



Duty Crew Manual (RIBs) - 2018

These notes are provided for the assistance of safety boat personnel (RIBs, both Cox and crew). They must be read in conjunction with the RO's Manual. In matters of conflict, the RO's Manual shall be assumed the correct version.

Lomond Yellow, Red and Blue are the preferred RIBs as they have protective rubber sheets to minimise wear when laying and recovering marks, and lower side tanks for ease of mark handling.

In addition to on-water duties, the duty team is responsible for cleaning the clubhouse at the end of each day.

1 Primary Duty of Safety Crews:

The primary duty of safety personnel is to ensure the safety of people. This applies at all times: property (e.g. dinghies/keelboats etc) comes second to people.

Note:

- The crew (i.e. any person other than the cox) are not on board as passengers, their duty is to be the primary pair of eyes scanning for problems.
- Safety cover must be maintained following an abandonment until all competitors are safely ashore. In addition, safety cover must be maintained until all keelboat crews are ashore.
- No persons under the age of 16 will be allowed to undertake a duty on any safety craft. **There can be no exceptions to this rule.**

2 Responsibility to the Race Officer

The Support/Safety boat crews operate under the direction of the RO.

They should be sure as to the RO's requirements of them. If not sure, ASK!

The RO has the final decision in the matters of safety. This includes rescue priorities.

The RO has the final decision as to who may be aboard the safety boat in addition to the duty crew.

Inform the RO of any faults etc that develop during the boat's use. (Faults must be noted in the log at the end of each day)

3 Support/Safety Crew Order of Priorities

1. Personal safety
2. Safety of competitors
3. Race organisation duties
4. Prevention of damage to boats/equipment
5. Recovery of equipment/boats



3.1 Personal Safety of Duty Crews

3.1.1 Personal equipment

Every crew member **must** wear personal buoyancy when afloat.

It is the crews' responsibility to be dressed for the day and conditions according to:

- The temperature and time of year.
- Length of time required to be afloat, which will involve long periods of inactivity.
- The necessity for agility in and around the boat.
- The possible need for at least one crewmember to assist by entering the water.

At least one crew member on each RIB **MUST** be wearing a wetsuit/drysuit and be prepared to enter the water should a safety situation require such action.

3.1.2 The Kill Cord – RIBS

The Kill Cord is probably the most important single piece of safety equipment in a RIB.

NEVER try to operate the boat without the kill switch in place and the cord attached to the driver's body (round the leg is often the best attachment point)

The Safety Equipment Bin carried on board the RIB should contain a spare kill-cord. Check before leaving shore as a RIB cannot be started without the Kill-cord being in position.

The Cox should show the crew how to attach the Kill Cord and restart the engine before leaving the jetty.

3.1.3 Staying on the boat!

- Communication between Cox and second crew is imperative.
- The Cox must keep the crew informed, particularly when about to perform sudden or high-speed manoeuvres.
- Try to stay seated when the boat is moving.
- Be ready to use your legs as shock absorbers when in rough conditions.

3.2 Safety of competitors

3.2.1 Responsibilities Before the Race

- Make a note of the number and type of boats participating in the day's event.
- Be aware of the number of singlehanders/doublehanders participating.
- Confirm your count with the Race Officer at an appropriate lull in the starting process.



3.2.2 Responsibilities During the Race

Monitor the racing fleet (**even when dealing with an incident**).

- Be aware of the position of all the boats you are responsible for at all times throughout the race.
- Advise the RO of any retirements.
- Ask capsized competitors if any assistance is required; and ask for a clear reply.
- Do not give assistance without agreement *except* when you are unable to communicate with a competitor e.g. Face down etc. in the water or the competitor showing signs of hypothermia (sluggish, clumsy, and erratic actions).
- Be aware of boats being in a dangerous position e.g. Lee shore in a strong wind.
- When attending a casualty (boat) be aware that your primary concern is the personal safety of the crew of the casualty *and the rest of the people racing*.

3.2.3 The positioning of support boats

Recognise that:

Collisions are most likely during the start and up to the end of the first beat.

The most likely capsize location is the gybe mark

The leg most prone to capsize is the run.

That each safety boat must be aware of the area(s) requiring to be covered.

The priority must always be the protection of persons rather than property.

3.2.3.1 Observation

Throughout the race, observe for:

- Immediate signs of activity following capsize (indicating consciousness)
- Check the number of heads visible. Know which boats are single and which are two-man.

]Look for the warning signs:

- Repetitive capsizing (indicating possible gear failure and / or fatigue)
- Hazardous positioning e.g., lee shore with priority always being given to the protection of persons rather than property.
- Be aware of problems of entrapment. (A copy of the RYA Research into Dinghy Entrapments may be found in the Race Office and on the RYA web site).

