

# Water Awareness and Charge Certificate Manual

## Module 43: Basic Canoeing

Current Document Revision Number: 1.1  
Revision Date: 31 January 2017

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## Revision History

Module Title	Comments	Rev No	Revision Date
Module 43: Basic Canoeing	Initial Release	1.0	28 Mar 2011
Module 43: Basic Canoeing	Outcomes Added	1.1	31 Jan 2017

## Outcomes

After completing this module, the certificate holder will:

- Be able to manoeuvre a canoe using basic paddle strokes including the J-stroke.
- Repair damaged fibreglass.

# 1 Basic Paddling Manoeuvres

## 1.1 Holding the Paddle

The top hand grabs the handle on top of the paddle. When the paddle is oriented vertically, the back of the top hand will be facing upward. The stem of the paddle should be between the four fingers of the top hand.

Grab the paddle with the lower arm's hand on the throat of the paddle. When the paddle is held out horizontally the paddler's arms should be holding the canoe paddle at wider than shoulder width apart.

## 1.2 Boarding the Canoe

Before going for your first paddle:

- Check that your craft has buoyancy fitted into the nose and tail.
- Ensure the wooden braces are firmly in position

Step evenly into the canoe, being careful to maintain your balance. Keep your fingers inside the gunwhale to prevent them getting pinned between your boat and other boats or the dock. Sit on the buoyancy compartments (located at the front and rear) or kneel on the floor of the canoe. No more than one person should be standing in the canoe at any time.

It is important to note that the wooden braces running across the canoe are just braces and are not designed to be sat on. Sitting on these braces will lead to damage or loss of shape in the hull.

## 1.3 J Stroke

As canoes are paddled with a single bladed paddle, two paddle strokes are combined to form the J-Stroke. The first half of a J Stroke is the power portion followed by the rudder portion which occurs in the last phase of the completed stroke. Sometimes you'll just need a flick of the rudder part of the stroke and other times you'll need to do a hard J. Look straight ahead over the bow to see what effect you are having on the canoe.



**1.** First part of the stroke. Sit up straight and have the paddle shaft is almost perpendicular to the water, Not across my chest. Raise your upper hand high and extend your lower arm. This is critical to good technique. If you are paddling with the top of the paddle in front of your chest or body, you are in a sloppy sweep stroke and you are now creating more problems for yourself and preparing to blame the canoe..



**2.** In this phase, the paddle is pulled through the water propelling the canoe forward. Push the paddle forward with your upper hand as you draw your lower arm back.

If you just pull the paddle straight back the canoe bow will automatically turn to the side opposite of the side the paddle is on. You need to implement a correcting phase at the end of your stroke and this is where we put the J in the stroke.



**3.** Still in power phase, begin to extend your lower arm away from the canoe to correct for the canoe's natural desire to turn to the right as you paddle on the left.



**4.** The final phase of the J Stroke. Your top hand turns the paddle blade into a vertical position while you bottom arm now pushes the paddle. Just like a rudder on the stern of a ship, the paddle exercises leverage on the canoe pushing the stern in one direction and causing the canoe bow to move in the opposite direction.

## **1.4 Sweep Strokes**

There are many ways to turn a canoe, but most are negative strokes and result in loss of speed. The purpose of the sweep stroke is to turn the canoe without reducing speed.

To execute a sweep stroke, keep your arms low and place the paddle as far forward as possible. As you execute the stroke, concentrate on the outward movement of the paddle blade and minimise the backward movement. As you do this, your upper hand will punch across the centre line of the canoe. Look in the direction you want to turn to further amplify the stroke.

Done properly, the sweep will turn your canoe without losing speed.

## **1.5 Steer Strokes**

Steer strokes, also known as rudder or tab strokes, allows the paddler to rapidly turn the canoe. These are negative strokes, but allow the paddler to steer the canoe from the bow or stern as required.

To execute the stroke, plant the paddle blade close to the canoe, as far forward or back as you can reach. The canoe will turn towards the side on which your paddle is planted and the speed of rotation can be controlled by adjusting the angle of the paddle blade in the water

## **1.6 Draw Stroke**

The draw stroke is used to move the canoe sideways in the water.

Plant the blade in the water next to the paddler, parallel to the canoe, as far away as you can reach. Lean onto your paddle as you pull the boat to the paddle.

## **1.7 Capsizing**

In the inevitable situation of a capsize, account for all paddlers who were aboard.

Right your canoe while still in the water. From the stern or bow, board the canoe and begin to bail the water out of the canoe.

Once sufficient water has been removed, allow the rest of the crew to board and resume paddling.

## 2 Fibreglass Repairs

Fibre-glass canoes are very strong and flexible in comparison to canoes 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 canoe, you will need the following:

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

To repair your canoe, 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.