

SAFETY
ON THE
SEA



motorboating

SEA SAFETY GUIDELINES

The RNLI – saving lives at sea

The Royal National Lifeboat Institution (RNLI) takes great pride in saving lives at sea. But so many of the situations that our crews risk their lives to deal with could be prevented with the right knowledge and equipment. That's why we have prepared the information in this booklet.

If, having read the booklet, you find that there are areas you are unsure about, there are several organisations you can contact for training or further information. You will find their contact details at the back of the booklet, when you see this icon.



This booklet is one of a series of RNLI sea safety publications and services – call us for more information on freefone 0800 328 0600.

Michael (RNLI)



Even after working as a lifeboat crew member for 16 years, I'm still amazed at how some people overlook the simplest safety precautions – often leading to terrible consequences.

As the owner of a motor boat, you need to fully understand your craft and check it over thoroughly before setting out to sea. You are responsible for the lives of everyone on board, so you need to know exactly what to do should something go wrong.

I know that many of the things that can happen at sea are beyond your control. However, you should inform the Coastguard immediately, if you see a potentially dangerous situation developing – even if it does turn out to be a false alarm. It's better to give warning at an early stage, than to wait for a situation to get out of hand.

This booklet will tell you about some of the potential dangers that you may face while at sea and how you can make sure they don't present a problem for you. By following our advice and sharing it with your crew, you can look forward to enjoying safe boating trips for years to come.

Michael Currie
Coxswain,
Mallaig lifeboat,
Scotland.

A handwritten signature in blue ink, appearing to read 'Michael Currie', written in a cursive style.

CHANDLERY
☎ 701556

BAYLINER
NEW BOATS BROKERAGE
01202 701707 FAX 01202 701670

free shop
chandlery

PETROL PUMP
SWITCH OFF IF

INDULGENCE

www.indulgencecharters.com



SUNSEEKER

before you go

Get the right boat for the job

Be realistic about the size and type of motorboat you can handle. Bigger does not necessarily mean better – you can learn more and have just as much fun by starting out with a boat that is comparatively small.

- Get expert advice when buying. An independent survey by a marine expert will show if the boat is in good, seaworthy condition and assess the standard of equipment.
- If you hire or charter, make sure the boat is comprehensively insured with full cover for all crew. Check that the boat is fully equipped with safety equipment and that all paperwork is in order. Check that the Inspection Certificate is in date.
- For more advice on buying or charter, visit www.boatingadvice.com provided by the British Marine Federation.



Master basic skills

- Before setting out, you and your crew must possess sufficient skill to use the boat safely. This means acquiring basic knowledge of boat handling, navigation, meteorology, rules of the road, use of safety equipment and maintenance of the boat and its engine.
- The RYA administers a comprehensive Motorboat Cruising Scheme for all abilities, starting with 'Introduction to Motor Cruising' and extending to 'Yachtmaster Ocean'. For information call the RYA on [0845 345 0400](tel:08453450400).



Free safety advice from the RNLI

The RNLI provides sea safety advice in a friendly and confidential manner and can arrange to send a trained adviser to discuss your boat's safety equipment totally free of charge. The service is called SEA Check (Safety Equipment Advisory Check) and has provided practical advice to thousands of boat owners since it was introduced in 1999.

- For more information, or to arrange a SEA check, call [freephone 0800 328 0600](tel:08003280600) or register on-line at

www.rnli.org.uk/seasafety



Dressed for action

The crew must stay dry and warm, whatever the weather. All crew members should have access to suitable clothing, which is fully functional and will help protect against hypothermia when they are on deck or facing an emergency.

- Base and mid layers should be fleece and fibre pile garments, which trap warm air and provide quick drying comfort. Thermal headgear can play a major role in helping to conserve body heat.
- The outer layer should preferably be dedicated marine gear for foul weather use. Chest high trousers and jacket with high collar, hood and storm cuffs will provide a complete barrier against rain, spray and wind. Breathable fabrics, which transmit sweat to the outside, are likely to provide the best performance. Bright colours and retro-reflective strips are strongly recommended. Some jackets have built in lifejackets and harness.



- Yachting boots will provide the necessary warmth and protection in poor conditions or an emergency. They must have effective non-slip soles and should pull on and off easily. Yachting shoes provide the best possible grip, which is vital when moving round the deck.
- Marine gloves help protect the hands from abrasive modern ropes and any possible injuries. They will also keep out the cold.

Wearing lifejackets

- A motor cruiser must have sufficient lifejackets. This means having lifejackets which will fit all of your crew including children and your pet dog.
- It is the skipper's responsibility to show the crew where lifejackets are stowed, how to don and secure them and when and how to operate them.
- It is good practice for all the crew to wear a lifejacket when on deck. Non-swimmers and those with poor swimming ability should wear a lifejacket at all times when afloat. Remember - it is important to use the crotch straps.
- Wearing lifejackets on deck should be mandatory when a boat is out in poor weather conditions or at night.