Most casualties will self-rescue, but cold weakens even a strong crew remarkably fast.

- Watch for signs of distress especially in young crews.
- Any crew which is becoming distressed, or which looks unlikely to self-rescue should be encouraged, or (in extremis) instructed, to abandon their craft.
- If other casualties are waiting, you should require a crew whose self-rescue is taking an unreasonable time to abandon their craft.

Give the Race Officer regular reports of your, and the fleet's, position throughout the race. Apart from the utility of the information, the regular interchange of signals ensures that you are always contactable if required urgently. However refrain from social and trivial banter.



3.2.4 Dealing with an incident

- When a crew is taken into the Safety Boat, return them to somewhere warm as soon as possible - this will usually be ashore, but if distance or number of casualties require it, you can off-load into Mory or Ceardach if they are nearby.
- Inform the RO that you have removed the crew and why you have taken that action.
- Skippers who abandon will often ask you to recover their boat. *You should only do so if you are **sure** that no other casualties will require your attention while the recovery operation is in progress.* Ask the RO's permission before starting a recovery operation.
- Be prepared to abandon any boat recovery should your presence be required elsewhere on the race course.

When dealing with an incident you **must** continue surveillance of the remaining competitors in order to assess any change in priorities.

- Look around every few minutes.
- Remember things may be happening behind you.
- Monitor boats progress round the course and note retirements and inform RO at the next convenient moment.

3.2.5 Communication to competitors (capsized or otherwise)

For effective verbal communication between the safety boat and the attended craft the following three simple procedures should be followed:

1. Never try to shout instructions from a moving powerboat - get in close, cut the engine or throttle down and shift into neutral, then speak at a reasonable volume.
2. Reduce the number of words communicated to a minimum - think what you need to say and go over it in your head; by doing this you will only need about 1/3 of the original words
3. Always ask for an acknowledgement that all involved understand your instructions.

3.2.6 Approaching and assisting a capsized craft.

1. Be aware of the importance of a head count. – How many people should be in the boat?
2. Know where people are in the water. Always keep yourself between them and the engine on the RIB.
3. Be aware of floating debris, lines etc. and the danger of them wrapping around the prop.
4. The right position to be in is within earshot but not so placed as to allow the dinghy and safety boat to drift together. - Off to one side across the wind is usually good
5. Consider approaching a capsized boat, that is not inverted, at the masthead: Whilst holding the top of the mast you can:
 - Motor to bring the boat head to wind
 - Stop it from inverting
 - If necessary, lower the sails by unshackling the halliards
 - Alternatively,
 - Approach the forestay and bring the boat head to wind.

**INTERNATIONAL MOTHS ARE VERY LIGHTLY-BUILT AND EASILY DAMAGED.
See guidance at 3.2.9**



In cases where the lack of dinghy crew weight is hampering recovery:

Consider coming alongside the bottom of the hull – looking out for sheets and ropes - so that the safety boat crew can help right it by levering down on the centreboard. (Be ready to get out of the way quickly!)

3.2.7 When approaching a fully inverted dinghy

Count heads - be aware of the problems of entrapment*.

If entrapment is suspected, inform RO by radio immediately - NO IFs, NO BUTs

It is best to come alongside so both bows are pointing the same way

Tow the boat head to wind from the forestay

Asymmetric boats should have their bowsprits retracted and all boats should have their spinnakers lowered before attempting recovery.

* The RYA Research into Dinghy Entrapment recommends the immediate attempts to right the boat (“The fastest reliable rescue technique which worked for all boats was found to be two heavy sailors aboard the inverted boat, pulling on the centre board. Nearly all boats could be righted consistently inside thirty-five seconds in a range of conditions.”) This replaces previous methods such as diving under with a knife or lifting the boat by the bow or bowsprit.

3.2.8 Getting a person out of the water

Approach from downwind. Slowly.

Stop the engine. (If there is a very good reason *not* to stop the engine, ensure it's in neutral then check that the prop is not turning).

If the person can help himself, he will generally prefer to face the safety boat, but his legs will tend to float under the boat.

The better method is to turn the person away from the boat. Crew members positioned on either side of him can get hold under each armpit and pull him into a sitting position on the side of the safety boat. This is the only way to deal with an unconscious person as it keeps the airway open.

In extremis a sponson (air tube) may be deflated partially to assist with recovery. Check that the RIB has a pump on board.

