



Newhaven & Seaford Sailing Club

Seaford Sea Safety Skipper's Handbook

Guidance for refreshing/upskilling PB2 Helms



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1. Introduction

- Newhaven & Seaford Sailing Club (NSSC) has continual improvement at the heart of its training and development. Learning from past incidents with high safety boat repair costs, (approx £8000 in 2018), it is evident that the current sea skipper's training would benefit from enhancement by delivering a practical refresher and upskilling course to existing PB2 skippers.
- Areas identified for improvement include anchoring, towing, safe mark laying and retrieval.
- Club management has decided the sea safety boats will only be skippered by people who have PB2 and who have also been assessed to the requirements of Seaford Sea Safety Skipper's Handbook (4S). In addition all 4S skippers will now have to have undertaken an annual 4S refresher.
- The added benefit of this approach is that our skippers will feel confident in boat handling and to have good boat control skills to carry out efficient rescues
- This refreshing/upskilling is intended to be fun and could be a pathway to progress towards RYA Safety Boat and PB2 Instructor qualifications
- The refreshment/upskilling will be offered by experienced club members with suitable practical and teaching skills.
- The management of this scheme is by the Sea Safety Sub-committee which report to the NSSC board
- Thanks is given to numerous club members that have contributed to this handbook.

2. Responsibilities and Insurance

- Safety Skipper - Responsible for ensuring:
 - The safety boat is seaworthy
 - The safety boat has all the safety equipment
 - It has sufficient fuel
 - That the radio is working
 - That the crew is capable, dressed appropriately and prepared to enter the water to effect a rescue

- Good communication with the Race Officer (RO) during the event.
- Notification to the RO should weather conditions deteriorate.
- To call off the event should weather conditions deteriorate
- To comply with the requirements of this handbook
- Race Officer –Responsible for ensuring:
 - Safety Skippers are 4S approved
 - To designate a Lead Safety Skipper if more than one safety boat is used
 - The race event is able to take place safely
 - To call off the event should weather conditions deteriorate
- Sailors – Responsible for:
 - Decision to take part and safety for themselves, crew and all others
 - Carry valid insurance as required by NSSC
- NSSC – Safety Boat Insurance covering the following:
 - Area of use is Inland & Coastal Waters of Great Britain. Permitted use is for training, racing & club use.

3. Handbook distribution & updating

- The Seaford Sea Safety Skipper's Handbook will be available on the NSSC website.
- It will be reviewed and updated annually.

4. Our bit of sea

- The tidal stream on the flood (rising) tide is East going towards Eastbourne, max rate is about 3knots in spring tides
- The tidal stream on the ebb (falling) tide is west going towards Brighton, max rate is about 3knots in spring tides.
- The tidal stream turns direction approximately one hour before high/low water.

- The maximum depth in our part of the sea is approx 11m. This is worked out from the chart datum parallel to the lighthouse being approx 4m. The spring tidal range is about 0.5m to 6.6m. The neap tidal range is about 1.9m to 5.2m. The max depth to anchor will therefore be approx $4m + 6.6m = 10.6m$
- The sea is flatter with an offshore wind (N or NE)
- When the sun shines, an onshore sea breeze starts about 11.00 hrs, but this does not generally generate big waves
- On a flood (rising) tide the West harbour arm causes an eddy in the bay

5. Pre-Planning

- Follow weather forecasts for four days before the race to get a trend
- Check tide heights <https://www.tidetimes.org.uk/newhaven-tide-times>. The boats sit on the mud at low water in the marina. They safely float in 1m of water. This needs a tide height of approx. 2m (about 1 hour before/after low water at neaps and about 2 hours before/after low water on springs). Ensuring tide heights are sufficient will prevent damage to propellers and mud being sucked up into the engines' cooling systems
- If the tide height is below 2m when the boats need to get on/off the berth, the boats will need to be moved either before or after the event to a temporary berth in deeper water. Contact the Marina on 01273 513881 for temporary berth location.
- Two days before the race speak with RO and crew to coordinate, exchange phone numbers and Marina gate codes
- Plan to have the course laid 15 minutes before race start. This will mean leaving Seaford 75 minutes before race start. ie: for a 10.30 hrs start, leave 09.15 hrs.