Using a harness

- A motor cruiser must have at least one harness for use on the foredeck. The modern style of combined air-inflation lifejacket and harness is easy to wear with minimal restriction of movement.
- The skipper should identify harness attachment points for moving forward on the boat. They should be placed close to the companionway and be accessible from the flybridge and foredeck. Always clip on when wearing a harness, making sure you are clipped to something strong enough to take your weight.
- If a person falls overboard when clipped on, they could be dragged back and held in the area around the propellers. Be aware of this potential danger, which will depend on the length of the line, the position of the props and where you clip on.



Understanding lifejackets

Lifejacket buoyancy is measured in newtons – 10 newtons equals 1kg of flotation. There are four European standards for lifejackets which must all carry the CE mark:



1. Buoyancy aids with 50 newtons are only for use by swimmers in sheltered waters when help is close at hand. They are not guaranteed to turn a person from a face-down position in the water.



2. The 100 newton lifejacket is for those who may have to wait for rescue but are likely to be in sheltered and calm water.



3. The 150 newton lifejacket is for general offshore and rough weather use, where a high standard of performance is required.



4. The 275 newton lifejacket is primarily for offshore and extreme conditions and for those wearing heavy protective clothing.

Lifejackets are available with a choice of foam-only buoyancy, air-only buoyancy or air-foam buoyancy.

- Air lifejackets may be automatically activated on entering the water or can be inflated manually or orally. They must be checked and maintained as recommended by the manufacturer. Spare gas cylinders should be carried on board.
- It is recommended that all lifejackets are fitted with a whistle, light and retro-reflective strips and should have crotch straps.
- Crotch straps should be fastened under the crotch NOT on the outside of the hips. There is a real risk of drowning if lifejackets are not fitted properly.

Emergency electronics



VHF and GMDSS

- A VHF radio will enable you to summon help by calling the Coastguard and alerting other vessels on Channel 16.
- VHF radios with the Global Maritime Distress and Safety System (GMDSS) are equipped with Digital Selective Calling (DSC), which allows a distress alert to be transmitted at the touch of a button.

EPIRBs

Emergency Position Indicating Radio Beacons (EPIRBs) are a feature of the GMDSS system. They transmit a one-way distress signal, which can be activated manually or automatically. For instance, if a boat sinks, an EPIRB fitted with a Hydrostatic Release Unit will float free and automatically transmit a distress signal, which relays its exact



position to the nearest Coastguard co-ordination centre. An active EPIRB also enables lifeboats or helicopters to obtain a direct radio bearing. Ensure your EPIRB is correctly installed and make regular checks of the battery and hydrostatic release.

- For more information about GMDSS contact your local Coastguard Maritime Rescue Centre (see page 28) or the RNLI on [freephone 0800 328 0600](tel:08003280600).



Radio licensing

Make sure your boat has an up-to-date radio licence. If you fit DSC equipment, you will need to obtain a Maritime Mobile Service Identity (MMSI) number. For more information contact the Radio Licensing Centre, Bristol on [0870 243 4433](tel:08702434433).

EPIRB registering

It is vital that your EPIRB is registered so that full details of your boat are known if the EPIRB is activated. Registration is provided free of charge by the Maritime and Coastguard Agency (MCA), which can be contacted on [023 8032 9100](tel:02380329100). Do not transfer your EPIRB to another boat without informing the MCA of necessary changes. If you sell a boat with an EPIRB, it must be registered to the new owner.



Mobile phones

Never rely on the use of a mobile phone to replace marine VHF radio for distress and safety calls. It is not a safe or reliable substitute! However it may be useful in some circumstances.

- In an emergency dial 999 and ask for the Coastguard.
- The service is free – the Coastguard is always there to help.



Training

Make sure you are properly trained and qualified so you can operate your radio kit effectively. The skipper should attend a recognised Short Range Certificate (SRC) or Long Range Certificate (LRC) course. It is a legal requirement that at least one member of the crew is qualified to use the equipment on board. The RYA administers the Short Range Certificate (SRC), with a course typically held over one day to include routine, safety, urgency and distress communications as well as radio voice procedures and techniques.



- Make sure your crew knows how to operate your VHF radio or EPIRB. There is a risk of setting off a false distress alert without proper training.



Lifebuoys

Some motor cruisers do not carry a lifebuoy in the belief that the boat is likely to be travelling too fast for practical use. However all offshore lifeboats carry lifebuoys as a safety aid that can be thrown to a man overboard (MOB) casualty. A lifebuoy should be mounted where it can quickly be thrown overboard. It should be marked with the boat's name and retro-reflective tape and fitted with a drogue to prevent drifting, a whistle to attract attention and an automatic light (projecting a continuous beam) or a strobe.

Flares

Day and night distress flares are an essential part of a motor cruiser's safety equipment and should be stored in a suitable waterproof container.

- Make sure the crew know where flares are stored.
For safe use get them to read the instructions printed on the sides – it will be too late on a dark and stormy night!
- Ensure that you have the correct quantity per the RYA recommended list for the type of power boating you do.
- All flares must be in-date.



First aid

A comprehensive first aid kit and basic first aid knowledge could prove invaluable until professional assistance arrives. It is recommended that at least one crew member should have a current first aid certificate.

- The RNLi produces a video 'First Aid Afloat'.
Call us on [0800 328 0600](tel:0800 328 0600) for more information.