3.2.9 Guidelines for Safety boat crews - Int. Moths

International Moths sail at roughly twice the speed of a conventional dinghy around a course and can reach speeds of 25 knots. The leading Moth may well be completing Island courses in little over 30 minutes.

Moths are challenging boats to sail. All Loch Lomond Moths are helmed by experienced sailors who are aware of the challenge and risks associated with the boat. Some sailors are likely to capsize frequently (and often spectacularly!) but should be able to self rescue in the majority of cases.

However, as with any dinghy class, safety boat crews should still monitor any capsize (even if from a distance) in case of more serious injury or breakage in which case the sailor may require assistance.



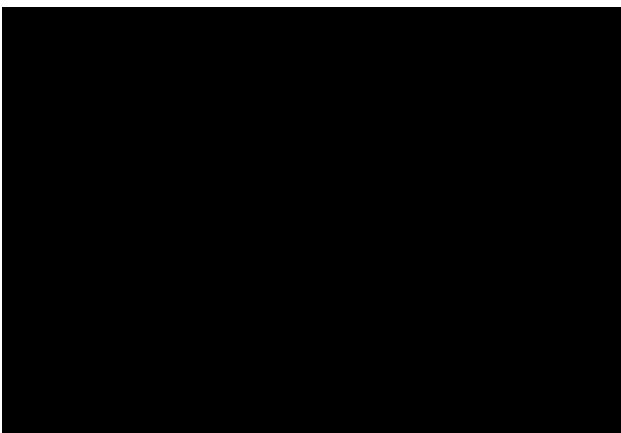
In case of serious injury the casualty should be treated appropriately and the boat abandoned. Ensure you inform other RIBs and the RO so that they are aware of the abandoned craft (tape ?? – other water users??). The boat can be recovered at earliest opportunity preferably with the assistance of another experienced Moth sailor.

In case of minor injury or breakage then the following guidelines are appropriate (adapted from the International Moth class UK website):

- To avoid potential collisions rescue craft should not closely follow a Moth whilst foiling from behind. If the boat comes off the foils this can result in a very sudden loss of speed.....
- Even when pilots appear to be in full control rescue craft should err on the side of caution and maintain a safe distance where possible.
- Moths are carbon in construction and weigh approximately 30 kgs all up. Thus they are very easy to lift but are also very fragile. Any collision will easily puncture the hull so as with any dinghy please be careful.
- When assisting a Moth in a rib the best approach is to stay to windward of the craft and rest the wing on the side of the rib.
- Due to the fragility and instability of the craft it is not recommended to use a tow rope. If a boat requires towing the best approach is for the helm to detach the ride height connection at the top of the centre foil, climb into the rescue boat and hold onto the wing. It may be easier to de-rig the boat on the water when doing this.
- Foils are long and easily damaged, the boat requires at least 5 ft minimum water depth, avoid towing through shallows
- Tow at low speed. The boat may try to take off and fly at ~8 knots boat speed.....
- In cases of downed rigging it is advisable to completely detach the rig from the hull for towing.
- If the rescue boat is big enough an alternate way of bring a boat ashore is to lift the hull so that it is rested on the inflatable sections of the boat.
- Buoyancy – the class rules state that there must be two buoyancy tanks, one in the bow and one in the stern. The wings will also often have some buoyancy in the form of foam tube or an air bag.

See below for possible means of recovery of a Moth.

Always be guided by the helmsman.





3.3 Race organisation duties

3.3.1 GH Series

COMMITTEE BOAT – The Race Officer will station Committee Boat at M. He/she will remain on Committee Boat until the racing is complete. The ARO should monitor the progress of the Dinghy and Keelboat fleets and assist the Race Officer with starts, timing of rounds and finishes of the Dinghy/Flying Fifteen fleets. He/she should also assist with the start and finish of the Keelboat fleets.

PRIMARY RIB

- The Primary RIB should maintain effective safety cover of the dinghy and Flying Fifteen fleet for the duration of the racing.
- She should also lay the windward (orange Dumpy marks) before the first race.
- Between the first and second race, under the direction of the Race Officer, she should lay the wing mark for the second race.

SECONDARY RIB – the Secondary RIB crew will be specified on the duty rota.

- She should lay the leeward mark (orange Dumpy mark) and the Dan buoy for the start line
- During the races the Secondary Cox and Crew should provide safety cover for the dinghy and Flying Fifteen fleets from the Secondary RIB.
- The Secondary RIB Cox may also be required to finish the Keelboats at the Race Office or at a Mark, but only if the conditions do not require the Secondary RIB to be covering the dinghies. The Crew may be left on Committee Boat with the Race Officer if this occurs.

