# NAIRN COASTAL ROWING CLUB

# INTRODUCTION MANUAL AND TRAINING NOTES

## January 2019

***Preface***

This manual provides information about coastal rowing with a focus on the waters around Nairn. Nairn Coastal Rowing Club (NCRC) operates under the general rules of the Scottish Coastal Rowing Association (SCRA) and much more information can be found on the various links elsewhere on the website.

***These pages give guidance to club members on rowing, coxing and the good practices associated with coastal rowing which promote safety and the enjoyment of participation. However, it must be appreciated that the information herein is only advisory. Neither NCRC, nor contributing sources, can be held responsible for any damages, consequences or other outcomes that result from following the advice herein. It is recognised that the unpredictable nature of circumstances afloat, at times, may determine the adoption of alternative courses of action; the consequences thereof must remain the sole responsibility of those concerned at that time.***

People engage with NCRC for a variety of reasons, some are keen to row competitively, some more leisurely and others to build and maintain the boats and participate in the camaraderie of the club. Whatever your preference, which may vary over the year, the ethos of NCRC is to promote the pleasure of NCRC membership and its part in the wider SCRA. The manual reflects these wider links in its compilation of information from various sources, which we gratefully acknowledge, especially those of Lossiemouth, Portobello and Ardersier (now incorporated within NCRC).

A supplementary manual is in production to assist in the more specific aspects of training to be a Cox, a critical component of our membership and a role with its own further pleasures!

# Contents


| | Page |
|---|---|
| *1: Introduction to the skiff & Scottish coastal rowing* | *3* |
| *2: Preparation for Rowing* | *4* |
| *3: Nairn Rowing Sea Area* | *7* |
| *4: General Operational Matters* | *11* |
| *5: Rowing Techniques* | *14* |
| *6: Safety and Emergencies* | *17* |
| *7: Club Events* | *23* |
| *References and Related Information Sources* | *27* |
| *Appendix A: Voyage Check List, Risk Assessment, Boat Kit Essentials & Grab Bag* | *28* |
| *Appendix B: Contacts and Links* | *31* |

## *1: Introduction to the skiff & Scottish coastal rowing*

The design is based on a Fair Isle skiff – an open fishing boat – which was drafted by Ian Oughtred. The first 'St Ayles Skiff' was built in 2009 by Anstruther Maritime Museum, since when over 200 such boats have been built, mainly in Scotland but also in Australia, Canada, USA, and some European countries. The Nairn boat, 'Dulsie', is boat number 215. The Ardersier-built boat, Esther, is boat number 84. Dulsie has been appointed a Racing Number by the SCRA, number 177 and is 22ft (6.5m) in length with a 5ft 8in (1.7m) beam.

The skiff is built from a kit using high quality marine plywood in a 'clinker' build whereby the planks overlap those below. Additional timbers are incorporated for the keel, stem, stern and other boat fittings. The standardised design of the skiff enables boats to compete in 'one design' races to promote fair competition. However, there are several areas where modifications may be made, such as rudder design, oars, footboards etc. that give each build team the possibility of stylizing their own unique design ideas. Some exclusions do of course exist!

***The Scottish Coastal Rowing Association*** (SCRA) is the umbrella organization for all Scottish coastal rowing clubs and amongst other things is responsible for setting standards for building the boats and organizing events. It also disseminates news on what is going on in the coastal rowing scene through its website (See: https://scottishcoastalrowing.org/ ), Facebook, Flikr and other media. Periodically they organize training courses for coxes and other club related functions.

***Nairn Coastal Rowing Club*** (NCRC) obtained initial funding from Nairnshire Council in early 2017 and soon evolved to formal club status in the late autumn of that year. Following a successful application for further funding the critical stage of the purchase of the kit was reached. The build site, the old stable block in Viewfield Park, was secured by an agreement with Highland Council and enabled NCRC members to prepare for the skiff's construction.

The build frame and moulds were borrowed from the Lossiemouth Club who earlier had been loaned these by the Findochty Club; an exchange illustrative of the friendship and co-operation within the coastal rowing community. With the infrastructure in place, the build began in mid-January 2018, despite the limitations of low temperatures and no power to the building. In parallel to the build in the main workshop various fittings were made, with many thanks to David Matthews at his workshop. Also, administrative tasks, such as fund raising and obtaining charitable status, were carried out by the Trustees. The club is now registered as a Scottish Charitable Independent Organization (SCIO No.48196) which facilitates fund raising and applications.

Fixed seat sea rowing as an organized hobby in the UK covers Cornish Pilot Gigs (See: http://www.cpga.co.uk/) and Welsh Skiffs, as well as the St Ayles Skiff. Unfortunately, unlike scull rowing (where the seats slide) there is not a lot of training material available. British Rowing, (See: https://www.britishrowing.org/ ) the body that provides information and training standards, is primarily aimed at the sliding-seat enthusiasts, although we understand they are now taking a closer look at fixed seat rowing. A number of short video clips about sea rowing are available on You Tube, a good selection of which can be found on Amble Rowing Club website ( See: http://www.amblecoastalrowingclub.co.uk/ ). These feature building, rowing, racing, man overboard, swamping and many other relevant topics.

The following sections follow the sequence of sections from preparations prior to, then for, rowing at Nairn through to events further afield. It should be appreciated that the NCRC website https://www.nairncoastalrowing.co.uk/ contains some more detailed segments of the manual, along with more up-to-date information.

## *2. Preparation for Rowing*

***Safety*** is of primary importance and, therefore, it is essential that you follow the instructions of the Cox. The Cox has your safety, that of the rest of the crew and the skiff to consider and so whilst the reasons for any instruction may not be immediately evident it is vital that they are followed without question. The Cox is empowered and tasked with continuing, curtailing or amending activities according to their judgement. Reflections on instructions and actions taken may be discussed later when ashore but not during the trip. One person leading at a time ensures everyone is working together. Teamwork makes it all easier at launch, on the water and skiff recovery.

Membership of NCRC is important not only to help maintain the financial sustainability of the club but also to ensure that individuals, and our skiffs and kit, are covered by the club's insurance. Initial membership communications regarding meetings and rowing sessions are via "WhatsApp" although this is intended to migrate to a more user-friendly calendar base on our website in due course.

Given the tidal restrictions and seasonal daylight it is important that participants arrive at the agreed time and are prepared to assist in the launch. Time also needs to be allowed to assist with the recovery and safe storage of the boat at the end of a session.

Before going on the water, members MUST:

- Be able to swim in light clothing.
- Feel fit enough for the planned trip, and have no health issues that could become problematic.
- Take responsibility for your own safety and not compromise the safety of other crew members.
- Always wear a lifejacket.
- Dress suitably, wearing several layers to keep warm and have some waterproof clothing ready.
- Not wear wellingtons in the boat – slip them off except when boarding/landing.

Once a trip has been agreed a final decision on it going ahead will be taken based upon a risk assessment and checklist (***See more detail in Appendix A***) to verify:

- Weather and tide information – forecasts and sea states may have changed as may the need for protection against sun/glare;
- Special arrangements – details of crew ability and needs;
- Plan and aims for the outing including – planned route, session timings and any crew rotations including any shore persons;
- Checklist of the onboard equipment and the boat;
- Safety briefing including – personal buoyancy, safety ashore, safety afloat, personal responsibilities and responsibilities to others.

It is important to work to the principle: 'If in doubt, don't go out.' We want to enjoy our sport, but the Cox and Beachmaster will always have the final say on this.

***Clothing***

Generally, when you are out, the rowers get warm, and the cox feels the cold – so it is good practice to swap positions during a session as required. Unless you are near home, bring spare clothing with you so that you can change into warm dry clothing at the end of the session. It is very rare for the boat to capsize, but you can get a soaking on the beach when side swamped by a wave breaking in rough weather. You are also likely to get a wet seat from sea spray or someone's splashy oars.