Throwing lines

A throwing line should be carried for instant use on deck, regardless of whether the boat is fitted with a lifebuoy. The brightly coloured floating line is coiled inside a throwing sack, with a wrist-loop or handle to retain the pulling end. Achieving a long distance throw with good accuracy requires practice, with a possible reach of over 20m.



Fire extinguishers

Fire extinguishers and fire blankets must be checked and maintained in line with manufacturers' recommendations. Make sure they are stowed correctly and fully accessible and that every crew member knows when and how to use them. Check fire extinguisher pressure and expiry date.

Liferafts

- Liferafts are essential for extended passages. They can be hired for this purpose for as little as £1 a day.
- The liferaft must be regularly serviced in line with the manufacturer's recommendations.
- The number of crew on the boat should not exceed the capacity of the liferaft.



- The liferaft should be stowed in a position where it is ready for immediate launching. Never stow it below deck or beneath other equipment.
- 1. A hydrostatic release should be used if the liferaft is stowed above deck (two year life span).
- 2. If generally secured against theft in the marina/mooring, remove the padlocks and ensure the hydrostatic release is operational before sailing.
- You should be familiar with the safety/survival equipment carried in your liferaft.



Michael's advice

*Remember the fire triangle, HEAT – FUEL – OXYGEN.
Remove just one element and the fire will go out.*

Planning a trip

Weather check

Always check the weather forecast before you go and be prepared to change your plans. Services of particular relevance might include:

- Met Office online – www.metoffice.gov.uk
- Marine mobile services via SMS or WAP – details online
- Marinecall National Inshore forecasts Audio – 09014 737460
- Teletext

Organising the crew

- Ensure the crew is sufficiently prepared for any trip. Be aware of their limitations – particularly young children – and try not to expect too much from them if you are planning a long passage.



- Make an absolute rule that all crew must be safely seated or holding on when the boat is at speed.
- Brief the crew on all safety issues including use of lifejackets and harnesses. Ensure extra care is taken with flammable materials and when turning off the gas.
- Give the crew specific duties to avoid confusion during the journey.
- Provide clear instructions before mooring or anchoring.

Organising the boat

When preparing to use a boat that is new to you, familiarise yourself with its good and bad points by making short inshore voyages.

- Produce and display a list of important pieces of information, including fuel capacity, maximum endurance, gallons/litres per hour, how to deal with water ingress, how to pump bilges and how to jury rig.
- Do a risk assessment. The RNLI SEA Check team can support you in this.



Be aware of the limitations of your boat. Do not over estimate its speed or ability to deal with difficult conditions.

- Accept that you may be slowed by foul tide or poor weather.
- Check all relevant charts, tide tables and pilots. Take those that are required on board.
- Do your navigation before you set off. Slow down or stop if there is any doubt.
- It is better to be pessimistic when estimating the duration of a trip. Work out alternative strategies that include putting into safe havens en route.
- Leave details of a planned trip with a reliable person on shore. This should include destination and route, expected times of departure and arrival, description of boat and contact names for all people on board. Keep shore contact advised of any changes.
- On a long passage it is good practice to inform the Coastguard of your plans and estimated time of arrival.
- Check all radio equipment is functioning fully before setting out.

Emergency repair checklist

- Spanners
- Screwdrivers
- Pliers
- Waterproof torch
- Batteries
- GRP repair kit
- WD40
- Stainless steel knife
- Bungs
- Heavy duty tape
- Spare fuel filters, pump impellers and vee belts
- Link belting for quick repairs
- Lubricating oils
- Liquid sealant

Regular servicing of all safety equipment is highly recommended

Around the deck

- Guard rails provide a safety barrier round the main cockpit and foredeck.
- Treat any slippery areas with non-skid paint or stick-on strips. Pay particular attention to the tops of hatches and sloping coachroof sides.
- 'Bow riding' is potentially dangerous and has been made illegal in some countries.
- Avoid standing next to a working radar antenna.
- Slow down in bumpy conditions or when there are waves ahead. Warn everyone when the boat is going to change speed or direction, or is about to hit unexpected waves. Give them time to sit or hold on securely. No one should be on the foredeck.



- Make sure all deck gear is securely stowed, including loose mooring lines and the anchor.
- When a line or painter is secured at one end, make sure it is not likely to foul the propeller if it falls over the side.
- Check fixings and equipment stowed on deck regularly for deterioration.

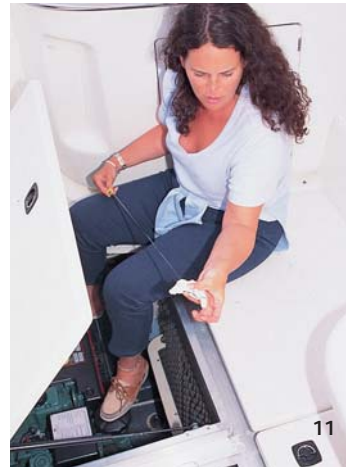
The RNLI's engine check list

- The engine plays a vital role in the safety of your boat. It must start every time and be ready to get you out of trouble in an emergency.
- The RNLI produces a laminated card 'Engine Check List'. To request your copy, freefone the RNLI on 0800 328 0600.
- RYA provide diesel engine training courses.



Remember!

