

## **Turning strokes for canoe slalom**

A number of strokes are used to turn the boat, and in sequence, can be used to execute the key techniques of canoe slalom, outlined in chapter 7.

### **Forward sweep stroke**

Sit up straight

Rotate from the bottom of torso – using the whole of the back muscles.

Reach – without leaning forward extend your arms and rotate your torso in to the turn, such that the blade is extended as far as possible towards the bow. As you execute the stroke be sure the blade describes a wide arc out and away from the boat.

Keep top hand low – keeping the stroke horizontal and allow the stroking blade to sweep out its widest arc. In executing the sweeping stroke with your torso, simultaneously punch out with the top hand.

For further detail, see BCU Canoe Slalom technique dvd

Kayak Level 1.5 Turning sweeps;

C1 Level 1.3 Turning sweeps.

### **Reverse sweep stroke**

Rotate from the torso – both of your shoulders should be focused towards the place you are turning, keeping the turn centred around the base of the spine, avoiding leaning out over the paddle for extension.

Focus your eyes on where you are going – your boat will follow.

Extend your paddle – put the blade in the water all the way back to the stern. Paddle shaft should be parallel with boat and both hands should be on the inside of the turn. As you execute the stroke your blade should push out from the stern and then make a wide arc away from the boat.

Keep the paddle horizontal – paddle shaft should be as flat to the water as possible without losing grip from your blade. Keep top hand low to the water as you execute the stroke.

For further detail see BCU Canoe Slalom technique dvd

Kayak Level 1.5 Turning sweeps;

Kayak Level 1.6 Reverse / Bow draw pivots;

C1 Level 1.4 Reverse pivots

### **Bow draw**

Rotate from the torso, extending comfortably far from your centre of rotation, using the muscles in your back, shoulders and arms all at once.

Focus on looking and opening up your shoulders on where you are going, thereby opening up your body to the exit in the gate line .

Place the paddle vertically on the outside of your body in the water. The top hand should be just in front and above the head. The bottom hand should be extended from the hip. Look through the loop made by your arms and the paddle then you are in good shape.

Turning your boat – turn the body first, put the blade in the water for grip, now turn the boat to your original shoulder line. Finish the stroke with your shoulders facing straight ahead, relative to the boat and facing your objective.

For further detail see the BCU Canoe Slalom technique dvd

Kayak Level 1.4 Zig Zag bow rudders;

Kayak Level 1.6 Reverse Bow draw pivots;

Kayak Level 1.7 Bow draw pivots;

C1 Level 1.2 Bow rudder zig zag drills.

### **Cross bow draw (Canoe)**

Used to turn the boat on the offside, where there is a need to overturn the boat in order to achieve the desired position.

The paddle is taken across the canoe with the torso rotated strongly to the off side.

The paddle is placed into the water, with the body locked into a C shape across the boat, with the top hand at head height, the paddle as vertical as possible and the lower hand over the blade

The drive face of the blade should be facing the bow of the canoe.

By unwinding the torso, the blade is pulled towards the bow and then sliced through the water to pull again or leave the water to return to paddling on the on side.

For further details see BCU Canoe Slalom technique dvd

C1 Level 1.6 Cross bow pivots

C2 Level 1.2 Onside pivots;

C2 Level 1.3 Offside pivots

### **Pry (Canoe)**

Used to turn the boat, or control the angle of the boat on the onside.

The upper body is turned to the side the pry is done on.

The bottom hand holds the paddle shaft along side or in front of the hip

The drive face of the blade is levered away from the side of the canoe, with the top hand held higher, than on a sweep.

The blade is sliced back in at right angle to the canoe before being turned and levered back out and away from the canoe.

The blade should not break the surface during the stroke.

## **Understanding edge control**

In general the boat should be kept as flat as possible, as this provides good stability, while also providing a platform in order to execute strokes. A flat boat, running on the surface, is generally a fast boat as it sheds water quickly. However there are also occasions where edge control (dropping one edge lower than the other), or submerging the tail can be effective.