***Running or cycling clothing*** is good for rowing and you should wear several light, close-fitting layers so that you don't catch clothing on the oars. Layering is important as it enables you to add or remove layers as required to keep warm and maintain the right temperature. The rowers' and cox's needs will change during a session depending on exertion and varying conditions. A windproof, breathable jacket is highly desirable.

***Synthetic fabrics*** are generally best as they can keep the rower relatively warm, even when wet, and they dry quickly. ***Merino wool*** is the best natural fabric and is especially suitable worn as the base layer. If you get wet, either from sweating or the weather, you will soon get cold. Therefore, avoid jeans, cotton socks and t-shirts. Cotton doesn't wick moisture from your skin and will not keep you warm when wet. Down should never be worn on the water. When down gets wet it will clump and loose its insulating properties. Waterproof clothing is not essential for rowing; however, if chosen a highly breathable waterproof fabric is strongly advised. Non-breathable clothing will retain perspiration within the fabric shell and render its (external) waterproofing redundant.

***Footwear*** of some kind must be worn to avoid slipping and provide feet protection; soft-soled shoes are typically sufficient. Wellingtons are often not advised as they can fill when launching and will weigh you down if you fall in. However, if individuals must wear wellingtons at launch then they should be slipped off as soon as aboard and seated. Dinghy/ wetsuit shoes are ideal. 'Crocs', sandals or simple trainers usually suffice and worn with waterproof socks provide extra warmth when required. Neoprene boots and socks also work reasonably well.

***Hands*** can get cold while rowing and wearing gloves is a matter of personal preference. Be aware, however, that rowing with gloves can cause blisters if they are not well fitted. Cycling gloves are good as they have some grip and a variety of styles to suit different weather/ temperature conditions and many rowers opt to wear them. An alternative to gloves is Pogies, which fit over the oar handle, you and your hands. However, Pogies may keep your hands too warm and, by retaining moisture, create ideal environment for blisters.

***Hats*** are advisable as they will provide options for protection from the cold and the sun. Close fitting 'Beanie', woollen or synthetic skull caps are less likely to be blown off and will significantly reduce body heat loss. Wider brimmed hats, such as baseball, more focussed on shade need to fit comfortably tight as even once retrieved its wet value is of limited appeal on most trips. Sunglasses and a high factor sun cream/ lip salve are advised at all times of the year as the glare on the water and the sea breeze will dry your skin.

***Dry bags*** are worth considering to provide protection for storing essential personal bits of kit in the boat, particularly non-waterproof electronics/ watches. Be aware that touch screen phones won't work with gloves or wet hands, or wet screens, so may be of no use in an emergency/ hurry. Onboard space is at a premium so storage ashore should be arranged wherever possible; a dry mobile is of little value once trampled upon.

***NCRC cannot accept any liability for items that are damaged, lost or stolen whilst taking part in our activities.***

***Lifejackets*** are available to borrow for trips organised by the club along with other buoyancy aids, which are primarily for younger members. However, to lessen the club's maintenance, cost and storage issues regular rowers are encouraged to purchase their own personal lifejackets. It is of course important that such personal lifejackets are maintained as per manufacturer's instructions. Lifejackets should be worn before launch/ embarkation and only be removed once back on dry land.

A debate exists in the coastal rowing community on whether to go for automatic or manually-inflated jackets. There are pros and cons to both: there is a chance of accidental inflation by water ingress and the threat of being caught underneath an upturned boat by an inflated jacket. Rather than take a specific stance at this early stage of our development, we have provided both types of inflation jackets and leave it to the individual to make the choice***.*** If borrowing a lifejacket it is vital that ***members note which type they are wearing,*** understand how it works, and check it before use. Lifejackets must fit correctly and have the crutch strap fastened (if not secured it is likely that the jacket will slip off when it is used to pull you from the water).

***Food and Drink*** may be required depending upon the planned trip length, possibly a thermos for a hot drink in cold weather. Glass bottles/ containers are potentially hazardous and so are not recommended. No alcohol or smoking is permitted during activities.

### *3 Nairn Rowing Sea Area*

***Storage of the NCRC skiffs*** is currently in the Nairn Kayak Club yard who have kindly cooperated whilst alternative NCRC facilities are being explored. It is important that the yard is locked after accessing it and returning the skiffs. To gain and maintain access to the road outside the yard the yellow drop bollard needs to be lowered for trailing skiffs via the road to the harbour ramp; and be returned to an upright position once cleared. It is important to remember this is a shared facility and considerate behaviour towards the requirements of the Nairn Kayak Club is paramount; not only to maintain our agreement for use until the end of March 2019 but as fellow users of the Nairn coastal zone.

***Skiff Launch and Recovery*** at Nairn can be done either at the harbour ramp or from the beach using the sailing club trackway. Whichever method is chosen, in reality, we are limited by the tidal conditions and of course the weather. Assuming favourable weather this limits us to three hours either side of high water. However, if the weather does worsen after a beach launch, it is always possible to recover the boat at the harbour ramp, subject to the tide. Even in fairly rough weather rowing is possible in the river which is good for learners and for sprint and turn training. Occasionally the Harbour Master may grant the use of a pontoon berth in the harbour to save some time, especially if rowing on consecutive days is planned.

This photograph shows the bar to the Nairn River at low water and looking back from the breakwater to the harbour entrance. You will notice, in particular, the large bank on the harbour side. The photograph below shows the river at high water during the naming day for Dulsie, plus good view of the East Beach towards Culbin.

The harbour launch ramp above provides convenient access to the harbour; a fixed steel ring at the top of the ramp to which a trailer rope can be attached aids control. Crew should be aware of the steep vertical drop-off near to the harbour wall ladder. Maintaining awareness of your position in relation to this is clearly important along with underfoot conditions which may be slippery. As added security when no one is holding on to the launch trolley, a block should be placed behind the wheel(s) to secure it. The trolley must be parked off the slipway after the skiff has been launched; more specific trailer-related handling issues are covered in Section 7.

When manoeuvring within the harbour it may be better to use the paddles instead of the oars to avoid clashes with other craft. Fenders should also be made ready to fend off against the harbour wall or other craft. Harbour slipway launches are possible in virtually all conditions, except gale and storm force winds

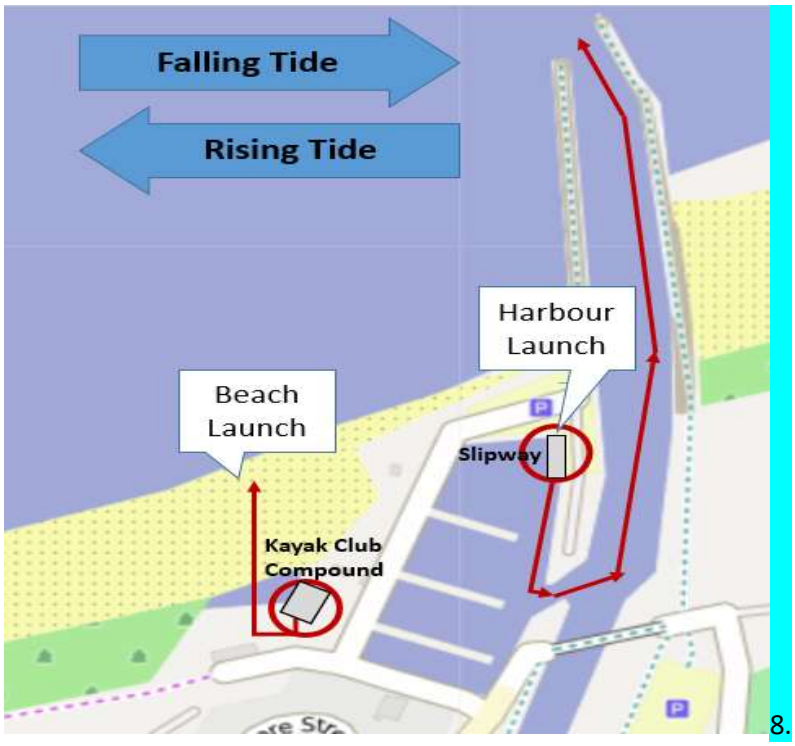
***Beach launches*** are generally possible in wind directions between WSW and SE. This is best carried out by using the sailing club ramp in front of the Sundancer restaurant and the geo-matting track below the ramp (the clear strip of sand to the water in the picture below). Stony patches are best avoided in beach recovery and caution is required around the shallow sand bars before accessing deeper water and when returning to shore.

