

Advanced Nautical Skills

To gain this badge the Explorer Scout must complete the following requirements.

- 1** Hold the Advanced Nautical Skills Badge from the Scout Section or the Explorer Scout Nautical Skills Badge.
- 2** Pass a message to another boat or ashore by visual or radio signal, using the correct procedures.
- 3** Demonstrate a good working knowledge of charts including projection, datum and symbols used.
- 4** Know the activity rules for expeditions as laid down in Policy, Organisation and Rules.
- 5** With at least three friends, take charge of an expedition on the water lasting two days and one night. At least 12 hours of the expedition is to be spent under way.
- 6** Achieve one of the following:
 - a** Gain the RYA Competent Crew Award or have logged seven days as a useful member of an offshore sail or power cruising vessel.



- b** Gain the Advanced Pulling Coxswain Award.
 - c** Hold the RYA Level 3 in Dinghy Sailing or demonstrate skills to an equivalent level of skill.
 - d** Gain the RYA Level 2 in Powerboating.
- 7** Complete:
- a** One further item from the Practical Skills section in the Training Options list, making sure that at least two different water disciplines have been covered from the Nautical Skills Training Options.
 - b** Four further items from the remaining seven sections. They should not use more than one item from each section.
 - 8** Keep a log of water activities undertaken.



Nautical Skills training options

Nautical Skills training options – Practical skills

- 1** Gain The Scout Association Pulling Coxswain Award.
- 2** Gain the BCU 3 Star Test (Kayak or Canadian).
- 3** Pass the BCU Safety Test.
- 4** Gain the BCU Inland or Sea Proficiency Award.
- 5** Gain the National Dinghy Certificate Scheme Level 2.
- 6** Gain the RYA National Dinghy Certificate Scheme Level 3.
- 7** Gain the RYA Competent Crew Certificate.
- 8** Gain the RYA National Windsurfing Scheme Level 2 (inland or open sea).
- 9** Gain The Scout Association Advanced Pulling Coxswain Award.
- 10** Gain The Scout Association Pulling Instructor Award.
- 11** Gain the RYA Inland Waterways Helmsman Certificate.
- 12** Gain the Community Boats Association Certificate.

- 13** Gain the RYA Powerboat Level 2 Certificate.
- 14** Gain the RYA National Dinghy Certificate Scheme Level 4.
- 15** Gain the RYA National Dinghy Certificate Scheme Level 5.
- 15** Gain the RYA Day Skipper/Watch Leader Certificate (Practical).
- 15** Gain the RYA Motor Cruising Certificate.

Safety

- 1** Explain the effects of temperature, wind and water on the body in cases of hypothermia and exhaustion. Explain the correct First Aid procedures.
- 2** With another canoeist, demonstrate two methods of canoe rescue.
- 3** Heave a lifeline from a boat to land within reach of a target eight metres away twice from three attempts.



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- 4** Acting as an assistant in a rescue exercise, board a stranded craft and bring it ashore single-handedly.
- 5** Under sail, demonstrate the man overboard drill using a suitable object.
- 6** Using a training manikin, demonstrate the correct method of ventilation.
- 7** Demonstrate the capsizing drill in a sailing dinghy.
- 8** One other activity of a similar nature and level of achievement as agreed by the Section leadership team.

Boats and construction

- 1** With other Members of the Section, clean and paint a boat.
- 2** Under supervision, carry out repairs to a boat.

- 3** Demonstrate an ability to do simple sail repairs, using a palm and needle.
- 4** Build and look after a boat or canoe.
- 5** Whilst afloat, construct and hoist a jury rig from available materials in a boat. Sail the jury-rigged boat 500 metres.
- 6** Under supervision, carry out routine maintenance on an outboard motor and demonstrate the proper fitting to the transom of a boat.
- 7** Make a boat's bag or sail bag.
- 8** Build and demonstrate a working model of a boat.
- 9** One other activity of a similar nature and level of achievement as agreed by the Section leadership team.