At all times safety is paramount and if the Secondary RIB is required to attend a safety incident then all other responsibilities cease.

3.3.2 Islands Races

COMMITTEE BOAT – The Race Officer will station Committee Boat at M. Committee Boat should leave the “M” mark after the last fleet has started and monitor the progress of all fleets in conjunction with the RIBs. The RO and ARO must proceed to the Race Office in time to finish all fleets (be aware that a Foiling Moth will not take long to sail the course).

PRIMARY RIB The Primary RIB should provide effective safety cover for the dinghy and Flying Fifteen fleets, maintaining contact with the front of the dinghy fleet.

SECONDARY RIB The Secondary RIB should provide effective safety cover for the dinghy and Flying Fifteen fleets from the back of the fleet.

One of the RIBs may be required to finish the races if shortened but only if the conditions do not require the RIBs to be covering the dinghies.

At all times safety is paramount.



3.3.3 Points Races

COMMITTEE BOAT – The Race Officer will station Committee Boat at M. He/she should remain on Committee Boat at M until all racing is complete (all courses finish at the Gate). The ARO should monitor the progress of the Dinghy and Keelboat fleets and assist the Race Officer with starts, timing of rounds and finishes of the Dinghy/Flying Fifteen fleets. He/she should also assist with the start and finish of the Keelboat fleets.

PRIMARY RIB

- She should lay the Dan buoy for the start line and lay the windward mark (orange Dumpy mark) and the wing mark (orange Dumpy mark) for the dinghies and Flying Fifteens.
- She should maintain effective safety cover of the dinghy and Flying Fifteen fleets for the duration of the racing.

SECONDARY RIB

- She should lay the 2 leeward marks (one orange Dumpy mark and one yellow Dumpy mark)
- She should maintain effective safety cover of the dinghy and Flying Fifteen fleets for the duration of the racing.
- The Secondary RIB may also be required to finish the Keelboat and Achilles races if shortened but only if the conditions do not require the Secondary RIB to be covering the dinghies.

At all times safety is paramount.

3.3.4 Laying Marks by GPS

3.3.4.1 LOMOND RED (“Vow”, c/s LOMOND RED)

Switch on GPS (bottom left)
Wait for GPS to acquire satellites
Press “MENU” twice to reach Main Menu
Select “Wpt” by Up/Down arrows
Press right arrow
Select required waypoint by Up/Down arrows
Press “NAV”
Select “GO TO xxx”
Press “ENTER”

3.3.4.2 LOMOND YELLOW (“Lonaig”, c/s LOMOND YELLOW)

Switch on GPS (bottom button)
Wait for GPS to acquire satellites
PRESS “GOTO”
Select required waypoint by Up/Down arrows
Press “ENTER”



3.3.4.3 LOMOND BLUE (Blue RIB, c/s LOMOND BLUE)

GPS unit is normally held in drawer in Race Office:

Switch on GPS (red light button)

Press “PAGE” to accept usage. Wait for GPS to acquire satellites

Press “GO TO”

Select “WAYPOINT”, press “ENTER”

Press “ENTER”. Select required waypoint by Up/Down arrows.

Press “ENTER”

Once selected waypoint has been entered you will have a course to steer and distance to go to the required position. Drop within 5 metres of designated position.

3.4 Prevention of Damage to Boats/Equipment

3.4.1 Dealing with a disabled boat

Lower the sails and make them fast.

If the boat is rigged in the fashion of a Laser or Topper release the kicking strap and the clew of the main from the boom and wrap the sail around the mast as far as possible or if this is not possible remove the mainsheet, so that in either case the sail will not fill when towing down wind

Rather than tow the boat back to the club and thereby leave the race area (e.g. Island races) if the dinghy is disabled through gear failure but the crew are safe and happy with the prospect tie the boat to a nearby buoy or land them on the nearest island.

Inform the RO of action taken.

Never use the safety boat's anchor to moor a disabled boat, you may need it yourself see 3.4.3 below.

3.4.2 Dealing with an abandoned dinghy

If you have to leave a dinghy in order to take an injured person ashore or attend another incident, where possible tie a fender or a buoy to the masthead to prevent it inverting and tie Orange tag (stowed in RIBs) to the boat to indicate to others that a rescue has been carried out.

Inform the Park Wardens (and the RO) of the action you have taken and the position of the boat. This will, hopefully, prevent false alarms from the public.

3.4.3 A boat on a lee shore

Anchor off up wind, making sure the anchor holds!!

Switch off and lift the engine.

Drop back on the anchor line,

throw a line from the stern of the safety boat and tie it to bottom of the mast of the dinghy before attempting to pull the boat off the shore.