## **Edging or carving**

This involves dropping an edge so that the boat will grip and carry speed around a turn (the boat will generally turn to the side on which you are dropping an edge) or where water needs to be shed (ie on a jump or wave). This also facilitates crosses on heavier moving water or can be used where the water in an eddy can be used to facilitate turning (carving). In time the control of an edge is also useful in jumping stoppers or running stopper waves.

## **Practising edge control**

In order to practice this control, paddle on the flat, dropping the edge of the boat, using the control of lower abdominal muscles, hips and legs, while maintaining an upright paddling position at all times. Practice dropping differing amounts of edge and holding this for a number of strokes. As a paddle progresses, practice using a figure of 8, where the paddler holds an inside edge while paddling in a large interlocking circle, transferring the body weight smoothly to facilitate the turns.

For further details see the BCU Canoe Slalom technique dvd

Kayak Level 1.3 Edging drill

## **Pivot**

In general, submerging the tail underwater slows the boat down. However, where a boat needs to be turned hard, a powerful stroke combination of a forward and reverse sweep (and with advanced paddlers, forward sweeps and bow draws), combined with the paddler exerting downward pressure on a flat stern of the boat by pressing the lumbar region into the seat of the boat can facilitate a quick turn, which can be used in offsets, spins and upstreams. This can also be of particular use in plan B situations.

## **Practising pivot turns**

Practice pivoting by turning the boat through 360 degrees using forward and reverse sweeps. By keeping the boat flat and using the lower back to squeeze the stern underwater, use full sweeps to turn the boat smoothly, with the boat gliding, between transition of the strokes. As a paddler progresses, this drill can be undertaken using only forward or reverse sweeps or a forward sweep / bow draw turn combination, and also a bow draw only. Practice on both sides.

For further detail see the BCU Canoe Slalom technique dvd

Kayak Level 1.6 Reverse Bow draw pivots;

Kayak Level 1.7 Bow draw pivots;

C1 Level 1.5 Bow draw pivots;

C1 Level 1.6 Cross bow pivot

C2 Level 1.2 Onside Pivots;

C2 Level 1.3 Offside Pivots.

## **Exercises to develop core skills**

### Stroke kinetics session

#### Kayak

##### Aims

Power and technique development in key slalom strokes.

To reinforce the best stroke mechanics and muscle recruitment.

Load muscles in a highly specific way to give the best transfer into stroke power.

Warm up - stretch followed by 15-20 min easy aerobic paddle and some smooth easy stroke drills focusing on boat glide.

##### Points to focus on:

Throughout all strokes emphasize body rotation, posture and hand placement. Lead into turns with your shoulders. Start each stroke with a few slower strokes to check technique before working at full power.

Aim to do 3 sets of four max pulls on each exercise, build up to this amount and do not compromise the quality of your technique. The sessions should be short; around 45 min and you should finish feeling powerful. Be especially careful if you are injured and run through the strokes at a lower intensity.

As you become more skilled and effective in the exercises add some variations to moves. Keep the session high quality, short, sharp and powerful.

1. Sweeps. With the boat on a balanced outside edge, take wide power sweeps from the front of the boat to level with your hips.

##### Key points:

Drive the bow with the first part of the sweep.

Ending the stroke at the hip.

Power from rotation.

2. Bow Draws. using bow draws, turn the boat in tight circles whilst maintaining a smooth forward glide.

##### Key points:

Use full trunk rotation.

Full pressure on the blade.

Stable balanced boat.

3. Alternate Sweeps.  
Paddling in a zig zag line with forward sweeps on alternate sides.

Key points:

Driving the bow with the first part of the sweep.  
Ending the stroke at the hip.  
Carry glide form stroke to stroke  
Explosive power at catch generated from body rotation.  
Subtle transfer of lean from stroke to stroke

Tip - go from 10 to 2 o'clock

Sweep Draw Combo. Paddling in a zigzag line with forward sweeps in combination with bow draws on alternate sides. Keeping the blade in the water on the transitions between draws and sweep rotation

Quick stroke transitions

Fast acceleration.  
Balanced level boat.

Tip: Imagine the ideal upstream combination

5. Pivot Draw & Pull. Pivot the boat on a forward sweep followed by a reverse sweep and bow draw combination. At the end of the draw kill the spin momentum and squirt forward on a pull, followed by 4 power forward strokes then move into the same move on the opposite side.

