

# Water Awareness and Charge Certificate Manual

## Module 40: Basic Kayaking

Current Document Revision Number: 1.2  
Revision Date: 31 January 2017

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<b>Module Title</b>	<b>Comments</b>	<b>Rev No</b>	<b>Revision Date</b>
Module 16: Basic Kayaking	Initial Release	1.0	3 Jan 2010
Module 40: Basic Kayaking	previous Module 17	1.1	23 Mar 2010
Module 40: Basic Kayaking	Outcomes Added	1.2	31 Jan 2017

## **Outcomes**

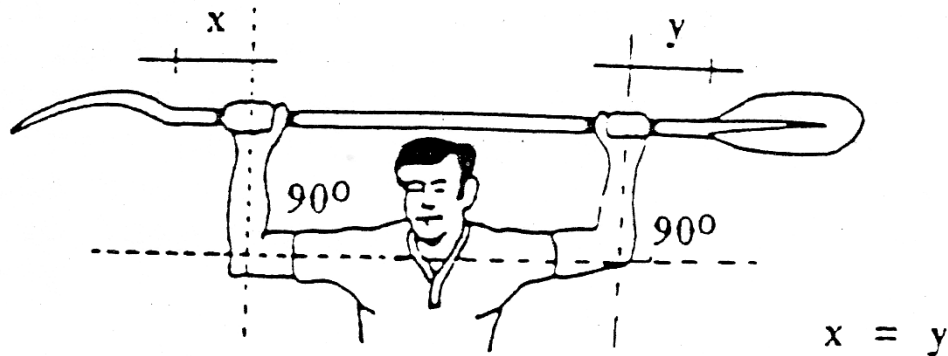
After completing this module, the certificate holder will:

- Be able to manoeuvre a kayak using basic paddle strokes.
- Maintain balance using brace strokes
- Exit the kayak after a capsize and recover the kayak
- Repair damaged fibreglass.

# 1 Basic Paddling Manoeuvres

## 1.1 Holding the Paddle

The paddle is held with two hands, some distance apart from each other. The grip in your right hand should have a ridge, which is placed in your knuckles. This hand retains a tight grip on the paddle and controls the angle of the blades. The left hand will not have any ridge and must allow the paddle to rotate. For normal use, it is drawn through the water from front to back to drive the boat forwards. The two blades of a kayak paddle are dipped alternately on either side of the kayak.



## 1.2 Boarding the Kayak

Before going for your first paddle:

- Check that your craft has buoyancy fitted into the nose and tail.
- Check that the footrest position is suitable for your legs (knees should be slightly bent).
- Adjust seat.
- If you are to wear a splash cover, ensure that the release strap is fitted and the splash cover fits the canoe tightly across the deck.
- Hitch the back of the splash cover above the buttocks, so that you don't sit on it.

Stand along side your kayak, facing the front of the kayak. Place your paddle behind you, perpendicular to the kayak so one side is resting on the aft edge of the cockpit and the other side is resting on the shore (or other stable object). Crouch down and grip the cockpit coaming and paddle in one hand and the other side of the paddle in the other hand. Sit on the paddle and slide across, keeping your weight balanced on the shore, until you can swing your legs into the kayak

Fit your spraydeck, beginning behind you and working forward. Place the elasticised strap in the slot and at the back and roll the deck into place. The front of the cockpit must be the last section to be sealed. Ensure that the panic handles are available.

Before starting to paddle it is essential to be comfortably set up in the boat. Legs should be slightly bent at the knees. A comfortable seat is also necessary to allow for good rotation. Sitting correctly in the boat is important. Normally the body leans slightly forward ( $5-10^\circ$ ), and the back is kept relatively straight or with a slight outward curvature near the base of the back. It is necessary to lean slightly forward for better reach and to combat the inertia of the boat. Over leaning, however, compresses the diaphragm making breathing difficult, as well as reducing rotation ability.

### 1.3 Forward Stroke

A correctly executed forward stroke is the difference between a good paddler and a great one. A solidly planted forward stroke the best brace possible and a good forward stroke will give you all the power you need, which is vitally important in moving water

To execute a good forward stroke, place the blade of your paddle as far forward as you can without bending over. Keep your lower arm straight and bring your upper arm in. Wind up your torso in the direction of your upper hand. Plant the blade and punch out your upper hand as you unwind your torso, to pull the boat to the paddle. The shaft of the paddle should be crossing in front of your face as you move forward. Keep your lower arm straight through the power section of the stroke, as this uses your powerful back and shoulder muscles instead of your tiny arm muscles. As your body comes alongside the blade, the stroke is complete as no further power can be applied to the paddle.