Be aware that the safety boat crew might need to get in the water and go ashore to assist.

If a dinghy can be moved onto the shore, take this action. Recover the boat after the race.



Always discuss what action to take with the RO

3.5 Some DOs

Visit **every capsized** within 2-3 minutes, if possible, even if you don't have to do anything when you get there.

At every capsized check that the correct number of people are visible and OK.

Talk to them – do they want your help? A lot can be judged about their condition from the reply.

Watch out for people getting cold and tired – e.g. capsized numerous times, each capsized taking longer to recover – don't hesitate to suggest they go ashore.

Look out for anglers. Do not pass within 200metres of their stern.

Keep your speed, and therefore your wash, down, particularly on calm days. (try to travel at "Gurgling speed" read the sheet on Powerboat Speed Restrictions (Loch Lomond Bye-laws 2007).

Unless there is a genuine emergency, you **must** observe the speed limit which applies within 150 metres of any shore and inside the yellow speed limit buoys.

Except in an emergency, you should avoid undue disturbance when passing through the moorings.

Always use correct radio protocol. See Radio Notes.

Recovery of capsized or damaged boats **must never** interfere with your primary duty - the safety of people.

Safety boats must remain fully manned on the water fulfilling their designated roles until all boats are safely back to the club and keelboat crews have returned to shore from their moorings

Look after your boat and its equipment.

Note any problems or missing equipment in the logbook in the race office.

Think safety at all times.

3.6 And some DON'Ts

Don't abuse the airwaves! Channel 37 (M1/P1) is an open channel used for race management. It is not the place for banter or general conversation.

Don't become involved with one incident to the exclusion of everything else

Don't have the engine running near people in the water – it's a mincing machine!

Don't tow a boat during a race without the contacting the RO and asking permission.

Don't start an outboard out of the water.



4 First Aid

Inform the RO immediately of any situation where first aid is required.

First Aid on the water is difficult and the kits are kept simple to reflect this. Members are encouraged to gain a qualification in First Aid. (The RYA First Aid course is a one day event.)

Priority is to get the casualty ashore!

Control of bleeding - priority should be given to stop bleeding. e.g. by applying a pressure pad holding it in place with a bandage if required.

Suspected dislocations and fractures – listen to the casualty! Keep the casualty as comfortable as possible. Get casualty ashore.

Treatment of Hypothermia – the aim is to prevent the casualty losing further body heat - the safety boat equipment includes a survival bag. Do not attempt to remove wet suits etc. Keep the casualty out of the wind i.e. low down on the floor of a RIB. When ashore remember to warm casualty GRADUALLY.

If it is suspected that hospitalisation is required then **DO NOT GIVE ANYTHING TO EAT OR DRINK.**

Should an hospitalisation be required, consider where you might meet up with the ambulance or Ranger's boat. Dependant on your position on the Loch (e.g. Island Races) Luss, Balmaha or Balloch slip at Drumkinnon Bay - may a more sensible destination. Inform the RO of the injury and that you require an ambulance/Ranger boat to meet at your destination. and state where you will meet it.

5 Communications -Asking for help

In a life-threatening emergency *i.e. risk of loss of life*

Call the Coastguard/Park Authorities/on Channel 16 or 67 (Park Authorities also monitor Ch. 37/M1) or The Police - 999 (or 112) from a mobile phone. The police will alert the Loch Lomond Rescue Boat if it is required

In non life-threatening situations

Call the clubhouse on 01360 870219, or by Radio or Park Authorities on Channel 67
Ambulance if required 999 (or 112 from mobile phone).

Communications – Assisting with the casualty.

When contacting outside agencies be prepared to:

Describe condition of casualty

Receive and act on first aid advice given.

Advise on your locality or position

Receive or advise information on possible landing location (this may not be at the club – e.g. Luss, Balmaha or Balloch might be quicker and better for an ambulance to attend).

In most serious of incidents the role of the safety boat crew is to keep the casualty alive and prevent his/her condition deteriorating.



6 Cleaning

When the racing is finished, the Race Team is also responsible for tidying the clubhouse and securing the club premises. The tea person is responsible for clearing away tea cups and leaving the kitchen area tidy, the tea towels to be washed and returned on next visit. It is the Race Officer's responsibility to ensure that the club premises are left secure, and to make sure the clubhouse including the Ladies and Gents toilets and changing rooms are left tidy. The contract cleaners will clean the toilet areas but members should keep these areas tidy and stocked with the necessary items such as toilet rolls, hand towels and soap etc.

Additional sources of essential information:

Boat manuals

Radio Notes

LLSC Accident Procedures