Key points

Keep the stem gliding flat underwater between strokes.  
Start reverse sweep pushing away from the back of the boat.  
Have both hands over at start of your reverse sweep.  
Aim for good balance timing and power on the squirt.  
Power in reverse sweep generated from body rotation.  
Finish the draw at the front of the boat for maximum reach on pull through.

Tip: Focus on pulling down on the squirt using abs and triceps. Feel the crunch.

5. Pivot Sweep & Pull. Pivot the boat on a forward sweep, reverse sweep, and forward sweep combination. At the end of the second forward sweep kill the spin with a strong forward sweep, then move into the same move on the opposite side.

Key points

Keep the stern gliding flat underwater between strokes.  
Start reverse sweep pushing away from the back of the boat.  
Have both hands over at start of your reverse sweep.  
Aim for good balance timing and power on the first forward power stroke.  
Power and control.

6. Carving Carving on an inside edge, four maximal long smooth pulls on the inside of the turn while maintaining an arc towards the side you are pulling on.

Key points

Long reach.

Forward catch.

Smooth gliding arc of the boat.

Constant unwavering boat lean.

Maximum boat travel from each pull.

Tip: Hook the front of the pull by opening the leading blade edge.

7. Roll backs A maximal sprint of eight strokes per side starting from a short backwards paddle.
8. Roll forwards A maximal sprint of eight strokes per side starting from a short forward paddle

## C2

**Aims** . Power and technique development in key slalom strokes.

Reinforce the best stroke mechanics and muscle recruitment.

Load muscles in a highly specific way to give the best transfer into stroke power.

**Warm up** . stretch followed by *i* 5 -20 mm easy aerobic paddle and some smooth easy stroke drills focusing on boat glide.

**Points to focus on**

Throughout all strokes emphasize body rotation, posture and hand placement. Lead into turns with your shoulders. Start each stroke with a few slower strokes to check technique before working at full power.

Aim to do 3 sets of four max pulls on each exercise, build up to this amount and do not compromise the quality of your technique. The sessions should be short; around 45 mm and you should finish feeling powerful. Be especially careful if you are injured and run through the strokes at a lower intensity.

As you become more skilled and effective in the exercises add some variations to moves. Keep the session high quality short sharp and powerful.

1. **Bow Man Sweeps.** With the boat on a balanced outside edge, take wide power sweeps from the front of the boat to level with your hips. Stem man takes curved inside pulls to maintain the glide. Main emphasis is on the bowman.

**Key points**

Drive the bow with the first part of the sweep.

Ending the stroke at the hip.

Power from rotation.

2. **Stem Man Sweeps.** With the boat on a balanced outside edge, take wide power sweeps. Bowman makes bow draws to maintain the glide. Main emphasis is on the stem man.

**Key points**

Drive the bow with the first part of the sweep.

Ending the stroke with a pull in to the stem.

Power from rotation.

3. **Draws.** Using draws or offside draws from the Bowman, turn the boat in tight circles in each direction whilst maintaining a smooth forward glide on the boat.

**Key points**

Use full trunk rotation.

Full pressure on the blade.

Stable balanced boat.

4. Alternate Sweeps. Paddling in a zigzag line with forward sweeps followed by forward pulls so Bowman is sweeping while stem man is pulling and visa versa.

Key points

Driving the bow with the first part of the sweep.

Carry glide form stroke to stroke

Explosive power at catch generated from body rotation.

Subtle transfer of lean from stroke to stroke

Tip go from 10 to 2 o'clock

5. D.S.C.P. (Draw, Sweep, Cross, Pull) The ultimate stroke combo! Key points

Use full shoulder rotation.

Regain full reach at the catch phase of the sweep.

Full pressure on the blade.

Stable balanced boat.

Driving the bow with the first part of the sweep.

Ending the sweep level with the hip.

Carry glide form stroke to stroke.

Tip

Lead off sweep with shoulders

6. Pivot Right Pivot to the right using (bow sweep, stem sweep), (cross draw, draw), (pull, pull). Followed by four hard pulls up to max speed.