### 1.4 Back Stroke

The back stroke is used to stop the forward motion of the kayak and to reverse. Wind up your torso in the direction of your lower hand and plant the blade in the water as far back as you can reach. Execute the stroke by unwinding your torso and pushing the boat back. It is not possible to keep your arms straight during this stroke but do not use your arms to provide power during the stroke.

Use the back of the blade for this stroke and **do not rotate the paddle.**

### 1.5 Low Brace (Beaver tail)

The low brace is designed to support the paddler in rough conditions or when drifting. The blade is placed on the surface of the water at a slight angle an arm's length away from the boat and is used to as a brace to lean on. This is particularly useful on moving water where you will be shooting rapids and passing under obstructions. It is vital that your blade remains on the surface of the water so that your paddle is available to take strokes or brace on the other side of the boat.

If you begin to fall over, a quick smack on the water with the blade, like a beaver's tail, will push you back into an upright position. The harder you smack the water, the more effective this technique will be.

### 1.6 Turning the Kayak

When paddling a rudderless kayak, each stroke turns the kayak away from the side on which the stroke was taken. I.e. a stroke on the left turns the kayak to the right. To paddle straight, the paddler uses even strokes on both sides of the kayak. In order to turn the paddler uses strokes on one side of the vessel only or harder strokes on the one side to turn the boat towards the other side.

The kayak can also be turned by using the paddler's weight to lean the kayak to one side. The kayak will turn in the direction of the lean.

### 1.7 Capsizing

Push the kayak away from you using your feet and hands. The spraydeck should come off easily, but if it is jammed, release it using the panic handles.

**Immediately** right the overturned kayak to limit the amount of water entering. The less water inside the kayak, the easier it will be to handle and empty.

Grab hold of one of the handles on your kayak and the paddle, using one hand. Then swim to shallow or safe water using your legs and free arm. Never ever hold onto the cockpit of the kayak.

## **1.8 Emptying Your Kayak**

Before emptying your kayak, place your paddle in a safe place (inside your kayak, on shore or in the hands of your buddy). Grip the edge of the cockpit nearest you. Lift the boat and roll it onto its side. If the kayak is very full it will be too heavy to lift high, but the water will flow out. When as much of the water as possible has flowed out, hold the bow of the kayak and depress so that the water flows to the bow. Lift the bow high and turn the boat into an inverted position. Water will flow out of the cockpit and the kayak will be empty after a few repeats.

Work from the bow as the forward rim of the cockpit is higher and the bow section holds less water than the stern.

## **1.9 Doggy Paddle**

Many capsizes, especially with novice paddlers, occur close to shore or to a fellow paddler. In this event do not panic and use your knees to keep you in the kayak. Your spraydeck will keep the water out and your PFD will help you to float on your side. You can then paddle with your hands until you can reach the shore or a boat of a fellow paddlers and pull yourself upright.

## **1.10 Mud rolls**

If you capsize in shallow water, it is possible to right yourself by pushing off the bottom of the lake / river with your paddle.

## 2 Fibreglass Kayak Repairs

Fibre-glass kayaks are very strong and flexible in comparison to kayaks of wooden construction, but they still can and will be damaged in collisions with rocks, the shore and other vessels. Temporary repairs can be made with duct tape but permanent fibreglass repairs are not difficult if you have the correct equipment and technique

In order to repair your kayak, you will need the following:

- Sandpaper, rasp or grinder
- Paint brush
- 2 containers
- Fibreglass mat (chopped strand)
- Resin and catalyst
- Acetone

To repair your kayak, do the following:

1. Begin by using the sandpaper / grinder to remove the gel coat from around the damaged area. You will need approximately 2cm of raw, rough fibreglass all the way around the damaged area.
2. Tear a piece of fibreglass mat the size of the area that you have cleared.
3. Pour sufficient resin into a container and add catalyst, stirring continuously until the resin goes clear (you need 2 ml of catalyst per 100ml of resin). This mix will give you about 20 minutes working time.
4. Using the paint brush, paint the area you have cleared with resin.
5. Stick the fibreglass patch over the damaged area and apply more resin using dabbing strokes of the brush. Normal painting will move the patch.
6. Additional layers of fibreglass can be added for additional strength.

To affect repairs around difficult corners or in bad weather, cover the patch with plastic bags. The bag will pull off easily when the patch is dry.

The brush and containers must be cleaned with acetone.

The patch will dry in 8-10 hours. Once dry, use sandpaper / grinder to remove loose and sharp edges.