- Read the engine handbook, keep it to hand and make sure you are familiar with its contents.
- Make sure the engine is regularly maintained. Engine failure is the main cause of lifeboat calls to motor cruisers.
- Always carry at least 20 per cent more fuel than you expect to need. Calculate fuel consumption, check that fuel gauges are accurate and plan your trip so you never have to top up the tanks when at sea.



Voluntary Safety Identification Scheme (CG66)

The Voluntary Safety Identification Scheme (CG66) is administered by the Maritime and Coastguard Agency and provides vital information in an emergency. To join the scheme visit www.mcga.gov.uk or obtain a form from any Coastguard Maritime Rescue Centre.



See the back page for more information.



Michael's advice

Before embarking on a passage, check the engine oil and take a reserve supply with you. Ensure that you have more than enough fuel for the trip.



under way

Radio sense

Maintain a good radio watch when at sea, using the recommended channels for distress, calling and ship movements.



- Keep information about correct radio distress procedures and your call sign adjacent to the radio.



Mal de mer!

Seasickness strikes down many a sailor, particularly those with little to do. Its effects are dangerous if the crew becomes too incapacitated to maintain proper control of the boat:

- Seasickness medication works for some people and should be taken well before the trip. Check the instructions for possible side effects, which may include drowsiness.
- Don't get cold and miserable. Dress up warmly and take a spell at the wheel to occupy your mind.
- If a crew member feels sick, the skipper must decide if it is necessary to seek shelter before the problem gets worse.
- Get someone to help if you need to be sick. The boat must stop, but there may still be an unpleasant motion and hanging over the side is potentially dangerous. The safest and easiest solution may be to use a bucket in the cockpit.
- Don't continue on an empty stomach. Dry toast, bread or plain biscuits are all good fill-ups. You must drink plenty of water to offset dehydration.

Drink and drugs

Be sensible about drinking alcohol, as it will impair your judgement. Consider it as irresponsible for a skipper and crew to be in charge of a powerboat under the influence of alcohol as it is for the driver of a car.

Beware of the side effects of any medication which may impair judgement and reduce the effectiveness of the person concerned.

Fire brigade!

Make regular checks of gas bottles and fuel containers to ensure no flammable vapours escape into the bilge. The active gas bottle and all taps must always be turned off when not in use. Turn the gas bottle off first, let the gas burn out of the system, then shut off the main cock and burner tap on the stove. Take extra care if anyone on board is a smoker. The engine compartment and cabin should be ventilated regularly, especially before going afloat.

Rules of the road



The primary role of these rules is to prevent collisions. They rely on common sense and good practice to succeed. This is only a brief summary. Complete 'International Regulations for the Prevention of Collisions at Sea' should be on board every yacht and motor cruiser and are available from the RYA. Phone 0845 345 0400 for more information.

Under power

- Boats under power give way to sail.
- Boats under power approaching head-on should turn to starboard.
- When boats under power are crossing, the vessel with the other vessel on its starboard side must give way.



General rules

- It is the responsibility of the skipper to maintain a good look-out at all times.
- An overtaking boat must always keep clear.
- There is a risk of collision if the bearing of an approaching vessel remains constant.
- Vessels of less than 20m should not impede vessels using a traffic separation scheme or confined to a narrow channel.
- Give way to vessels fishing, vessels not under command, vessels restricted in their ability to manoeuvre or vessels constrained by their draught.
- Avoid diving vessels that are flying the blue and white A flag – diver down.
- Be aware that divers may also be using a surface marker buoy to indicate their position. Keep clear.



Sound signals with a foghorn

- altering course to starboard.
- ● altering course to port.
- ● ● going astern.
- ● ● ● ● your intentions are unclear.

A motor vessel which is underway in fog should give a long blast every 2 minutes and a motor vessel which has stopped should sound 2 long blasts every 2 minutes



Navigation lights for motor cruisers

- A powerboat which is underway at night must show green and red side lights, a white stern light and a white masthead light at least one metre above the side lights. On a boat of less than 20m the sidelights may be combined.
- A powerboat of more than 7m must show an all-round white light at anchor.

Remember

Don't drag!

A length of chain adds weight and greatly improves the holding capability of an anchor. The amount of chain and rope should be at least five times the depth of water.

Be seen!

Radar reflectors will help your boat to be 'seen' by larger vessels, particularly in reduced visibility. A radar can check the approach of other vessels, but don't forget to use the GPS to confirm your position and keep a good lookout as well!

Shiver me timbers!

It is the skipper's responsibility to keep the crew dry and warm. A wet, cold crew will not be able to function effectively, which may endanger both boat and crew. The onset of hypothermia is often accompanied by lack of reason and judgement.