Key points

Use full shoulder rotation

Balanced level boat.

Carry glide form stroke to stroke.

Maximum reach on each stroke.

Fast spin through stroke power and flat balanced boat.

7. Pivot left. Pivot to the left using (bow sweep, stem sweep.) Followed by four hard pulls up to max speed.

Key points

Use full shoulder rotation

Balanced level boat.

Carry glide form stroke to stroke.

Maximum reach on each stroke.

Fast spin through stroke power and flat balanced boat.

8. Pivot on the spot. Pivot the boat in each direction for two full rotations

Key points

Keep the stem gliding flat underwater between strokes.

Start reverse sweep pushing away from the back of the boat.

Fast spin through stroke power and flat balanced boat.

Timing.

9. Roll backs Forward easy then back hard 4 strokes and forward hard 4 strokes.

10. Roll forwards A maximal sprint of eight strokes per side starting from a short forward paddle.

# Stroke kinetics

## CI

**Aims** . Power and technique development in key slalom strokes. Reinforce the best stroke mechanics and muscle recruitment.  
Load muscles in a highly specific way to give the best transfer into stroke power.

**Warm up** .stretch followed by 15 -20 mm easy aerobic paddle and some smooth easy stroke drills focusing on boat glide.

### Points to focus on

Throughout all strokes emphasize body rotation, posture and hand placement. Start each stroke with a few slower strokes to check technique before working at full power.

Aim to do 3 sets of four max pulls on each exercise, build up to this amount and do not compromise the quality of your technique. The sessions should be short; around 45 mm and you should finish feeling powerful. Be especially careful if you are injured and run through the strokes at a lower intensity.

As you become more skilled and effective in the exercises add some variations to moves. Keep the session high quality short sharp and powerful.

1. Alternate Pulls. Four pulls on each side alternating between on-side and offside.

### Key points

Maximize reach on each pull.  
Carry the glide between strokes.  
Maximize power at the catch.

2. Big Doughnuts. Using bow draws on-side and offside, turn the boat in tight circles whilst maintaining a smooth forward glide on the boat.

### Key points

Go for lots of reach.  
Full pressure on the blade.  
Stable balanced boat.

3. Little Doughnuts with a squirt. Pivot the boat with draws. Four draws whilst maintaining the speed and angle of the pivot. For the on-side pivot finish with a squirt and four hard pulls, aiming to maximize the squirt and acceleration.

#### Key points

Reach.

Rotation.

Carry the spin speed from stroke to stroke.

Balance on the stem.

4. Sweep Draw Combo. Paddling in a zigzag line with forward sweeps in combination with on-side bow draws then offside draws and sweeps. Keeping the blade in the water on the transitions between draws and sweep. Focus on the stem draw element of the offside sweep.

#### Key points

Regain full reach at the catch phase of the sweep.

Full pressure on the blade.

Stable balanced boat.

Carry glide form stroke to stroke.

5. On-side pull, Offside sweep. Using a powerful offside sweep push the bow hard off line then straighten up with an on-side pull. Focus on the first part of the offside sweep, driving the bow around. Four strokes on each side. The offside sweep is the priority.

#### Key points

Maximize reach.

Maximize power at the catch.

Make a wide powerful arc at the start of each stroke.

6. Stopping. Paddle forwards then stop and accelerate backwards using one offside then three on-side backstrokes.

#### Key points

Long power strokes

Reach around and behind for full range on backstrokes.

Power in reverse stroke generated from body rotation.

7. Stopping 2. Paddle forwards then stop and accelerate backwards using one on-side then one offside and two on-side backstrokes.

## Key points

Long power strokes

Reach around and behind for full range on backstrokes.

Power in reverse stroke generated from body rotation.

8. Roll backs A maximal sprint of eight strokes starting on-side from a short backwards paddle. Reaching maximum speed.
9. Roll backs 2 A maximal sprint of eight strokes starting offside from a short backward paddle. Reaching maximum speed. Focus on the power on the first offside pull.
10. Roll forwards A maximal sprint of eight strokes starting from a short forward paddle

