

Paddling (Kayaks & Canoes)



0845 300 1818

(Guidelines for the issue of a District Commissioner's Authorisation)

Introduction

This is the sixth edition of the factsheet dated May 2000 coded FS120604 and replaces that dated April 2000.

Further editions will be published in the light of experience from this edition. Publication of future editions will be notified in SCOUTING Magazine, Talking Points and the Activities Newsletter.

General

Paddling covers several different types of craft, closed cockpit kayak, open cockpit kayak, open canoe, decked canoe etc. The activity can be carried out in a variety of water conditions and there are therefore a wide range of possible skill and coaching qualifications involved.

Authorisation

When any party, of not less than three, Scouts are involved in a Scout Paddling activity, at least one member of the group, and possibly more, must have the appropriate Authorisation for Water Activities. This is granted by the appropriate Commissioner (normally District but occasionally County or Area or National) on the advice of the appropriate County/Area Water Activity Assessor. There are essentially two types of authorisation.

A leader or other person may be authorised to take charge of his own and a specified number of other craft on waters specified by class and/or location. The type of craft will also be defined.

A leader or other person may be authorised to supervise a specific number and type of craft on waters specified by class and/or location. The supervision must be done in close proximity, normally from another similar craft or safety boat, but sometimes from the bank if more appropriate.

The assessment for those applying for authorisation will be based on the three following areas:-

- The person who wishes to hold authorisation should be in possession of the necessary technical skill and

theoretical knowledge relevant to the activity undertaken.

- The person applying for authorisation should fully understand the responsibility of the authorisation and be aware of the limits of authority. The person should be aware of the need and be able to tailor the activity to the physical and mental needs of the young people concerned.
- The person applying for authorisation should have a good knowledge of the waters, and appreciate specific local hazards of any waters for which authorisation is sought. The person should also be aware of the effect of changing weather and water conditions.

The attached table is for guidance. It suggests the optimum number of craft that a Water Activity Assessor might consider for an applicant possessing a specific BCU qualification and operating in normal conditions. Commissioners and Assessors must be aware of using this automatically without thought. If an applicant does not hold the technical qualification the Water Activity Assessor should consider their skill, knowledge and experience against that needed for formal qualification before making a recommendation to the appropriate Commissioner. It is perfectly acceptable for the recommendation to be restricted to local waters within the range of classification suggested in the table until further experience is gained.

Persons who have recently gained a qualification or new skills may be given a limited authorisation, whereas those who have greater experience, may be given a wider authorisation.

Where the words "with support" appear on the table there is a need for other paddlers to have some knowledge and experience and/or for there to be a safety boat or shore party monitoring the activity.

The table does not attempt to give guidance relating to the supervision of paddling as the Water Activity Assessor must consider competence, the water, experience and type of craft before making a recommendation. Supervision implies a considerable degree of knowledge and experience as well as responsibility.

Safety

Lif jackets and Buoyancy Aids

The following are the key points in "Water Safety (Incorporating Lif jackets and Buoyancy Aids)".

When undertaking any paddling activity the minimum requirements for lif jackets and buoyancy aids are as follows:

- All waters -Buoyancy aid to be worn (CE 50 Newton Standard)

Note: When paddling in B3 or A class tidal waters all Members of the Movement must wear an approved buoyancy aid with a lif jacket of the type with no inherent buoyancy capable of inflation to 150 Newton or a lif jacket with inherent buoyancy and capable of inflation to full buoyancy.

- Buoyancy aids must be to CE 50 Newton Standard or to the old BMIF or BCU Standards and marked accordingly. Lif jackets must be to the CE 150 Newton Standard or to the old British Standard BS 3595 and marked accordingly.
- When paddling in swimming pools a lif jacket or buoyancy aid is not mandatory.
- All lif jackets and buoyancy aids should be inspected and tested independently every year in accordance with County or District arrangements.

Note: Where a CE 50 Newton standard buoyancy aid or CE150 Newton standard lif jacket is stipulated it is recommended that the lif jacket or buoyancy aid should be of a size appropriate to the weight of the person undertaking the activity.

Swimming

Members of the Movement taking part in a water activity must be able to demonstrate to a suitable person (such as a Scouter) their ability to swim 50 metres in ordinary clothes and keep afloat for five minutes.