Michael's advice

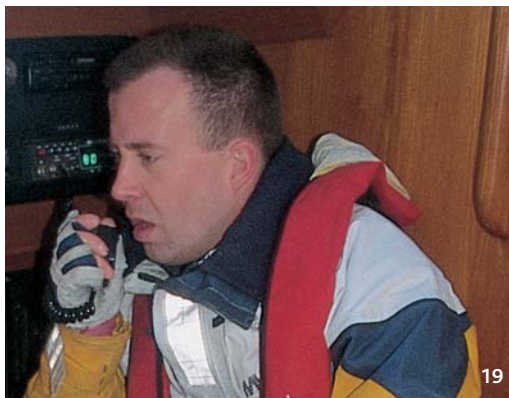
If in doubt... Never press on with a trip regardless. Be realistic about the situation. Be prepared to change your plans and make for a safe haven in good time. If things go wrong and you're not sure you can handle it, you must call for help – don't leave it too late.



emergency

Calling for help

If you are in distress and immediate assistance is required, a DSC Distress Alert should be sent before the MAYDAY procedure. This Distress Alert will activate all alarms in any DSC radios within range and alert any radio operators to listen on the distress working channel for the subsequent MAYDAY call. The DSC alert also contains your identification number (MMSI) and a valid position.



Do not rely solely on the DSC alert. It should be immediately followed by emergency radio procedures on VHF Channel 16.



Firing flares

- Familiarise yourself with the firing instructions.
- It is vital to aim parachute flares well clear of any radio masts or superstructure. Fire them slightly downwind so they achieve maximum height. Do not fire parachute flares if a helicopter is close by.
- Fire all flares to leeward and downwind so that smoke and debris is blown away.
- The RNLI SEA Check service can provide flare demonstrations for clubs and associations. Call on freephone 0800 328 0600.



Engine failure

The main cause of engine failure is likely to be blocked filters:

- A blocked fuel filter will reduce power until the engine stops. Change the filter and re-start the engine. If dirty fuel is the culprit, several changes may be required.
- A blocked salt water inlet filter will cause rapid overheating, indicated by increased steam from the exhaust and eventual seizure. Check the filters for blockage and clear as necessary. Also check the pump is functioning and for leaks in the system.

Man overboard

Prevention is better than cure!

Ensure all actions and safety precautions have been taken to prevent someone falling overboard.

- Practice MOB drills in all weather and sea conditions using a bucket and fender.
- Always wear a lifejacket and harness that is correctly clipped on when going on the foredeck in rough weather, poor visibility or at night.
- Taking a 'leak' over the side is potentially dangerous – even when the boat has stopped. If you can't face using the heads, a 'bucket-and-chuck-it' is far safer.
- Make sure you are holding on to secure fixings on the boat at all times.



Held by a harness

If a person falls overboard when still secured by a harness, stop the boat immediately and engage neutral. Keep hold of the harness line to help them swim round to the boarding ladder. If this is not possible you may need to rig a ladder, use some form of lifting tackle or lower a dinghy to get them back on board.

Left behind

If the person is not secured by a harness, the following are guidelines for keeping them in sight and retrieving them with minimum delay – **remember that cold water can rapidly kill:**

- Throttle back and immediately raise the alarm by shouting 'Man overboard!'
- Instruct a crew member to watch the person in the water and point continuously.
- Alert the emergency services and let them know what's happened. If you cannot see the person in the water or have any doubts about making a recovery, send out an immediate distress alert.
- Start your recovery manoeuvre. Beware of loose lines fouling the propeller at all times.
- If possible note your position. Most navais have a MOB function which may prove vital if contact is lost. The MOB records where the person fell overboard but does not allow for drift on wind and tide.
- If you are the only person left on the boat, do not leave the deck as you may become disorientated and lose sight of the casualty.
- In daylight, throw a buoyant orange smoke signal immediately after the person has fallen overboard.
- At night, if you have a lifebuoy with a light, throw this immediately after the person has fallen overboard. A white parachute flare can be used to illuminate the area and pick up the retro-reflective tape on the casualty's clothing.
- If you recover the MOB, inform the emergency services immediately.

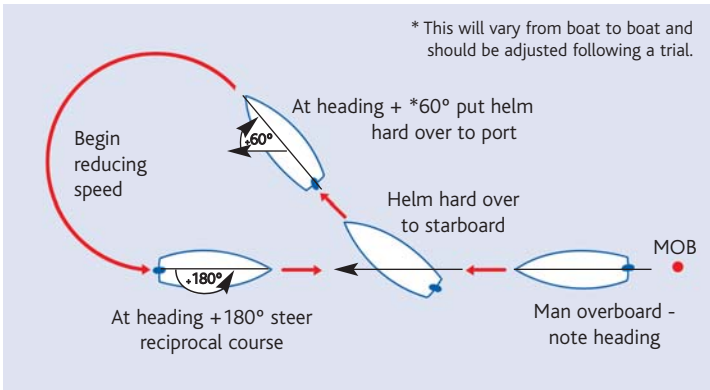
What can the casualty do?

- Remain as calm as possible.
- The greatest threat to survival is the cold. Cross your legs and hold your arms tightly together to restrict movement, prevent cold water flushing through and help prevent loss of heat. Tighten up wrist, ankle and neck fastenings.
- Use the light and whistle on the lifejacket to attract attention.
- In most cases you should not attempt to swim for the boat as this will promote rapid heat loss and exhaustion. Wait until you can grab the lifebuoy or heaving line that may be floating close by.
- In rough conditions, turn your back to the waves to keep your airway clear of spray.