Whether launched from the harbour or returning from a beach launch via the harbour, it is important to note that the shallowest point of the harbour is at the lip entrance to the river. When heading out from the harbour the deep water channel in the river is accessed by steering to the east side of the river, using the bushes close to the sheet piling as a guide.

Keep to the east side of river (by the caravans) to the end of the piers, particularly avoiding the rock armour on the riverside of west pier. There is a wide channel of about 400m of navigable water from the footbridge to the end of the piers. On entering sea, the deep channel can be found in line with the Dhan buoy channel marker and by using the orange leading line transit marks on east pier.

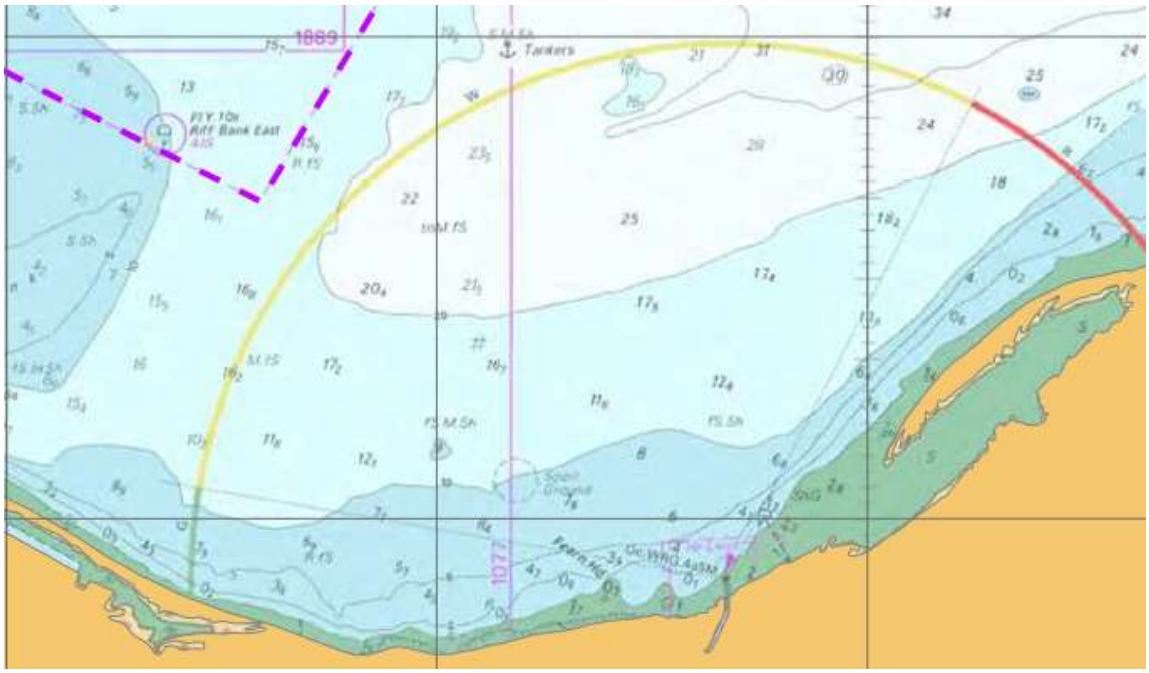
When approaching the sea, leaving the river be aware of the effect of both the tide and swell, it is very easy to drift on to the piers if you do not take care. Surveillance of the river is also advised for any floating logs especially following any spate conditions.

In the pre -launch risk review, the movement of the boat on its trailer around the harbour should be undertaken with care as there can be a lot of pedestrian and road traffic in this area. Bizarre as it may seem, not all expect to see or are tolerant of a boat being moved around a harbour!




8.

***The Rowing Patch*** is generally the area parallel to the coast, off the West or East beach, dependent upon the tide and wind. It is good to plan for a down tide return back to shore, especially if planning a strenuous first half of the trip. The tidal stream runs westerly on the flood (rising) tide and easterly on the ebb (falling) tide parallel to the coast as shown above. On the East beach you must be aware of the sewage outfall line that is marked at its seaward end by a yellow buoy.




***Northerly and Easterly Winds*** generally cause the most challenging seas for Nairn water-sports. In these conditions, the flattest water for rowing is generally found in 'The Stripe', the shallow channel between the Nairn Bar and the shore. With care, there is sufficient depth to row for the 3 hours either side of high water.

***The Nairn Sailing Club race marks*** (West, North, East and Russet marks) are laid in the Firth close to Nairn during the sailing season. They are highly-conspicuous orange Dhan buoys with red flags and thus enable legs of known distance, just over one mile apart, to be rowed.

***Radio/ telephone contact*** for the Nairn Harbour Master (Robbie Barron) is Mob: 07821302944) or via VHF channel 9; Nairn Sailing Club (including safety boats) generally operates on VHF channel 9. ***A fuller list of relevant contact details is provided in Appendix B.***

### *4 General Operational Matters*

***Skiff care*** is important to ensure that they remain reliable and safe. This requires a regular process to be followed before and after every trip. Noting and reporting of flaws and suspected issues should be undertaken in the trip log and checked to ensure that remedial action has been undertaken. If moving around the skiff when the floorboards are out, care must be taken to stand only on the HOG (the central beam of the boat) and not the THWARTS (seats) or the hull, which is thin plywood. However, accidents do happen and NRCR is keen to encourage a culture of reporting a fault and not one of concealment through any notional fear of blame.

***The Launch of the skiff*** is best overseen by nominating one person to be in charge, normally a Cox, but certainly someone with experience of loading and unloading techniques. Whilst contributions to the launch process are encouraged, and expected, the rule of abiding by the person in charge should prevail. After all it is usually simpler to blame one person than have all crew share culpability should things go wrong… In order to avoid that situation all personnel must be clear about any task allocated to them and, if in doubt, must always seek clarification. The Cox should establish that all instructions are clear.

There must be enough helpers in attendance to ensure that necessary tasks can be allocated and carried out without risk of injury to personnel or damage to equipment. For the St Ayles skiff, this would be a minimum of 5 personnel to lift the boat who must then coordinate manual handling and lifting techniques such as counting in for a lift.

***The Stern is launched first*** from the trolley and during this process attention must be paid to avoid hazards which typically include wet slipway surfaces, the end of the slipway and submerged obstacles such as logs, debris etc. As the boat slides off the trolley, the speed should be slowed as she falls. The boat will fall quickly because it is heavy, and care should be taken to protect the keel by ensuring that it remains on the roller. At this point, all being well and dry, the Cox boards first to fit the rudder and check all else is OK for the crew to board after ensuring the trolley is clear of the slipway. Once oars and footrests have been located the Cox ensures that everyone is ready after which the crew reverse row away from the shore until there is sufficient room for turning.