6. Fuel, keys, gate codes & RO briefing

- Ark – the diesel tank will be kept topped up by the Bosun. Two full tanks last the whole season
- Ribs – Petrol from the fuel store. Check the fuel in good time before setting off to Newhaven. Decant partially filled tanks into one. Use the funnel in the fuel store. Do not smoke when doing this.

- Take a full tank for each event (a full tank should last between 2-3 hours)
- All keys for fuel store, Ark and ribs are in the Race Box. Obtain code for box from RO.
- Rib keys are kept in the plastic safety container (keg). Two keys for each rib – ignition key and electric enabling switch key. The electrics on both ribs have an enabling switch which is activated with a separate key. This key is attached to the ignition key ring.
- Marina gate codes written on lid of plastic safety container (keg)
- Information on boat specifics eg: kill cords (Ribs), starting, engine controls, engine checks, fuel cut offs, radios, bilge pumps, emergency tiller (Ark), first aid, flares, tools, emergency anchor (Ark) spare life jackets etc. will be detailed on waterproof notes within keg containers for ribs and under the seat on Ark.
- ROs and skippers to exchange mobile phone numbers

7. Marina - getting boats ready for sea

- Get marks, their anchors and warps ready for deployment, tidy and secure
- Get boat anchors and warps ready for IMMEDIATE use, tidy and secure
 - **Stern Line**
 - Stern line is stowed on hook on outside of RED bucket
 - **Bow Line**
 - Bow line is stowed in anchor bucket – NOT on floor of boat
 - **Paddles**
 - Two paddles in clips on RED bucket
 - **Throw Line for Rescuing**
 - On both ribs and Ark there is a throw line
 - Ribs - quoit ring on the end
 - Ark – rope ball on the end
 - Throw line to be kept in WHITE bucket
 - **Tow Rope**
 - Tow rope in RED bucket
 - Feed out through automatic cleat on outside

- Tow rope on rescue boat MUST go aft of boat - NOT across A Frame
- **Ark Painter**
 - Painter is looped over cleat on front of Ark
 - Then brought back to cuddy and stowed loosely coiled beside the seat
- **Bilge Pump**
 - Manal bilge pump as well as electric
- Check boarding ladders ready for use
- Mooring warps stowed ready for return to marina
- Rib –
 - Inspect propeller and ensure no fishing lines entangled
 - Start engine and check cooling water is being ejected
- Use Ch 12 to Newhaven Harbour to request permission to leave. Observe the traffic signals. Further details are in the Port Authorities 'Code of Practice for Recreational Users' within the plastic safety containers for ribs and under the seat on Ark.
- Leave harbour on right hand side and avoid fishing lines

8. VHF communications including Pan Pans & Maydays

Note: Anyone can use the race box and safety boat radios when on channel 37A, M1, M2, N1, N2, P1, or P2 as these do not need a full licence. Otherwise VHF radios should only be used by a holder of a VHF Short Range Certificate (SRC)

- Call signs are:
 - **Ark** for Ark, **Orange rib** for orange rib, **Grey rib** for grey rib
 - **Arrow** for Race Box
 - Radio channel is 37A/M1 or P1, depending on radio
- On leaving the berth call sign on Channel 12 '**Newhaven Radio Newhaven Radio this is Ark/Orange Rib/Grey Rib. Permission to leave the harbour**'. Wait for permission. Obey the harbour light signals
- Pan Pans & Maydays – liaise with Race Officer
 - Pan Pan Ch 16 – non-life threatening incident e.g. engine failure

- Mayday Ch16 – imminent danger to life or boat
- You may also, if convenient, contact National Coastwatch Channel 65 when entering and leaving the harbour.
- **Emergency Radio Procedure** - Emergency radio procedure is on the side of the console