A non-swimmer may take part in some water activities, at the discretion of the person in charge, only if certain precautions are taken. There must be no more than one non-swimmer in any craft. In the case of single-handed craft this should only be on C or B1 waters with supervision on a one to one basis. The non-swimmer must wear a lif jacket or buoyancy aid of approved design and be in the charge of an adult.

Other Hazards

Leaders and paddlers should be aware of the range of waterborne hazards such as Blue Green Algae, Weil's Disease, Botulism etc. Details of the dangers and symptoms are contained in the factsheet "Water Safety".

The Craft

All craft used for Scout activities must be in a serviceable condition and suitable for the waters to be used. The authorised person in charge of the activity should be satisfied that the following have been done.

- All craft should be inspected and tested independently every year in accordance with County or District arrangements.
- Every Scout Group must maintain an adequate insurance cover, to be reviewed annually, in respect of marine and boating risks. Headquarters can arrange insurance cover in this respect.

Types of Buoyancy

Recommended types of buoyancy comprise securely fitted air bags or shaped blocks of 'closed cell' foam.

Where polystyrene blocks have been fitted careful checks should be made to ensure the material is not breaking up or is subject to physical damage by feet or stored kit inside the kayak or canoe. Loose fragments of polystyrene do not constitute 'purpose-built' buoyancy.

Where '2-part expanded (open cell)' polyurethane foam has been poured into the ends of a kayak or canoe, serious consideration should be given to replacing this form of buoyancy with one of the recommended types. This is because:

- '2-part expanded (open cell)' polyurethane foam often pushes seams of a kayak or canoe apart during application due to the forces exerted by expansion from the chemical reaction:
- during a season of use or through poor storage conditions, 'open-cell' foam absorbs moisture to the point of saturation and so buoyancy is seriously compromised
- 'open-cell' foam attracts many insects which live and breed therein, some of which can cause allergic reactions to bare skin.

Closed plastic bottles should not be considered a suitable form of buoyancy (even when secured behind a draining bulkhead so that no impedance to the paddler or their kit is experienced). This is due to bottles expanding when hot, and contracting and sucking in water when suddenly cooled by immersion.

Fixed Buoyancy

Craft shall be fitted with buoyancy so placed that the swamped craft, empty of equipment and occupant, floats parallel to the surface in flat water. The amount of buoyancy shall ensure that the swamped craft will support a mass of 6kg placed at either the bow or the stern, and at bow and stern simultaneously. (In this case the craft will be supporting a total mass of 12kg.)

As this buoyancy can degenerate with age it should be checked regularly and replaced or augmented if necessary.

All buoyancy should be fixed in such a way that it will not become free. Particularly, 'air-bags' should be tied in position so they cannot float out of a swamped craft.

Buoyancy shall offer minimal impedance to the paddler's exit from the cockpit.

Buoyancy of any type, however fitted must be examinable so that problems can be rectified. Sealed compartments are not recommended unless sufficient closed cell buoyancy is included to meet the requirements, or unless allowance is made, by plug or water-tight cap, to remove any water seepage which may occur.

Where buoyancy is used to add strength to the craft it shall resist displacement if deformation occurs.

Canvas Kayaks and Canoes

Particular attention should be paid to the condition of the canvas. Taped seams and repairs should be carefully examined.

The sectional frames and longitudinal runners should be intact with no breaks or jagged bearing surfaces.

Back rests, seats and bottom boards should be complete and securely fitted.

Glassfibre Kayaks and Canoes

There should be no exposed glassfibre laminates. Areas that come into contact with a canoeist's skin should be smoothly finished and free from splinters or any jagged edges.

Seams should be checked from the inside for splits, tears or breaks in the glassfibre tape or mat which joins deck to hull.

The general condition of the moulding should be checked to ensure that no structural damage has taken place which will reduce the strength of the hull or deck.

Repairs must have been correctly carried out using cloth and resin not 'car body filler or similar.

Wooden Kayaks and Canoes

The condition of all seams and the material used for sealing them should be carefully examined.

Areas of damp (particularly dark staining) should be carefully checked to ensure the wood is sound.

The appearance of internal and external painting or varnishing should be examined.

Bottom boards, seats and backrests should be complete and securely fitted.

Repairs should be carefully examined.

Plastic Kayaks and Canoes

There are at present two types of plastic boats on the market, cross linked and linear linked polyethylene. Of the two materials, cross linked polyethylenes are most suitable, having a 'memory' as well as the capacity for easy repair by localised heat. (A memory allows a boat to be returned to its original shape, after distortion, by a gentle warming in a heated room.)