MOB action

- If you can see the person in the water clearly, a simple 180 degree turn is quickest.
- If you lose sight of the casualty – due to poor visibility or a bad sea state – the 'Williamson Turn' is a good way to get on to a reciprocal course which will take you back down the track.
Put the helm hard over to starboard and add 60 degrees to your course – the amount will vary from boat to boat and should be adjusted following a man overboard trial. When the compass is on the new heading, put the helm hard over to port. When the compass is reading the course + 180 degrees, steer a reciprocal course and the casualty should be ahead of you.



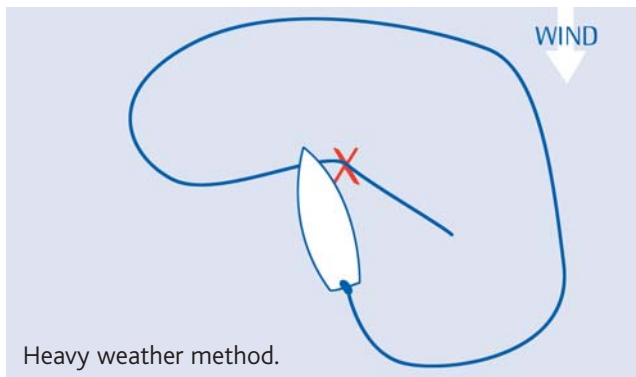
- In heavy weather the reciprocal course may bring the sea astern, in which case a short approach head-to-sea may be more appropriate once the turn has been completed.

Preparing to come alongside

Do not waste time while the boat is turning to approach the casualty. Prepare for the recovery so that everything is ready when you come alongside.

- Determine which side you will approach. Have a heaving line ready. Be sure to wear a lifejacket and harness and clip on before throwing the heaving line – you may get pulled over.
- Have someone ready with a rope loop to pass over the MOB's head and under their arms. When this is done, cross the rope. This gives the casualty something to hold on to and will give them confidence.
- The initial approach will vary, depending on weather and sea conditions and the

type of boat. Attempt to come on to the MOB head to wind, that way your props are away from the casualty and the vessel will not drift on to them.



- If you are not absolutely confident of your boat handling skills close to the person in the water, throw the heaving line as soon as you get within range. You can then pull the casualty alongside to a safe place for recovery.

- Ensure the propeller is not turning when you are alongside the person in the water. Make sure there are no lines which could foul the propeller.

Recovering the casualty

This may be the hardest part of the whole MOB procedure:

- If you have a boarding ladder and the casualty is able to help themselves, this may be the safest and most obvious method. Beware that a stern-mounted boarding ladder can be dangerous in a rough sea.
- Launching the dinghy can be used to aid the recovery.
- The casualty may well be suffering from shock and hypothermia. Be prepared to administer immediate first aid. Assess if the casualty needs professional medical attention.
- Lifting gear will need to be improvised if the casualty is exhausted or unconscious. A short strop with a block and tackle can be attached to a strong securing point – on the wheelhouse, anchor windlass or davits – to help lift the casualty on board. A sling using ropes or net can be made to roll the casualty up out of the water.



Michael's advice

Another method of recovering the MOB is to use the tender/dinghy as a stepping platform by using the outboard propeller as a means of climbing out of the water and onto the boat.

Fire on board

If you have a fire on board:

- Rig a sea anchor/drogue so that smoke and flames blow downwind. Rig it from the stern or stem, whichever is appropriate.
- Do not enter any smoke filled space. Try not to breathe in any smoke, as it may be poisonous.
- Put on your lifejackets.
- Get everyone on deck and take all the fire extinguishers with you.
- Try to extinguish the fire where possible. Use a fire blanket to smother small fires. When using a fire extinguisher, try to hold it upright.
- Fire requires oxygen. Reduce the supply of air by sealing vents and hatches. If there is smoke coming from the engine compartment, only open the access hatch enough to insert the nozzle of the fire extinguisher.
- Notify the emergency services.
- Move both the crew and liferaft as far as possible from the seat of the fire.
- Fitting a fire access port to the engine compartment offers the greatest safety.



Launching a liferaft



A liferaft should never be launched until it is intended to abandon the boat.



Ensure that the liferaft is tied to the boat. An inflated raft cannot be towed or held alongside for any length of time in a seaway without being damaged.



It should be boarded by crew as quickly as possible then cut free from the boat.

Climbing into a liferaft should always be considered a last resort. Unless the boat is on fire or is clearly sinking fast, it is better to postpone this until the last possible moment. A boat is likely to be easier for the rescue services to locate and the crew will suffer less from exposure. Heavier crew members should transfer into the liferaft first to help promote stability and other crew on board.

- The static line must be secured to the boat before the liferaft is thrown overboard! You may need to pull out about 8m of static line before the liferaft inflates. Cut free and move away from the boat as quickly as possible.

- Emergency equipment such as an EPIRB, hand-held VHF, flares, first aid kit, water and thermal protective aids must be taken, if not already in the liferaft. This can be provided in a grab bag which is stored in an easily accessible locker on the boat.
- Know your liferaft. Ask the service agent if you and your crew can be present when it is inflated for service. This will show you how it inflates and where the gear is stowed.