Beach launchers tend to position each oar across the gunwales to provide a handhold stepping across the boat and to facilitate a quick launch. Predetermine the oar plan before launching and set the oars in place. In choppy surf, the boat may well get side-swamped. Consider the safety aspects of going out at all at this point. There are two lines from the stern along the boat to the bow, which two shore crew can use to steady the boat into the waves. Following the Cox, the crew should then board as quickly as they can safely whilst the boat remains vulnerable to the surf. Thereafter the Cox conducts the checks as above but with the added awareness of the more exposed situation. If during the launch process the skiff does take on water and too much to bail, it is important that her stability is not compromised. If she gets very heavy, possibly too heavy to lift, the trip should be abandoned, the boat rolled onto her side/bailed out before lifting off the beach.

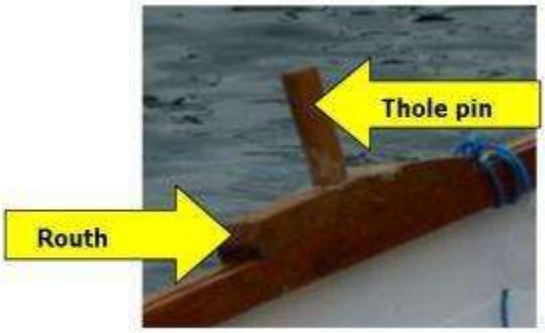
***Recovery from Water to Trolley*** is no less important and potentially riskier when following a strenuous session. As with the launch, the Cox or other agreed person should lead this procedure and the crew follow the instructions. The trolley should be rolled into a position so that the boat can be floated on to the frame ensuring that it remains central. The boat will be much easier to position if its buoyancy is increased by removing the oars, possibly the floor too; and easier still if someone wades in to guide the boat. The wheels

should be chocked to prevent the trolley moving forward and have someone at the bow end. With the crew either side to lift or slide the boat up onto the roller there should be one person at the bow or stern of the boat to ensure that the keel remains on the roller as it can easily fall to either side.

The boat is then lifted until the bow is in position at the trolley handle with the keel resting on the front rubber. The chocks can then be removed and stowed whilst the skiff, secured to the trolley, is pulled onto flat ground. If loading onto the road trailer, chock the road trailer wheels and leave the hitch with the end on the ground to minimise forward movement. Slide the bow end of the launch trolley onto the back roller of the road trailer before removing the jockey wheel. (***Section 7 contains further trailer-specific handling issues***).

It is advisable for two people to be on the trolley handles whilst the rest push. Roll the launch trolley onto the road trailer until the trolley engages over the lug at the bow end. Everyone needs to be aware of the need to go ***slowly***. The boat is heavy and the people at the bow can trip over the trailer spars. When the trolley and trailer are pinned together, two people need to lift the nose and a third person then attaches the jockey wheel and pin.

***Skiff Storage*** requires a few simple procedures to be followed before the end of each session. The boat should be rinsed off with freshwater after use to minimise any transfer of invasive species and to wash salt off both the boat and the trailer. *Rudder pins* should also be rinsed and oiled, otherwise they will stick. Similarly, *rouths* and *thole pins*, as illustrated below, should be oiled for the same reasons.




***The oars*** are handmade, long (14ft) Western Red Cedar oars for Dulsie, plus 16ft oars for positions 2 and 3. For Esther we have two sets of oars. The oars are durable but not indestructible so care in their use is required. Each rower takes responsibility for their own oar. If you need to push off, care should be taken to use the handle end and ***not*** the blade against the wall/ seabed, as the blade is thinner and thus more fragile.

***Coxswains and crew*** gain experience through regular sessions and taking advantage of the SCRA and other training sessions which are periodically held. The below matrix outlines the various training stages for rowers, coxswain and others that members might consider. The standard crew is one coxswain and four rowers with an additional shore-based person (aka the beachmaster) to provide a point of VHF radio and/ or mobile phone contact. Ideally all coxswains should hold a VHF radio licence and have first aid training. Each crew must have at least two experienced rowers on board and each younger person (<16) must be accompanied by a responsible adult. One passenger can normally be carried in the bow; some sources suggest a second depending on overall loading concerns and conditions.

***The Beach Master or Designated Person Ashore (DPA)*** is responsible for ensuring overall safe practice, with a number of specific duties. Importantly the DPA oversees, in conjunction with the other crew members, that the boat is safely launched, recovered and stored. It is important to notify the NCRC Skiff trustees of any damage, losses, issues for repair, replacement or maintenance. Our boats belong to all club members and there must therefore be a shared consideration for them and of all of us, as club members and users of our shared resource.

## NCRC TRAINING MATRIX

| | Fitness & Flexibility | Basic Seamanship. | Practical MOB Exercise | ColdWater. "rowhow" online course | Safety Basics "rowhow" online course | Basic VHF Use | First Aid | SCRA Cox Course |
|---|---|---|---|---|---|---|---|---|
| | No serious medical condition, competent swimmer | Experienced Rower, RYA Certificate, Fisherman, or Mariner | Participate in MOB technique using Club Boat | British Rowing website course | British Rowing website course | Competent & Familiar. | RYA First Aid or Equivelant | SCRA Run |
| Trainee Rower | Yes | No | No | No | No | No | No | No |
| Competent Rower | Yes | No | Yes | No | No | Yes | No | No |
| Race Rower | Yes | Yes | Yes | Yes | Yes | Yes | No | No |
| Cox | Yes | Yes | Yes | Yes | Yes | Yes/Certificate Desirable | Yes | Desirable |
| Event Cox | Yes | Yes | Yes | Yes | Yes | Certificated | Yes | Yes |
| Beach Master | Yes | Yes | Yes | Yes | Yes | Certificated | Yes | Desirable |

### *5 Rowing techniques*

***Seating positions*** are numbered from the bow (Number 1) through Nos. 2 & 3 to No. 4 called the *stroke*. This uniformity in all rowing means that the stroke, the rear-most rower, who is also nearest the aft-seated Cox, is effectively the oar that everybody endeavours to keep time with. The logic behind this is that everybody can see the stroke, but the stroke confines their attention to the Cox who may issue periodic rowing instructions regarding pace, cessation etc.

***The Rhythm of the crew's rowing*** is very important and should aim for co-ordination of timing to promote efficiency of effort and to allow recovery time between strokes. Each of the three phases (drive, extraction and recovery) should take about the same time, so the rhythm is like a waltz with three beats to the bar. Also, rowing at light pressure should be done at a much lower rating than firm pressure because everything is done in slow motion. Crew members should synchronise their body motions with the stroke and keep their oars parallel at all times. All oar movements should aim to be uniform, identical and contemporaneous. Long strokes are more efficient than short strokes for moving the boat. Whilst all rowers should strive to ensure that they can match the range of the crew, the stroke length selected will be determined by the instructions of the cox which must be followed

***Footrests*** play an important pivotal part in the efficiency of the rower's performance and should be adjusted so that the knees are slightly flexed, but not far from straight.

***The sitting position*** should be on the very edge of the seat as this enables leaning further forward and, with outstretched legs almost straight, leaning back further too. Simulation of the movement using a near-edge position on a stool or low table at home demonstrates the difference from sitting fuller on the stool. This land-based pastime may also provide some distraction from periods of extended bad weather. When the leverage of the oar is taken into account each extra inch the rower leans forward transfers into an extension of three inches at the oar tip; with a corresponding increase in the distance the skiff travels.

A diagrammatic illustration of the rowing sequence is shown below. ***Leaning forward*** as far as can be reached is important in fixed-seat rowing as this will maximise the length of the stroke. After leaning forward, the next stage is to ***lean back*** with arms kept straight until about the one o'clock position when your hands should be brought into your body and tap the oar out of the water. It is important to keep your arms straight for as long as possible. The stomach and back muscles do most of the work and being bigger muscle groups will not tire as quickly as your arms. Recover your arms by quickly straightening them out in front of you (punching them forward). This also helps with moving the rest of the body forward and takes the strain off the stomach muscles. Thereafter hinge the body slowly forward ready for the next stroke.

