a marine farm, mataitai reserve, or more than 200m from a marine reserve ■ Water must always be deeper than 5m

Treated sewage ■ Only *if* more than 500m from a marine farm or mataitai reserve

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9.19 Passenger Safety Briefing Card

Lifejackets	To be worn at all times	Your crew will instruct you on the type and operation of our lifejackets
Hazards	Hazards do exist	The vessel has a number of hazards. Please follow the instructions of your crew. Advise your crew immediately in case of MOB, fire or any event you find unusual or you are unsure of.
First Aid Kit	is located in the:	The forward cabin Starboard side. We have extensive first aid equipment on board, including oxygen. Should it be required please listen to your crew for instructions.
Fire Extinguishers	are located in the:	Show location of fire extinguishers To use – pull out pin, aim at base of the fire and squeeze nozzle
EPIRB	is located in the:	Main Cabin port side
Emergency Radio	channels:	16
During the Journey	be careful to:	Your surroundings, and listen to the Master for instructions. When moving around the vessel, please ensure you maintain a handhold with the vessel at all times. No Passengers are to go onto the tubes or stand on the fire pump hatch whilst the vessel is underway. The vessel has an extensive array of systems and equipment on board. Please do not touch anything unless directed to do so by your crew. If you would like further information on anything on board please a crew member.
Berthing		Please keep your arms and legs within the boat during berthing, launch or retrieval and let the crew do the work. Do not attempt to embark or disembark until instructed to do so by your crew.
Man Overboard		If you see a man over board shout, look and point to the person in the water. Do not take your eyes off the MOB. The crew will take all other necessary action. Should all persons left on board after the MOB event be non-crew or non-skippers put throttles to neutral and turn off engines. Try to give assistance to MOB without endangering yourself.
No Smoking		There is no smoking at any time whilst on the vessel.

9.21 Fuelling Flowchart

Requirements

- Trained operators only
- Radios to report spill
- Scuppers closed
- Oil spill kit at hand
- No smoking
- In an emergency contact RCCNZ on 0508 222 433 or 111
- MNZ accident report forms
- Logbook to record

FUELLING PROCEDURE