9. Anchoring

- **Note: Your anchor is an important piece of safety equipment. It should be ready for deployment at all times**
- You need to put out about 4x the depth of water to get the anchor to set
- Put the engine into neutral until you are stopped and drifting with the tide and wind
- Lower with enough warp (rope) until the anchor touches the bottom
- Feed out more warp as the boat drifts away, allowing the warp to lie on the bottom and not on top of the anchor
- When you have put out about 4x the depth, gently reverse the engine to pull the warp and to set the anchor into the sand on the bottom
- Check the shore positions to ensure that you are not drifting. Maintain a watch on your position
- **Rib** - The anchor is secured forward by rope to the D ring at the bow to stop the anchor sliding around. To use the anchor let out all the warp so that the external bow eye takes the load and does not rub on the sponsons.
- **Ark** – Ark's anchor warp has been arranged in such a way that it is no longer necessary for a crew member to have to get on the foredeck to drop or lift the anchor. Pulley blocks are positioned on the deck to route the warp back to the electric winch on the starboard side.
 - To drop anchor
 - Take the anchor from the bin and lower over side with chain
 - Once you get to the warp, clip the large karabiner hook over the warp and let go so that the anchor is now coming off the bow of the boat from the roller on the foredeck.

- The rope to the karabiner (which will now be under the water) has the free end still back in the cabin tied off to the handle on the side of the cabin. Now let out anchor warp from the cabin and tie off on winch and adjacent cleat once you are certain you have let out enough warp for 4x the water depth.
- A spare emergency anchor and warp is in the bow.

10. Towing Safety Boats

Throw Line for Rescuing – NOT to be used for towing – use Tow Line in RED bucket

- On both ribs and Ark there is a throw line
- Throw line to be kept in WHITE bucket

Procedure for Using Throw Line

- Throw line to be used if a rib or Ark need rescuing.
 - Casualty boat to throw line to rescue boat
 - Rescue boat to attach throw line to tow rope
 - Casualty boat pulls tow rope aboard
 - Release throw line and attach tow rope to front of casualty boat to enable casualty boat to be pulled out of danger
 - Feed back into bucket – DO NOT COIL
- Throw line can also be used to throw to a casualty in the water – man overboard

Tow Ropes

- Tow rope in RED bucket on ribs and Ark
- Feed out through automatic cleat on outside NB
 - Tow rope on rescue boat MUST go aft of boat - NOT across A Frame
- **Rib Towing Rib** – For an astern tow – see also Procedure for Using Throw Line
 - For the boat that is towing
 - Tow rope in RED bucket
 - Feed out through automatic cleat on outside NB
 - Tow rope on rescue boat MUST go aft of boat - NOT across A Frame

- **Rib Towing Rib** - For an alongside tow – see also Procedure for Using Throw Line
 - Secure the towed boat as far forward as possible so the towing boat's propeller is well behind the towed boat's transom. This makes steering easier.
- **Rib Towing Ark** – For an astern tow – see also Procedure for Using Throw Line
 - Tie the tow line from the bridle through Ark's bow roller and cleat off.
 - The crew should
 - Watch for slack in the tow line which could wrap around the Rib's propeller.
 - keep helm advised in order for speed to be adjusted or engine put into neutral
- **Rib Towing Ark** – For an alongside tow - see also Procedure for Using Throw Line
 - Secure Ark as far forward as possible so the towing rib's propeller is well behind Ark's transom. This makes steering easier.
- **Ark Towing Rib** – For an astern tow - see also Procedure for Using Throw Line
 - Run rope through a stern fairlead and cleat off.
 - The crew should watch for slack in the tow line and be prepared to hold it clear of Ark's transom/rudder/propeller
- **Ark Towing Rib** – For an alongside tow -
 - Secure rib as far forward as possible so Ark's propeller and rudder is well behind the towed boat's transom. This makes steering easier.

11. The course

Note: Discuss with RO at an initial briefing and/or over the radio. A basic course could be:

- Start to Windward
- Start line square to the wind
- First leg long enough to spread the fleet out before the first mark

- Marks to port
- Downwind to include reaches and a run, angled to suit the class
- Each lap to last 15 – 20 minutes
- Final leg to be long enough for RO to record timings and sail numbers
 - **Note:** For further information of courses and start lane markers e.g.: for cats, keelboats, please refer to Sailing Instructions

Committee boat starts

- The RO will run the race from Ark and will liaise with skippers.