***Long slow strokes*** are more efficient and help with timing and breathing. If you want to go faster, put more intensity into the stroke, but do not speed up the rate of stroke. Efficiency is also enhanced by ***keeping the body in line*** as much as possible: from the feet, through the legs, back and head. Sideways motions should be avoided as these will simply waste energy. Keep the oar blade just in the water, not too deep, and if you do find that you are pulling the oar through above your chest adjust your height by sitting on a cushion. It is hard to get everything right at once, so practice by breaking down the movements into one aspect at a time for say ten strokes, with the Cox calling it out. Lean as far forward as possible for ten, then lean back for ten; then punch the hands forward, then check your blade depth, then concentrate on getting all the oars in perfect time, etc. Plenty of core exercises and stretching to promote flexibility will help. The above stages are shown in the below illustration which is taken from an old version of the Admiralty Manual of Seamanship.

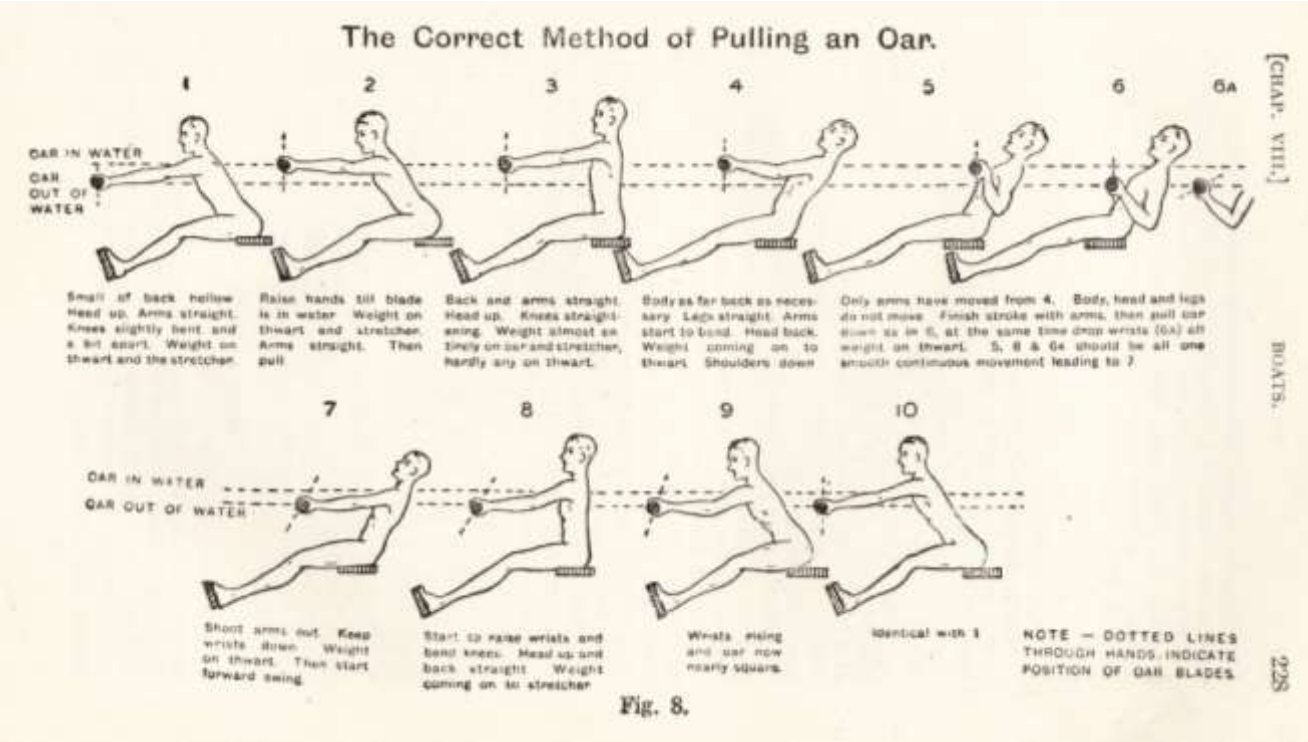
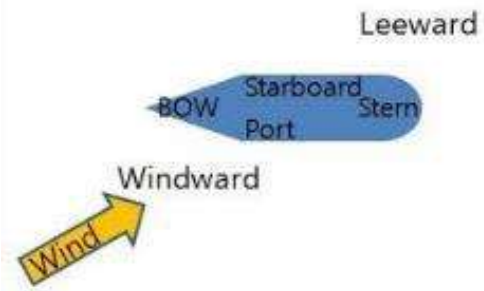


Fig. 8.

***Rowing Instructions*** are given by the Cox and whilst in general NCRC will endeavour to be consistent in the terms used there are some minor variations in the those used according to tradition and regional variation. The boat sides should be called Port and Starboard rather than Bow and Stroke Side to avoid confusion.

***The Cox should say to whom their instructions are directed:*** e.g. "full crew", "bow pair", "port side"




- **Ready to Row (Standby)** – all into forward position ('front stops')
- **Ready** – Oar blades in water. When all oars are in, the Cox will know everyone is ready and the boat should stay steady.
- **Row** – Row!
- It is helpful to give a warning of commands. E.g. say **"Next stroke…"** or count it in.
- **Port turn** – port side keeps rowing and starboard side stops.
- **Starboard Turn** – Starboard side rowing, bow side stops.
- **All together** – both sides resume rowing.
- **Easy Oar** – stop rowing *at the end of the stroke*. Blades out of the water.
- **Drop –** blades drop into the water to hold the boat steady e.g. at the start line.
- **Hold it up!** – Emergency stop. This can be called at any time during the stroke. Drop the oars into the water and hold them there to stop the boat.
- **Hold up Hard!** – Collision is imminent.
- **Back down** – Rowing to reverse. That is, travel in the direction the rowers are facing – the only time the rowers will see where they are going! The Cox will ask all or a part of the crew to back down. If asked to

do this, start by sitting upright, blade in the water, and push the oar handle away from you by leaning forwards. Lift the blade out the water, lean back ("catch, push, hands down, lean back").

### *6 Safety and Emergencies*

***Emergencies*** are categorized for radio communications as Distress (Mayday) or Urgency (Pan-Pan) messages. The Cox will determine the message category in an emergency.

***Distress (Mayday) calls must*** reflect a need for immediate reaction to a critical situation: that there is imminent danger to a person and/or a vessel. For example, someone has had a serious fall and is injured, lost consciousness, fallen overboard, the boat has been holed and is sinking or is on fire. In UK waters, the sea temperature is low and body heat is lost quickly.

***Distress signals*** at sea are defined in the International Regulations for Preventing Collisions at Sea and in the International Code of Signals. They must *only* be used where there is grave and imminent danger to life; other urgent signals should be sent using a ***Pan-Pan*** message.

***'Mayday Mayday Mayday'*** for Immediate Danger to persons or ship

***'Panpan Panpan Panpan'*** for urgent messages concerning the safety of persons or ship

***Signalling distress*** on a skiff may be done by one or a combination of:

***Sending a distress message by radio*** which should be done by a VHF licence holder. NCRC members are encouraged to undertake the RYA training course to promote the number of VHF licence holders. When rowing in coastal waters, probably the most effective means of indicating that you are in distress is to transmit a Mayday call by VHF radio. This will tell everyone in the area that you are in trouble; under SOLAS V regulations, they are obliged to come to your assistance, if possible, whilst also imposing radio silence to prevent your messages being covered up. The sequence of the message is:

1. Tell people you are in trouble (Mayday or Pan-Pan)
2. Who you are (This is Rowing skiff… (Name of boat))
3. Where you are (e.g. south west of Ardersier at Artulie Point)
4. What the problem is (e.g. man overboard)
5. Assistance you need (e.g. Coastguard and Ambulance)
6. People on board (usually 5 in a skiff, but remember any passenger(s)!)
7. Let them reply

If you are unable to complete the message for any reason, the most important information will have been sent first. Normally a Mayday is sent on channel 16. This is the distress and calling channel on VHF radio, but any other channel can be used. High power (25W) should be selected.