Any system of internal structures designed to prevent bending must be firmly secured within the craft and resist displacement should deformation occur. Plastic boats with no internal bracing are not suitable for use in white water or surf.

Open Canoes

The touring/open canoe relies for its rigidity on the strength of the gunwale and the fixed thwarts.

Check that the gunwale strip (whether plastic, wood or aluminium) is complete and fixed to the hull throughout its length.

The thwarts should be firmly fixed in place and the anchorage secure.

Cockpits

The design and construction should allow the paddler to extract himself efficiently in the event of a capsized.

Deck Lines/Painters

Deck lines and/or painters (if fitted) should be rot proof and not less than 6mm diameter. They must be taut and so attached that they are not capable of accidentally becoming loose or of fouling the cockpit area.

Footrests

Footrests must be fitted to all craft using waters classified B2 and above.

When fitted they shall allow full adjustment to suit paddler's leg length.

Note: An effective paddling stroke is difficult to acquire without a firm footrest to pass energy from paddle to boat.

Platform footrests in closed cockpit kayaks should not in any position, permit the paddler's feet to pass forward of the footrest. They should be rigidly fixed and be incapable of rotation on their mounting.

Bar type footrests in closed cockpit kayaks should be so designed as to allow the paddlers to withdraw their feet or legs if they pass the bar. In practice this means that the bar must be of 'fail safe' design, i.e. rigid when the paddler's feet are pressed against it in the normal paddling position, but capable of swinging or falling clear of the paddler's feet if they pass beyond the bar.

Metal fittings

All metal fittings should be in good repair. Exposed nuts and bolts inside the boat should be encapsulated to prevent cuts or snags to the paddlers skin or clothes.

Seats

Seats in glassfibre kayaks are often suspended from the cockpit rim in a single moulded unit. Care should be taken to inspect the way in which the cockpit rim has been fitted to the craft and that it is secure all around the rim. There should be no breaks or splits which may detract from the strength of the structures.

In craft where the seats are placed on the hull, they should be securely fixed or clamped in place.

Toggles/Handles

Toggles or handles should be fitted to the bow and stern of all craft except those used solely for sprint and marathon racing or 'polo'. Competition slalom craft should have rot proof nylon end grasps positioned at bow and stern, sufficiently large to get a hand through.

Where handles are fitted these should allow all 4 fingers of the hand to pass through and the grasp should be not less than 6mm in diameter.

End grasps should consist of rope handles or toggles so fitted as to minimise the risk of snagging. Rope handles incorporate two separate anchor points at least 4 finger widths apart. Loops are not recommended, due to the danger of hand entrapment should the craft rotate ('loops' are formed when both ends of the rope come from the same, or close, anchor points). Toggles are appropriate, provided the hand cannot become trapped in the attachment ropes, and where the system permits the clipping of a karabiner.

Toggles should be attached by between 50mm and 200mm of 4mm rot-proof line or webbing. Toggles should be at least 75mm long with a diameter of 20mm, made of material capable of withstanding exposure to sea water without deteriorating.

Safety Helmets

In situations where injuries to the head of the paddler are possible a protective helmet should be provided. (In white water, surf, polo competition and some coastal expedition.)

Only helmets designed for paddling are suitable. Fastenings should be non-corrosive and remain secure

under stress. An EEC standard is being prepared and will be introduced in the near future. When this occurs existing serviceable helmets will be acceptable but new helmets will need to conform to the EEC standard and be correctly marked.

Where safety helmets are considered to be necessary for an event or activity, or where they are required to be worn by the competition rules, they must conform to the following:

- Safety helmets must have a hard, strong, outer shell, and provide protection close to the eyebrows and ears and well down towards the neck at the back of the head. The helmet must incorporate a shock absorbing liner of suitable foam. It must fit the head well, and must not easily pull up and backwards exposing the forehead.

Spray Decks

Spray decks should be provided for all craft using tidal or white water.

The design should be one that is retained on the cockpit rim with elastic. (Press stud variety should not be permitted.)

A quick release strap should be fitted, which allows the paddler to remove the spray deck quickly in an emergency. If small loops are provided at the sides of the deck, it is wise to join them together with rope or webbing strap so that they cannot be lost inside the boat when the deck is fitted and the method of release is easily available.