Note: There will be written guidance about committee boat starts for ROs

12. Mark Laying

Note: This is high risk for wrapping ropes around propeller

- Get to position and go into neutral, wait a few seconds for the propeller to stop, particularly Ark
- In Ark, always lay the marks from as far forward in the cockpit as possible
- In the Ribs, always lay the marks from forward of the helm position
- Lower mark anchor first – **always!**
- Lower over the windward/up tide side of the boat, so you will naturally drift off the mark. If wind and tide are opposing, then be cautious, have a trial run first to get a better idea of things.
- The mark with the longer warp is for use on seaward locations
- Do not shorten or knot the long warp. Use appropriate mark/warp in the appropriate positions
- Check no ropes under the boat before engaging propeller
- Advise the RO on getting the windward mark in the right place
- Work briskly to get the race started on time

13. Patrol

Note: From RYA figures, entrapment under a capsized boat is a high risk. Count heads first after a capsizes.

Note: Most capsizes happen at the gybe mark

- Count masts – constantly and be aware how many crew are in each boat.
 - Skipper and crew to monitor and watch fleet at all times
 - Identify competitors who may require additional support
 - Keep out of the way but close enough to get to a casualty quickly
 - Check for stationary or erratic boats as well as capsizes
 - Keep a check on ‘free sailors’ as well as racers
 - Patrol to windward of the fleet
- **If dealing with a casualty continue to remain aware of the rest of the fleet**

14. Dinghy/Cat Rescue

Note: Please don't forget your primary role is to rescue the sailors; the boat comes second. Once you give physical help, the sailor may be disqualified from the race

Watch Sea Safety Training Video <https://youtu.be/OuMJ2ExA79k>

- Ask if your help is wanted and ask how you can help
- Offer moral support if needed
- Be ready for the rescue crew to enter the water
- Ensure crew aware of ladders back into rib
- Kill the engine if you get too close to ropes or limbs
- Be aware of a lee shore situation (the wind is blowing you onto the shore). This is a potentially unsafe place to be, particularly if you get rope wrap and/or engine fail. Be ready to anchor
- Injured casualties to be taken back to Simpson Marine's slipway at the north side of the marina

Note: for a single hander dinghy, go to the bow so both boats are bow to bow facing each other with the rib crew at the bow with a rope ready to catch the dinghy, or use the dinghy painter

- Checking for ropes in the water, go slowly in reverse until the dinghy points into the wind ie: the stern of rib is upwind of the dinghy. This should make it easier for the dinghy helm to bring the dinghy upright.

Additional requirements for Cats

Note: Always take instruction from the Cat's helm

If the safety boat is near to a capsized Cat, a quick lift of the mast head may allow the skipper and crew to get going.

- Approach from windward and throw a long line to the cat crew.
- Get the crew to pass the line over the furthest hull and tie off on the mast base NOT the shroud.
- Reverse the safety boat away from the cat at 90 degrees to the hulls. As the cat rights itself, be ready to let go the line quickly.

For a more complicated situation:

- If inverted, the sailor will attempt to use the righting line under the windward hull and position themselves at the stern of the windward hull to raise the boat to 90 degrees.
- The safety crew should be prepared to enter the water to help and if requested, stand on the hull that is still in contact with the water and put weight on the trampoline handles or righting lines.
- The mast head could also be raised to help tip the boat. NB in high seas this could be a difficult manoeuvre.

15. Retrieving the marks - **Do NOT use Ark to retrieve marks.** Only ribs to retrieve marks

Note: This is high risk for wrapping ropes around propeller.