Getting a tow



- Have a plan for securing the towline to your boat when it is passed by the rescue boat. Practice this as a routine drill.
- As a lifeboat approaches, the coxswain will inform you of his intentions. Advise him of hazards such as ropes or netting in the water. Follow his instructions – he is the expert.
- Do not secure the towline to fittings that are not strong enough for the job. If in doubt, back up the towline using additional ropes led to other cleats and strong points on deck.
- Avoid using knots or loops that cannot be released under load. Where possible provide protection to prevent chafe of the tow rope, such as running it through the bow fair lead.
- Some boats will tow better using a bridle rather than a single line. You may be passed a small canvas drogue for streaming astern, particularly if you have lost your rudder. This will make the tow more manageable and reduce the chance of broaching in following seas.
- If you accept a tow from a commercial or private vessel, it is wise to check if any fee is expected. There is no 'salvage' fee when you are towed by a lifeboat, but a voluntary contribution to the RNLI is always very welcome!
- If you are acting as the tow vessel in poor weather add something heavy i.e. 2 or 3m of chain, to the middle of the rope.

Helicopter rescue

- Use a red hand-held or orange smoke flare as a signal to the helicopter if requested. Do not fire parachute flares or mini flares when the helicopter is close by.
- Once contact has been made, the pilot will tell you his intentions. Follow these instructions – he is the expert.
- Make sure you understand what the pilot has said as you will not be able to hear your radio when the helicopter is overhead.
- Winching normally takes place from the stern of the vessel. Ensure there is a clear area and that loose gear and debris is secured or cleared away. Beware that the helicopter down-draught can be very strong.
- If possible keep the vessel as steady as you can. You will be given instructions regarding course and speed if you have power available.
- Allow the winch wire to earth in the water before grabbing it. Ensure it does not snag on anything. Never secure it to the boat.
- If the Hi-Line technique is to be used, have a bucket to hand to collect loose line on deck.



25

REMEMBER!

The RNLI is here to help, but would rather do so before you get into trouble! **Free** safety advice is always available – **freefone 0800 328 0600.**

Useful contacts – as referred to throughout the booklet



RNLI

Royal National Lifeboat Institution
West Quay Road, Poole, Dorset, BH15 1HZ

Telephone: 0845 122 6999 email: seasafety@rnli.org.uk www.rnli.org.uk



BMF

British Marine Federation,
Marine House, Thorpe Lea Rd, Egham, Surrey, TW20 8BF

Telephone: 01784 473377 email: info@britishmarine.co.uk www.britishmarine.co.uk



MCA

Maritime and Coastguard Agency
Spring Place, 105 Commercial Road, Southampton, SO15 1EG

Telephone: 023 8032 9100 email: micmca@mca.gov.uk www.mca.gov.uk



The EPIRB Registry

MCA Southern Region (Falmouth)
Pendennis Point, Castle Drive, Falmouth, Cornwall, TR11 4WZ

Telephone: 01326 211569 Fax: 01326 319264



RYA

Royal Yachting Association
RYA House, Ensign Way, Hamble, Southampton, SO31 4YA

Telephone: 0845 345 0400 email: admin@rya.org.uk www.rya.org.uk

The Radio Licensing Centre

Customer Management, PO Box 1495, Bristol, BS99 3QS

Telephone: 0870 243 4433

The RNLI would like to thank the following people and organisations for their support in the production of this publication:

McMurdo, Pains Wessex, Practical Boat Owner, Simrad.

Photo credits: Roger Turner, (Cover, 1, 4, 9, 10, 11, 13, 14, 16, 17, 21, 23, 24), Kevin Riley, (2, 5, 8, 20), RNLI, (3), Patrick Roach Picture Agency, (6, 7, 12, 15), Rick Tomlinson, (18, 25), David Harding, (19), PPL Ltd, (22).

Coastguard Maritime Rescue Centres

London Coastguard

Thames Barrier Navigation
Centre, Unit 28, 34 Bowater
Road, Woolwich,
London SE18 5TF
Tel: 0208 312 7380

MRCC Aberdeen

4th Floor Marine House,
Blaikies Quay,
Aberdeen AB11 5PB
Tel: 01224 592334
MMSI No: 002320004

MRSC Belfast

Bregenz House, Quay Street,
Bangor, Co Down BT20 5ED
Tel: 028 9146 3933
MMSI No: 002320021

MRCC Clyde

Navy Buildings, Eldon Street,
Greenock,
Inverclyde PA16 7QY
Tel: 01475 729988
MMSI No: 002320022

MRSC Forth

Fifeness, Crail, Fife KY10 3XN
Tel: 01333 450666
MMSI No: 002320005

MRSC Shetland

The Knab, Knab Road, Lerwick,
Shetland ZE1 0AX
Tel: 01595 692976
MMSI No: 002320001

MRCC Falmouth

Pendennis Point, Castle Drive,
Falmouth, Cornwall TR11 4WZ
Tel: 01326 317575
MMSI No: 002320014

MRSC Humber

Limekiln Lane, Bridlington,
East Riding,
Yorkshire YO15 2LX
Tel: 01262 672317
MMSI No: 002320007

MRSC Thames

East Terrace, Walton-on-Naze,
Essex CO14 8PY
Tel: 01255 675518
MMSI No: 002320009

MRCC Yarmouth

4th Floor, Havenbridge House,
Great Yarmouth,
Norfolk NR30 1HZ
Tel: 01493 851338
MMSI No: 002320008