***The Boat's Position*** may be done by either stating ***Latitude and Longitude:*** quick if using a GPS navigation system. Alternatively, or in addition, ***Bearing and Distance*** may be given. The advantage of using a bearing and distance is that anyone hearing the message should know your approximate location relative to them. However, the downside is the greater dependency on navigation skills, which may not be so omnipresent in a more digital-dependent age. With a bearing and distance, the direction is always given from the reference point and not from the vessel.

***Other means of signalling a state of distress*** include:

- Using red flares (either hand-held or parachute flares);
- Emitting orange smoke from a canister;

- Slowly & repeatedly raise and lower arms outstretched to each side;
- Continuously sound any fog-signalling apparatus.

***Man Overboard (MOB)***

***The Casualty, the person who has gone overboard should:***

1. Inflate lifejacket and top-up as required
2. Periodically raise an arm to signal location, shout or whistle
3. Keep movement to a minimum to reduce heat loss
4. Hold onto any flotation devices thrown from the boat and you will get pulled aboard. NB**:** This is when you will appreciate having worn and fastened the crotch strap, without which the lifejacket could be pulled over your head, leaving you still in the water.

***The Cox and crew should:***

1. Shout 'MAN OVER BOARD!'
2. For stability, keep low in the boat if moving around or rescuing a casualty.
3. Point direction: one crew member to keep the MOB in sight and keep pointing to them.
4. Have one crew member prepare and be ready throw a line or throwbag.
5. Adhere strictly to the Cox's instructions whilst steering towards the MOB which may involve tight turns.
6. Get the casualty alongside: Cox advise crew which side the MOB is being rescued from. Exercise caution to avoid running over the MOB or hitting them with oars. Prepare crew for retrieval and impact on stability.
7. Rescue with the Bow rowers continuing to row slowly/ holding position as required whilst the Stroke and next rower/ cox pull casualty aboard amidships. Proceed as indicated in the *Basic Life Support* section below, which may require the recovery position if unconscious.
8. Call for assistance**,** if not already done so, and get casualty ashore ASAP. The casualty may be vomiting sea water, choking, hypothermic or shock may have set in. Keep the casualty on the deck of the boat out of the wind and keep them warm with a thermal suit or space blanket.
9. Where possible attend to any injuries requiring immediate attention.

A useful video illustration of the practical difficulties involved in such a MOB is available on the website of Ullapool Coastal Rowing Club See*: http://ullcoastrow.wordpress.com/safety-matters/*

***Cold Water Shock***

Notwithstanding the speed and efficiency of any MOB retrieval, **cold water shock** is a real danger in waters below 15C and here the wearing of a properly fitted lifejacket will be critical in saving life.

Immersion in cold water rapidly incapacitates and can kill you. The sudden exposure of the head and body to cold water can cause a number of involuntary body reactions, known as cold water shock. It is one of the most profound stimuli that the body can encounter, it cannot be prevented and can be as swift as it is deadly. Because cold water shock comes well before the effects of hypothermia, it is far deadlier, yet less understood, by recreational boaters.

Hypothermia kills over a period of time, as heat is conducted away from the body leading to a gradual decline in body core temperature, the loss of swimming ability, unconsciousness and ultimately death. In contrast, cold water shock can be lethal in minutes because it causes a number of instant, powerful and involuntary respiratory reflexes, such as the sudden increase in heart and blood pressure that may result in a cardiac arrest, even for people in good health. Your ability to 'swim like a fish' will have no impact on your body's involuntary reflex response.

At a water temperature of below 15°C, and if you are not wearing a life jacket, especially an automatic one, cold water shock will invoke 3 critical phases, any one of which may be fatal:

- cause you to inhale as you go under the water, due to an involuntary gasping reflex, and drown without coming back to the surface;
- drastically reduce your ability to hold your breath underwater, typically from a minute or so to less than 10 seconds;
- induce vertigo as your ears are exposed to cold water, resulting in failure to differentiate between up and down.

**Given the above risks in our normal sea conditions the importance of wearing a correctly fitted lifejacket cannot be overemphasised. See:** http://www.rya.org.uk/infoadvice/safetytips/Pages/cold-water-shock.aspx

***Swamping***

If the boat is caught out in deteriorating weather, it is quite possible to ship water in the boat, especially if caught beam on to the sea. If so, the Cox will instruct two rowers to bail out the water after gaining heading control putting the bow or stern to the sea, whilst the other two maintain momentum.

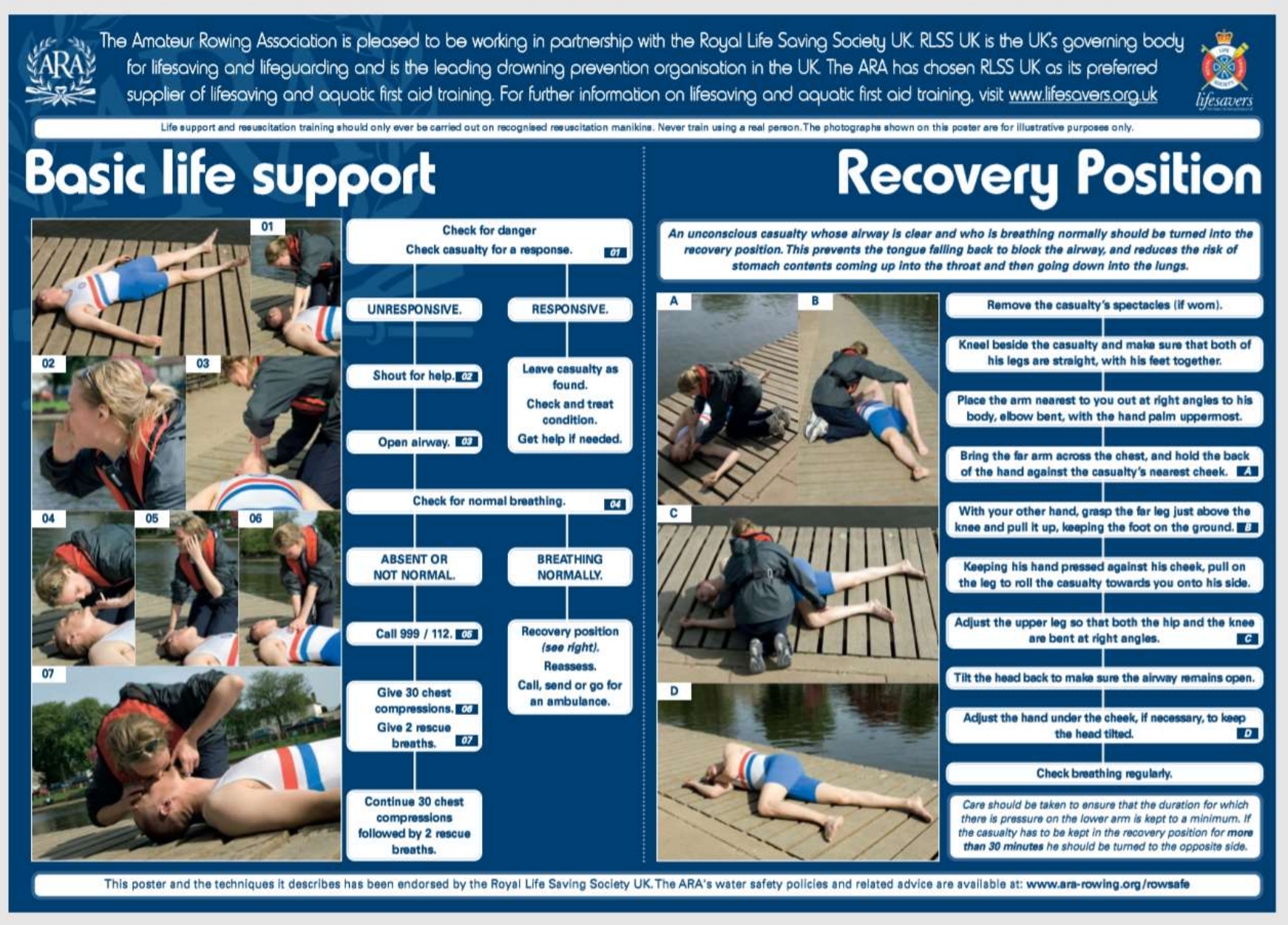
There should always be two bailer scoops or buckets on the boat. When bailing, the crew should be moved around if necessary to ensure, as far as possible, an even inclination of the boat. If caught with a substantial amount of water in the boat, the Cox must inform the person ashore and decide quickly what action is required and if assistance is needed.