Ribs Only

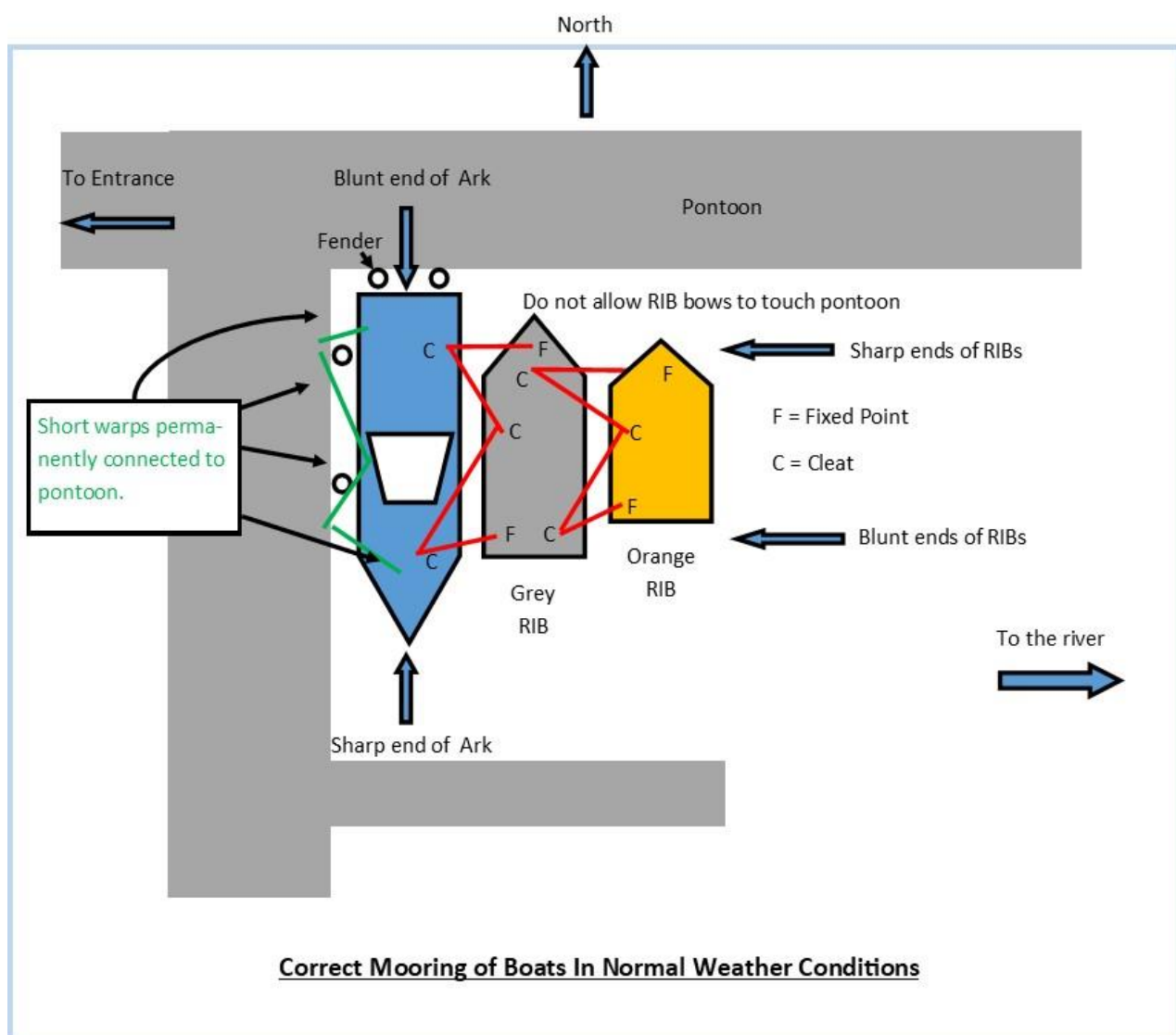
- Always retrieve the marks from forward of the helm position
- Always come up to the marks from the opposite side of the warp (the string). Do a 'fly by' to check which direction the string (warp) is flowing.
- This will keep the propellers furthest away from the warps and you are less likely to overshoot. If not, there is a likelihood that the boat will be pushed onto mark's warp and may get wrapped around the propeller
- If it goes wrong – drop the mark, reverse and have another go. If it's too late, turn off the engine, drift clear and have another go.

- If the sea is too rough to retrieve marks, LEAVE THEM for retrieval at a later date. Let RO know and report to Rear Commodore and/or Bosun. See final bullet point in Section 16 below.

16. Returning to the Marina & Packing Up

- To enter the harbour call on Channel 12 '**Newhaven Radio**'
- '**Newhaven Radio Newhaven Radio this is Ark/Orange Rib/Grey Rib. Permission to enter the harbour**'.
- Wait for permission. Obey the harbour light signals
- Enter harbour on right hand side and keep away from fishing lines, particularly off East Pier
- Moor up Ark and rib with spring lines & fenders see diagram p14 with the stern facing the side pontoon. See mooring diagram fixed to Ark.
- Ribs are to be tied up alongside Ark see diagram p14 with the bow facing the side pontoon. DO NOT moor with rib engines facing side pontoon.
 - There are two long lines on both ribs. Both permanently attached. One at the bow and one on the port side stern.
 - Take the bow rope across to the next boat port side and then back to the cleat in the middle of rib. Take the stern rope across to the next boat port side and then back to the cleat in the middle of rib to form a 'W' shape.
 - The mooring procedure is to use the lines as bow and stern lines and bring the lines back to the boats as front and back springs.
 - Tip - When standing on the main pontoon alongside Ark the mooring lines on all three boats will form 3 W's
- Do not put ribs on another berth as this could incur a charge from the Marina
- Use the temporary berth for ribs if Ark is not on the berth on the main pontoon. Be aware of other moored boats. As soon as Ark is returned, moor up ribs as per diagram
- Raise rib engine
- Leave fuel line connector secured off the bottom of the boat by wrapping around the seat back and leave facing down to avoid sitting in any water in the bottom of the boat