Spray decks should not be worn until the wearer has proved his ability to remove the spray deck under the water, by taking a supervised spray deck removal test, involving a capsized.

Spare Paddles

A spare (split) paddle should be carried by paddlers especially on tidal waters.

Tow Lines

A serviceable tow line with quick release facility should be readily available to the Leader of a touring party of paddlers especially on tidal waters.

Publication Cross Reference

The current editions of:

Policy, Organisation and Rules of The Scout Association
Authorisation Scheme for Water Activities FS120601
Water Activity Assessment and Advice FS120602
Water Safety FS120603

Paddling (Kayaks and Canoes) Guidelines for the issue of a District Commissioner's Authorisation FS120604 May 2000

TABLE OF MAXIMUM SUGGESTED RECOMMENDATIONS FOR A RANGE OF BCU COMPETENCIES WHEN CONSIDERING SCOUT ASSOCIATION AUTHORISATIONS

BCU AWARD HELD	FORMALLY KNOWN AS	TYPE OF CRAFT	INLAND B1 WATERS	INLAND B2 WATERS	INLAND B3 WATERS	INLAND A WATERS	TIDAL B1 WATERS	TIDAL B2 WATERS	TIDAL B3 WATERS	TIDAL A WATERS	SAFETY RECOMMENDATIONS
2*		CCK	2								WITH SUPPORT
2*		OC	3 (use 2 OCs)								WITH SUPPORT
2* & ST		CCK	3	2			2				WITH SUPPORT
PW 2		OCK	2								WITH SUPPORT
PW 2		OC	3 (use 2 OCs)								WITH SUPPORT
3*		CCK	4				2				WITH SUPPORT
3*		OC	3 (use 2 OCs)								WITH SUPPORT
3* & ST		CCK	4	2			3				WITH SUPPORT
PW 3		OCK	3				2				WITH SUPPORT
PW 3		OC	5 (use 3 OCs)	3							WITH SUPPORT
PW 4		OCK	4	2			3				WITH SUPPORT
PW 4		OC	5 (use 3 OCs)	3			3				WITH SUPPORT
4*	KAYAK PROF	CCK	5	3			3				WITH SUPPORT
4*	CANOE PROF	OC	5 (use 3 OCs)	3 (use 2 OCs)			3				WITH SUPPORT
4*	SEA PROF	Sea CCK	5	3			3	2			WITH SUPPORT
5*		CCK	6	4	2		3				WITH SUPPORT
5*		OC	5 (use 3 OCs)	3 (use 2 OCs)	3 (use 2 OCs)		3				WITH SUPPORT
CADET INSTR		CCK	5	3			2				WITH SUPPORT
CADET INSTR		OC	5 (use 3 OCs)	3 (use 2 OCs)			2				WITH SUPPORT
PW COACH 1	SUPERVISOR	OCK or OC	5 or 5	2 or 3							
COACH 1	SUPERVISOR	CCK	5	2							
	SUPERVISOR	OC	5	3							
	TRAINEE INSTR	CCK	5	3			3				WITH SUPPORT
	TRAINEE INSTR	OC	5	3			3				WITH SUPPORT
PW COACH 2	TEACHER	OCK or OC	5 or 5	3 or 3			3 or 3				
COACH 2	INSTRUCTOR	CCK	8	5			5	2			
	INSTRUCTOR	OC	8	5			5	2			
	TRAINEE SI	CCK	8	5	2		5	2			WITH SUPPORT
	TRAINEE SI	OC	8	5	2		5	2			WITH SUPPORT
	TRAINEE SI	SeaCCK	8	5	2		6	3	2		WITH SUPPORT
PW COACH 3	SI	OCK or OC	10 or 10	8 or 8	3 or 3		8 or 8	3 or 3			
COACH 3	SI	CCK	10	8	6	2	10	7	3		
	SI	OC	10	8	6	2	10	7	3		
	SI	SeaCCK	10	8	6	2	10	7	5	3	

ST - Safety Test
 OC - Open Canoe
 CCK - Closed cockpit Kayak

OCK - Open cockpit Kayak designed for touring, racing etc where the legs are not engaged under the deck and in the event of a capsized the paddler falls freely out.

BCU - British Canoe Union
 WITH SUPPORT - group of paddlers of similar ability, or there is a safety boat or shore party monitoring the activity.