Further insight on swamping can be gained from Ullapool Coastal Rowing Club's website (See: http://ullcoastrow.wordpress.com/safety-matters/). This contains the images below (reproduced with kind permission) amongst others from their training exercises and greatly assists preparation for such events.

Left: Ullapool Coastal Rowing Club found it took some effort to tip their boat…

Right: The swamped boat could support one person, but more crew, or weight away from the centre tips the stems under.

***Basic Life Support***



***Anchoring***

***Anchoring a skiff offshore*** is uncommon and usually only undertaken as an emergency, such as a crew injury, a broken oar or as part of recovering a person overboard. Thus whilst it is not normal practice to anchor the skiff it is important to appreciate how this might be undertaken. Both our boats are fitted with anchors, connected to a short length of chain and attached to about 30 metres of rope. The anchors are stored in the bow of the boat. The rope being secured under the bow seat. If the anchor is of the collapsible type it needs to be locked in to the in use position before being dropped.

It is very unlikely that the anchor will be used on a routine basis, but it is important to know the routine on how to deploy and recover the anchor as anchoring could be an important step in a difficult situation. For example, person lost overboard or attending to someone in the boat with a medical issue. Once the boat is anchored, the boat will align itself to the predominant wind or tide influence, in that position rolling should be much reduced and stopping any drift. Reducing the chance of being "broached" sideways on to the waves and taking water on board.

The anchor should be deployed by the bow rower. It should be lowered to the seabed in a controlled manner, making especially sure that legs and arms are free of the anchor rope, also avoiding rope burn by lowering slowly not just letting the rope run through unprotected hands. It will be obvious when the anchor is on the seabed, as a 'bump' will be felt and the flow of rope will slow; the cox should be informed. Once the anchor is on the seabed, further line should be paid out to create a shallower angle of pull on the anchor and help it to dig in.

The cox may find it necessary to get rowers number 2 & 3 to row, in either direction, whilst deploying. It is important not to have the chain and rope piled on top of the anchor to avoid the risk of fouling the anchor. The bow rower should keep the cox informed about the tension and direction of the anchor rope as it is deployed.

The recovery will be by the bow rower who will lift and recover the rope, and anchor. The same precautions must be taken to avoid hands and legs getting trapped in the anchor rope. The cox will get rowers number 2 & 3 to row to keep the weight off the rope whilst recovering; again the bow rower should keep the cox informed of the tension and direction of the anchor rope as it is recovered.

Neither boat currently has a ***Drogue (Sea Anchor)*** but will soon be added to our kit. A drogue anchor consists of a canvas conical tube that acts a drag, and will be useful to slow down drift, and bring the boat orientated to the prevailing weather, reducing heavy rolling of the boat. It is lighter to lift within the boat but can require some manipulation to effect a 'hold' although unlike a drop anchor it will not keep the boat in a fixed position. A more detailed section on procedures will be added here prior to the drogues being installed.

### *7 Club Events*

In addition to the Nairn-based rowing sessions and other NCRC social activities which typically serve also to raise club funds, external events include racing regattas held at other ports. These promote the existing very friendly inter-club relations and social camaraderie of SRC in general; although this may take on a more competitive hue during races. A typical Racing Regatta will be a weekend event with races for different groups within clubs commonly based upon age, gender, race type and other criteria. Normally numerous boats participate, with various configurations of crew, drawn from different clubs around the country. Crew permutations might extend beyond more traditional gender, age bands (>40/50/60s etc.) to inclusive age divisions e.g. of the four rowers one from each decade, such as 20's, 30's, 40's, 50's etc. or by total rowers' ages e.g. > 230 years. The programme meeting from July 2018 hosted at Ullapool shown below is illustrative of the many events which are listed on SCR's website.

### *Travelling to Events*

Attendance at events, with a few local possible exceptions, requires a vehicle suitable for towing and a driver with at least one companion to assist in case of an emergency. Loading the road trailer to a vehicle should be done by two people. Checks on towing advice online and relevant licence and insurance requirements to tow the boat must be made. Prior to departure the driver must ensure that:

- Lifejackets are loaded into the towing vehicle;
- Trailer chocks, wheel lock and hitch lock and keys are in the vehicle;

- The anchor and dry bag of safety equipment are present;
- The oars, footrests, oarlocks, dry bag and rudder are securely attached in the boat;
- The appropriate number plate is fitted, secured and electrics functioning correctly;
- The boat is tied to the road trailer with straps amidships and at the bow, padded against the gunwales and with strap ends secured and not trailing free. (Loose-hanging straps can be especially dangerous when passing pedestrians, cyclists and motorcyclists);
- Tyres are properly inflated, legal and a spare carried;
- The jockey wheel is removed on lifting the hitch to the vehicle and stored for subsequent use.
- Trailer is secure on the tow hitch;
- Safety wire loop is attached to vehicle hitch;
- Confirm the Regatta Checklist (below).

***Regatta Equipment Checklist***

| | |
|---|---|
| Responsible person on the day - named | |
| Personal details of team, including next-of-kin | |
| Check list of equipment to take to regattas | |
| Printed regatta instructions | |
| Spare wheel for trailer | |
| Keys for trailer | |
| Spare oars | |
| Life jackets | |
| Anchor, Warp & Chain | |
| Fenders | |
| Mooring and towing ropes | |
| Binoculars | |
| Team sunglasses | |
| 1st VHF for skiff, 2nd VHF on shore | |

| | |
|---|---|
| Heavyweight fleeces, woolly hats and caps | |
| Plastic/ metal water bottles | |

***Regatta Briefings***

Briefings should typically cover the points below although clearly these may vary according to specific sites and events.

| | |
|---|---|
| 1st Aiders location and contact details | |
| Start times | |
| Tides | |
| Weather forecasts | |
| Actual weather | |
| Surf reports | |
| Radio channel | |
| Radio protocol | |
| Start number | |
| Start procedure | |
| Safety boat | |
| Umpire boat | |
| Penalties | |
| Start line | |
| Finish line | |
| Individual course or open course | |
| Hazards above water | |
| Hazards below water | |
| Creels | |
| Race rules for right of way | |
| Starboard or port rounding if applicable | |
| Launch site | |
| Associated 3rd party or public interaction | |

| | |
|---|---|
| Beach masters | |
| Heats and number in heats or single race | |

***Boat Terminology***

Familiarity with the correct terminology for various parts of the skiff is useful, not least when reporting faults.