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Navigation

- 1 Read a mariner's compass and have a knowledge of variation and deviation.
- 2 Demonstrate how a position may be found using two bearings.
- 3 Demonstrate use of tide tables and tidal stream atlases.
- 4 Explain the system of strip maps of canals and rivers. Use one of these charts to plan an expedition.
- 5 Demonstrate how compass error can be found from a transit bearing.
- 6 Plot your position using a Decca or satellite navigation system.
- 7 Plot your position at sea. Understand the cocked hat principle.
- 8 Use a sextant to measure vertical angles.

- 9 Complete a navigation exercise by day on water and know how to find North by sun or stars.
- 10 Demonstrate how to take soundings in local waters, both with leadline and pole.
- 11 One other activity of a similar nature and level of achievement as agreed by the Section leadership team.

Rope work and tradition

- 1 Hoist the colours for a Sea Scout group. Pipe the 'still' and 'carry on' on a Bosun's Call.
- 2 Demonstrate three further calls commonly used in a Sea Scout group.





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- 3** Make an eye splice, a short splice and a back splice.
- 4** Make a rope fender or a decorative piece of rope work, for example, a lanyard.
- 5** Demonstrate the correct method of maintaining and stowing ropes.
- 6** Explain the differences in usage and stowage of natural and synthetic ropes.
- 7** One other activity of a similar nature and level of achievement as agreed by the Section leadership team.

Meteorology

- 1** Know the Beaufort wind and sea scales.
- 2** Identify the basic types of clouds. Explain how they are formed, how wind speed is measured and how weather can affect water activities.
- 3** Identify the weather associated with frontal systems in the United Kingdom, and be able to explain the meaning of the terms used in

describing a weather map, for example, col, ridge, trough and occlusion.

- 4** Explain how temperature and pressure are measured. List the units used for each, and demonstrate conversion between Celsius and Fahrenheit.
- 5** Identify the weather conditions associated with the movement of air masses over the United Kingdom.
- 6** Find the geostrophic wind speed from information given on a synoptic chart. Discuss its relationship to wind on land and in coastal waters.
- 7** Be able to interpret a weather map and identify at least two natural signs for weather changes in your area. Set up a simple weather station and keep a logbook of your recordings for a month.
- 8** Record a shipping forecast, make a weather map from it and be able to interpret it.
- 9** One other activity of a similar nature and level of achievement as agreed by the Section leadership team.



Nautical Skills training options

Expeditions

- 1 With friends, complete a one-day expedition by canoe, pulling boat or sailing dinghy.
- 2 With friends, complete a 24-hour expedition by canoe, pulling boat or sailing dinghy, including a night spent in camp.
- 3 Form part of a crew on an offshore cruising vessel for a trip of not less than 24 hours, including at least one night afloat.
- 4 Form part of a crew on an inland cruising vessel for a trip of not less than 48 hours, including at least two nights afloat.
- 5 Take part in a 50 mile expedition by canoe, pulling boat or sailing dinghy.
- 6 As part of a crew, take part in a major event on the water, for example, the Tall Ships Race or the Great River Race.

Rules of the road and communications

- 1 Know the distress, storm, fog and danger signals.

- 2 Know the International Buoyage System (IALA).
- 3 Know the sound signals used by powered vessels underway and at anchor.
- 4 Know the navigation lights carried by different types of vessels. Identify at least three different types from the lights displayed.
- 5 Have a working knowledge of the International Yacht Racing Rules and the Yardstick Handicapping Systems.
- 6 Know the effects of currents on non-tidal waterways and the effect of heavy rain upriver, danger levels, rapids and wild water on two rivers.
- 7 Be able to advise on suitable local moorings and anchorages for different types of craft and emergency landing places for small craft.
- 8 Explain the systems of sea-lanes in national and international waters.
- 9 Achieve a radio yacht licence.
- 10 One other activity of a similar nature and level of achievement as agreed by the Section leadership team.