

Water Awareness and Charge Certificate Manual

Module 32: Introduction to Canoes & Kayaks

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Revision History

Module Title	Comments	Rev No	Revision Date
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Module 32: Introduction to Canoes & Kayaks	Title Change	1.2	23 Aug 2011
Module 32: Introduction to Canoes & Kayaks	Outcomes Added	1.3	31 Jan 2017

Outcomes

After completing this module, the certificate holder will:

- Be able to identify the various types of Canoe, Kayak and Ski .
- Be able to identify the supporting equipment necessary for paddling.

1 Equipment






1.1 Canoes / Kayaks


A **canoe** is a small narrow boat, typically human-powered, though it may also be powered by sails or small electric or gas motors. Canoes are normally open on top, but can be covered. . It is propelled by a single or double-bladed paddle in the hands of a sitting or kneeling paddler(s).

A **kayak** is a small human-powered boat. It typically has a covered deck, and a cockpit covered by a spraydeck. It is propelled by a double-bladed paddle in the hands of a sitting paddler(s).

A **ski** is a sealed hull variation of the kayak, also known as a "sit-on-top". The ski has an open cockpit and water entering the cockpit drains through scuppers

Modern kayaks are typically constructed from moulded plastic, wood, fabrics over wooden or aluminium frames, fibreglass, kevlar, or carbon fibre. Provision must be made for sufficient buoyancy in the kayak. A swamped single seat kayak can hold up to 400 litres of water and the buoyancy of the construction material will not be able to keep the kayak afloat. For this reason, buoyancy in the form of polystyrene blocks, buoyancy bags, plastic bottles or sealed compartments are needed to keep water out and keep the swamped kayak afloat. A minimum of 10 litres of buoyancy are required in each end of the kayak and it must be securely tied or wedged

<p>Skimmer – Sea Kayak Polyethylene construction Length 5m width 0.6m Weight 25kg</p>	
<p>Tarpon – Sit-on-top touring kayak Polyethylene construction Length 4.27m width 0.71m Weight 28kg</p>	
<p>Eagle Owl – Canoe Fibre glass construction Length 4.55m width 0.8m Weight 29kg</p>	
<p>Assagai – K1 Intermediate river Kayak Fibre glass construction Length 5.2m width 0.51m Weight 10kg – 16 kg, depending on construction</p>	
<p>Mirage – K2 Intermediate river Kayak Fibre glass construction Length 6.45 m width 0.55m Weight 13kg – 19 kg, depending on construction</p>	


<p>Wavesport Z – Play Kayak Polyethylene construction Length 2.64m width 0.66m Weight 19kg</p>	
<p>Fanatic – Wild water Kayak Fibre glass construction Length 4.5 m width 0.6m Weight 10kg – 14 kg, depending on construction</p>	
<p>Polo Kayak Fibre glass construction Length 2.7 m width 0.65m Weight 12kg</p>	
<p>Instinct 75 – Slalom Kayak Fibre glass construction Length 3.51m with 0.66m Weight 13kg</p>	


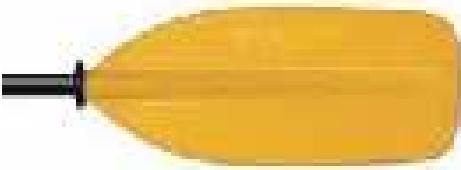


1.2 Paddles

Paddles commonly used in canoes consist of a wooden, fibreglass, carbon fibre or metal shaft with a handle on one end and a rigid blade on the other end. Paddles for use in kayaks are longer, with a blade on each end; they are handled from the middle of the shaft.

Kayak paddles having blades in the same plane (when viewed down the shaft) are called "un-feathered." Paddles with blades in different planes are called "feathered". Feathered paddles are measured by the degree of feather, such as 30, 45, or even 90 degrees. Because the kayak paddle is not supported by the boat, paddles made of lighter materials are desired, it is not uncommon for a kayak paddle to be 1kg or less in weight.

Paddle blades come in various different shapes, depending the purpose for which they are intended

	<p>Symmetric Blade Used for flat water touring and canoe polo Single bladed canoe paddle. Also used in C-type kayaks and dragon boats.</p>
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		<p>Double Bladed kayak paddle</p>
		<p>Symmetric Blade Used for flat water touring and canoe polo Has no "right way up" so it can be used in either hand</p>
		<p>Asymmetric Blade Used for medium and full rivers. The "cut away" section of the blade is the lower part and allows easier removal of the paddle from the water.</p>
		<p>Wing Blade Flat water sprints and river races</p>

1.3 Spraydecks

A spraydeck is a flexible cover for the cockpit of a canoe or kayak, designed to prevent water from entering the canoe / kayak in rough water or inclement weather. The spraydeck has an opening for the paddler which is secured around the chest of the paddler under the PFD.

On a kayak, the spraydeck is secured to a rim surrounding the cockpit with a line or elastic string. The line or string runs in a hollow seam along the edge of the spraydeck, and is tied around the rim or stretched over it. It is important that the fastening be as tight as possible to prevent water infiltration and yet capable of quickly being released if the boat should capsize, so that passengers can get out from the capsized boat. In most cases the weight of the paddler will pull the cover off, but panic handles should also be fitted. A properly sealed spraydeck will allow a kayaker to perform an eskimo roll and continue paddling without having to bail out.

1.4 Helmets

A helmet must offer protection to the head, ears and upper neck of a paddler and is an integral piece of kayaking equipment. A helmet is often dispensed with on flat water lakes and when gigging or sailing, but is an absolute necessity on rivers or while playing canoe polo.

A helmet must be cool, have ample drainage and the ability to absorb sharp impacts with rocks or trees. They must fit snugly on the paddlers head and have a chin strap. Skateboarding or cycling helmets are not acceptable as they do not protect ears or upper neck. Construction and mining helmets should be avoided as they do not drain

1.5 Rudders

Several classes of modern kayak (e.g. K1, K2, K3, K4) are fitted with rudders. The rudder is used to control the direction of the kayak and is operated by the front paddler using foot pedals under the deck.

Rudders can be of the overstern variety, which can lift to pass over obstacles, or understern where the rudder is fixed to the underside of the kayak

A rudder must be undamaged and fully functional as steering a kayak with a damaged rudder is extremely difficult.

Kayak word search.

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Words to find:
KAYAK