MRSC Dover

Langdon Battery, Swingate,
Dover CT15 5NA
Tel: 01304 210008
MMSI No: 002320010

MRSC Liverpool

Hall Road West, Crosby,
Liverpool, Merseyside, L23 8SY
Tel: 0151 931 3341
MMSI No: 002320019

MRSC Swansea

Tutt Head, Mumbles,
Swansea SA3 4EX
Tel: 01792 366534
MMSI No: 002320016

MRSC Portland

Custom House Quay,
Weymouth, Dorset DT4 8BE
Tel: 01305 760439
MMSI No: 002320012

MRSC Solent

44A Marine Parade West,
Lee-on-Solent,
Hants PO13 9NR
Tel: 023 9255 2100
MMSI No: 002320011

MRSC Holyhead

Prince of Wales Road,
Holyhead, Anglesey, LL65 1ET
Tel: 01407 762051
MMSI No: 002320018

MRSC Milford Haven

Gorsewood Drive, Hakin,
Milford Haven, Pembrokeshire
SA73 3HB
Tel: 01646 690909
MMSI No: 002320017

MRSC Brixham

Kings Quay, Brixham, Devon
TQ5 9TW Tel: 01803 882704
MMSI No: 002320013

MRSC Stornoway

Clan Macquarrie House,
Battery Point, Stornoway, Isle of
Lewis, Western Isles HS1 2RT
Tel: 01851 702013/4
MMSI No: 002320024

Above all – don't forget – the Coastguard is there to help. The service is free. Isn't your safety, your family's or friends' worth thinking about? Talk to the Coastguard.

Voluntary Safety Identification Scheme

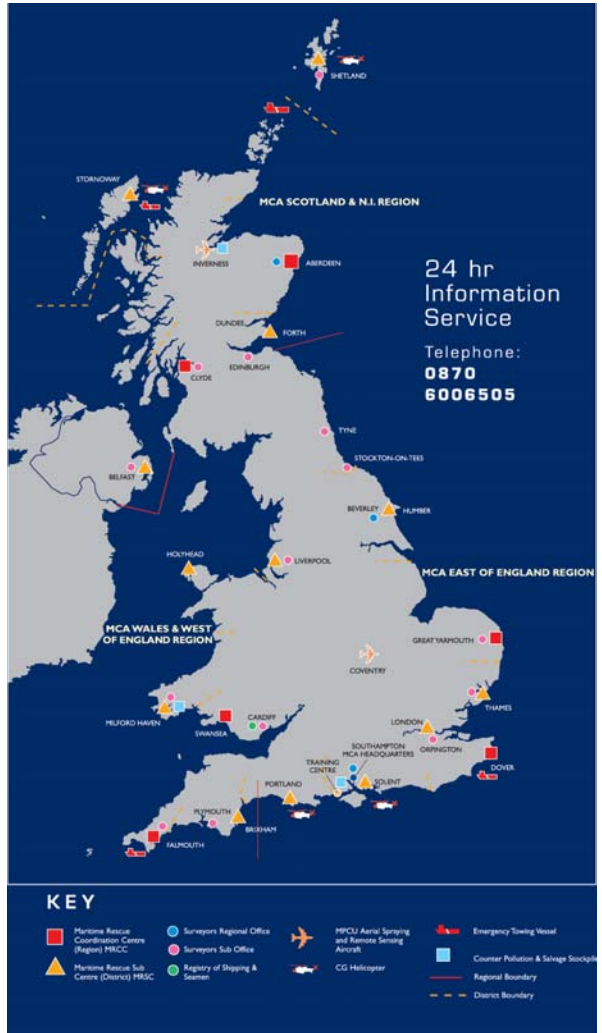
- how to join
- it's free and it could save your life

If you are at sea and get into difficulty and you are unable to raise assistance, is there anyone ashore who knows what to do if you fail to return at your estimated time? Would a friend or relative know who to contact? Would they have sufficient detail about your vessel and your likely whereabouts to be able to assist the Coastguard to locate you?

Would it not be a comfort to know that when you set out, the Coastguard has the details of your vessel on a database that is accessible to all Coastguard Co-ordination Centres throughout the UK so that they have the information they need to mount a search and rescue operation should you get into difficulty?

It is simple to join HM Coastguard's CG66 Voluntary Safety Identification Scheme. Visit www.mcga.gov.uk to join online, or download the form and send it to your nearest Coastguard Co-ordination Centre. Forms can also be obtained from any Coastguard Co-ordination Centre or Sector Base, MCA Marine Office, RNLI boathouse; or look out for them in your local marina or sailing club.

The scheme is free and is for the benefit of the owners and skippers of all types of leisure vessels and small craft.



Also available in the RNLI sea safety range

With over 175 years of experience saving lives at sea, no one knows more about marine safety than the RNLI. Our range of sea safety resources give you the essential safety information you need – whatever you do at sea.

Sports and subjects include:

Sailing
Sport diving
Dinghy sailing
Sportsboating
Windsurfing
Personal watercraft
Surf kayaking
Kite surfing
Beach safety

To order any of these free resources, or to find out more about free sea safety advice call freefone

0800 328 0600

or visit our website

www.rnli.org.uk/seasafety