| ***Components*** | ***Description*** |
|---|---|
| Loom of an Oar | The part grasped by the hands when rowing |
| Blade of an Oar | The flattened area which grips the water |
| Shaft of an Oar | The part of the oar between the blade and the loom |
| Slates | Flat wear plates fitted to the shaft in way of rowlocks/thole pins |
| Port | The side of the boat on the left when looking forward |
| Starboard | The side of the boat on the right when looking forward |
| Bow or Stem | The front end of the boat |
| Stern | The back end of the boat |
| Stem Post | The post of wood on the centre line at the front of the boat. (There are the outer and inner stem posts fixed together and seen whether looking at outside or inside of boat) |
| Stern Post | The post of wood on the centre line at the back of the boat. (There are the outer and inner stern posts fixed together and seen whether looking at outside or inside of boat) |
| Keel | The main piece of timber on the centre line running between stem post and stern post on the bottom of the boat |
| Hog | The piece of timber seen on the centre line, along the middle bottom inside of boat. It is fixed to the keel. |
| Bilge | The rounded part of the hull adjacent to the keel |
| Garboard Strake | The plank fitted next to the keel on either side |
| Shear Strake | The upper most plank fitted below the Gunwale |
| Gunwale | The top rail of the side of the boat |
| Cap rail, or Gunwale Capping | The top piece of wood running all around the side of the boat, on top of the gunwale |
| Thwarts | The seats for the oarsmen to sit on, running from port to starboard |
| Stretchers | The pieces of timber extending from one side to the other, underneath the thwarts. |
| Pintles | The pins projecting downwards from the fore side of the rudder which fit into the sockets fitted on the aft side of the stern post. |

| | |
|---|---|
| Gudgeons | The rings or sockets which the pintles fit into and are fitted on the aft side of the stern post. |
| Thole Pin | Projects up from the gunwale into which it is bedded. The oars used with this fitting have brackets with one or more holes in so that the oar may be lowered on to the thole pin, which then passes through the oar, holding it in place. |
| Catch a crab | When a blade gets stuck in the water and the handle knocks the rower flat |

***References and Related Information Sources***

Amateur Rowing Association https://www.britishrowing.org/

Amble Rowing Club https://www.amblecoastalrowingclub.co.uk/

British Rowing https://www.britishrowing.org/

Cornish Pilot Gigs https://www.cpga.co.uk/

Nairn Coastal Rowing Club https://www.nairncoastalrowing.co.uk/

Nairn Kayak Club https://www.facebook.com/groups/493025280810750/

Nairn Sailing Club http://www.nairnsailingclub.co.uk/

Scottish Coastal Rowing Association https://scottishcoastalrowing.org/

Royal Life Saving Society UK https://www.lifesavers.org.uk

Royal Navy *The Admiralty Manual of Seamanship* https://www.iims.org.uk/the-admiralty-manual-of-seamanship-12th-edition-published/

Royal Yachting Association http://www.rya.org.uk/infoadvice/safetytips/Pages/cold-water-shock.aspx

Ullapool Coastal Rowing Club *https://ullcoastrow.wordpress.com/safety-matters/*

**Appendix A**

***Voyage Check List, Risk Assessment, Boat Kit Essentials & Grab Bag***

Notwithstanding enthusiasm to launch and start rowing it is important to complete a voyage checklist as below.

| **Nairn Coastal Rowing – Voyage Checklist- Log Record** | | | | |
|---|---|---|---|---|
| Date:<br>Times…… | OOD / BEACHMASTER | | | No……./ 20xx |
| **SAFETY CHECKLIST** | **Out** | **Home** | | |
| **1. Check trailer, tyres& fittings** | | | | **OOD:** |
| **2. Inspection of boat for damage** | | | | **COX.** |
| **3. Tow rope attached to bow** | | | | **Crew 1** |
| **4. Anchor Chain & Warp tied on** | | | | **Crew 2** |
| **5. Oars & Fittings on board** | | | | **Crew 3** |
| **6. Thole Pins & Spares** | | | | **Crew 4** |
| **7. Rudder & Tiller incl. wedge.** | | | | |
| **8. Two Paddles on board** | | | | **Voyage Plan.** |
| **9. Footrests, straps set for rowers** | | | | |
| **10. Lifejackets for all** | | | | |
| **11. Cox warm clothes** | | | | |
| **12. Drainage pump and two bailers** | | | | |
| **13. Mobile phone** | | | | **Phone No:** |
| **14. VHF with fully charged battery** | | | | **Radio Check: Y/N** |
| **15. Flares** | | | | |
| **16. Throwing Line** | | | | |
| **17. First Aid Kit** | | | | |
| **18. Thermal Blanket & Beanie Hat** | | | | |
| **Additional Equipment** | | | | |
| **Harbour Fenders** | | | | |
| **Compass** | | | | |
| **Hand Held GPS ?** | | | | |
| **Whistle** | | | | |
| **Cox & DPA sign off;**<br>**Boat washed**<br>**Any damages or equipment failures listed**<br>**Log book completed** | | | | |

***A Risk Assessment Form*** must be carried out by the Cox and OOD with the crew prior to each session and a record maintained.

| **NAIRN COASTAL ROWING RISK ASSESSMENT** | |
|---|---|
| **DATE:** | |
| **PROPOSED TIMES:** | |
| **AREA: East or West Beach or River** | |
| **HAZARDS TO CONSIDER** | **CONTROL MEASURES** |
| **Weather, wind and sea, changes anticipated** | **Latest forecasts obtained** |
| **Visibility, light & fog** | **Decide duration of session** |
| **Rain, Cold, Snow** | **Ensure appropriate clothing** |
| **Sun,Heat, Sunburn and Glare** | **As above, plus protective cream and glasses.** |
| **Slippy launch surface** | **Stress at launch and recovery** |
| **Crew Experience** | **Ensure at least two experienced crew** |
| **Crew Health & Fitness** | **Any issues cox to be aware and agreeable to** |
| **Launch and Recovery** | **Conditions suitable** |
| **Radios/ Phones** | **Comms check carried out** |
| **Safety Equipment** | **Grab Bag Checked** |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

## *BOAT KIT ESSENTIALS*

| | |
|---|---|
| VHF Radio | |
| Flare Pack | |
| 4 x Oars | |
| 2 x Balers | |
| Bailing Pump | |
| 2 x Paddles | |
| Anchor and warp inc. sea anchor (drogue) | |
| 2 x Mooring Lines | |
| Fenders | |
| Grab Bag (as below) | |

## *GRAB BAG CONTENTS*

| | |
|---|---|
| First Aid Kit | |
| High Intensity Torch | |
| Safety Knife | |
| Whistle | |
| Throwing Line | |
| (5) x Foil Blankets | |
| 1 x Survival Bag | |
| Spare Warm Bag | |
| Radio Emergency Instructions | |

***Please check the contents, each session***

**Appendix B**

***Contacts and Links***

| **Contacts** | **Telephone or Website** |
|---|---|
| Coastguard and emergency services | 999 |
| Port of Cromarty Firth. (VHF Ch16 & work on Ch 11). | 01349 852308 |
| Aberdeen Coastguard MRCC | 01224 592334 |
| Doctors (Nairn Healthcare Group) | 01667 452096 |
| Nairn Harbour Master (Robbie Barron) | 07821302944 |
| Local police (Nairn) | 01667 452222 or<br>101 for non urgent incidents |
| Scottish Coastal Rowing<br>(our Portal to everything skiffy) | www.scottishcoastalrowing.org |
| RYA – for our VHF courses and lots more | www.rya.org.uk |
| Knots and Ropework | www.realknots.com |
| UK Hydrographic office | www.ukho.gov.uk |
| Navigation course and info | www.sailingissues.com |