- Tidy up marks' warps and anchors ready for re use. Anchor placed on top
- Tidy up vessels' anchor and warp ready for re use
- Tidy up all other ropes ready for re use
- Take keys, fuel tanks and safety containers back to Seaford
- Check no fishing lines around propeller
- Take away and dispose of litter
- Debrief with RO incidents, boat faults etc
- Report any issues including any missing or damage bits of equipment to Rear Commodore and/or Bosun as appropriate



17. Fault Reporting

- Radio/speak to RO who will note in the Log. RO to email Bosun and Rear Commodore Newhaven to seasafetycommittee@nssc.org.uk

18. Skipper's Refresher/Upskill Training

This particular training will enhance our:

- PB2 syllabus refreshment and requirements of this manual
- Rescue of a dinghy & cats
- Provision of a stepping stone to the RYA Safety Boat course
- Please refer to the NSSC calendar for '**Sea Safety Boat – Refresher/Upskill Training**' and book your free place via seasafetycommittee@nssc.org.uk

19. Seaford Sea Sailing Skipper's Training Plan

Classroom

Introduction to the Skipper's Handbook

- Why we are doing it
- What we will be doing
- What will be achieved by the end of the session

Classroom information (45 minutes and handout)

- Has read and understood Seaford Sea Safety Skipper's Handbook

Completed

- Has watched and understood Sea Safety Training Video
<https://youtu.be/OuMJ2ExA79k>

Completed

Tides and currents

- Where to find tide times
- What tides and currents mean in Seaford Bay
- How these relate to a safety skipper situation

Towing

- Principles of towing
- When we would do it
- Who should do it
- Where the lines should be secured
- Dangers to avoid

Anchoring

- When to anchor
- Why we would anchor
- How to anchor
- Where to find emergency anchor on Ark
- How to retrieve an anchor

20. Seaford Sea Skipper's Training Plan cont.

Practical assessment on the sea

- Towing – Ark to rib; rib to Ark Completed
- Laying a mark Completed
- Throw a rescue line from rib downwind at a mark from 5m stern to wind (this simulates throwing a line to a casualty boat) Completed
- Do a 'fly by' to check which direction the string (warp) is flowing. Come up to mark with rib, holding station for 5 seconds and reversing off (this simulates a rescue in coming up to a casualty boat, making contact, attaching a line and getting clear) Completed
- Reversing rib slowly into wind for at least 30 secs (this simulates a rescue in holding the casualty boat into the wind to permit rescue in slow time) Completed
- Slow speed manoeuvring of rib up to Ark into wind (this simulates transfer of casualty sailor and mark(s)). Completed
- Anchoring Ark Completed
- Anchoring Rib Completed
- Mark retrieval – rib only Completed
- Correct mooring and springs Ark Completed
- Correct mooring and springs Rib Completed

Award 4S

Following this Award your name will be put on a database to be available for use by ROs

Name	
Assessed by	
Date	

Follow up assessment

Assessed by		Assessed by	
Date		Date	

21. Joining Instructions

- Before the day
 - Read Seaford Sea Safety Skipper's Handbook and bring it with you to the training day
 - Watch Sea Safety Training Video <https://youtu.be/OuMJ2ExA79k>
- Meet at Seaford Club House
- Bring with you the Seaford Sea Safety Skipper's Handbook
- Bring suitable clothing for sailing on the sea e.g. warm, windproof and waterproof. Ensure you have appropriate non-slip footwear preferably waterproof. Wear layers.
- Ensure you have your buoyancy aid otherwise you will not be able to sail
- You may wish to bring some food and drink