

s boat design has evolved it has allowed the modern whitewater kayaker to push limits that previous generations of paddlers couldn't even dream of. In this environment of change it seems only logical that 'bread and butter' strokes and techniques should also evolve to fit the modern style of paddling. As playboats become almost microscopic and even creek and river boats become shorter than yesteryear's playboats, Simon Westgarth explains why, with an open mind and a little modernising, the spin-out can be a thing of the past and controlled driving turns can be the order of the day.

 $\textbf{Article and photos:} \ \mathsf{SIMON} \ \mathsf{WESTGARTH}$ 



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# TURNING IT ON

Since I first jumped in a kayak at the tender age of ten, kayak shape and design has changed markedly. The four-metre, glass fibre, general purpose Snipe I paddled back then was great for paddling forward and pure fun to learn in. With a rapid learning progression I found myself in small stoppers practising my 3 star skills and looking forward to my virgin whitewater experience. The rounded, forgiving hull of the Snipe allowed me to recover from the occasional wobble. As I learned and developed my skills and applied them to more challenging rapids, the boats continued to evolved, ever shorter and with less volume.

Great fun was had until I one day, in Canada, I was paddling and trying to turn following the generic formula for a low brace turn, sweep and low brace. My experience went something like this: while trying to break in on a strong eddyline, I approached with some speed, gave a sweep stroke to start the turn, and braced to absorb the kick from the flow on my kayak's hull. As this happened the boat span on the spot, leaving me swirling along the eddyline, feeling very, very unstable.

My solution to the problem at the time was to give it more speed. A fine solution, I thought, although my turns were a little uncontrolled.

Time has moved on and with most new boat designs now having flat bottoms, it makes the whole turning experience more of a carve than a skid. It was, however, not until I watched the 2002 World Slalom Championships in France that I observed a new method that I'd not encountered before. I was intrigued by what the gate chasers were doing as they performed their break-outs. This was further enhanced when I partook in a slalom workshop under the guidance of Leo O'Hara last year. He introduced the 'duffeck' as a variation on the bow rudder and 'hey presto' a solution for those eddyline wobbles that I've been observing for years.

I took this onboard and spent a summer of developing this theme and watching other paddlers that I coached, and I believe I've come up with a more dynamic way to perform eddy turns that is simple to learn. Firstly, let's develop a frame of reference.



### **EDDY TURNS**

Any manoeuvre in or out of an eddy, is an 'eddy turn'. This is not very helpful for those learning to do eddy turns, yet it is about an outcome, a product from a method. For those that are looking for a more specific synopsis, eddy turns in the form of breaking in or breaking out involve using a turning technique through an eddyline from the main current into an eddy, or vice versa.

In the images above and on the previous page, the boat is aimed towards a target at an appropriate approach angle, whilst being propelled forward. A sweep stroke on the eddyline initiates the turn, followed by a turning stroke. The spin momentum gained from turning is controlled with a rudder stroke.

### **TURNING STROKES**

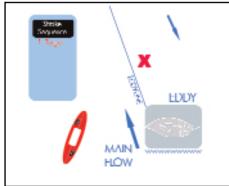
There is a wide choice and many variations of turning strokes available to the modern kayaker. What really matters is that they work. Used effectively, strokes like the stern rudder, a brace or a Duffeck can turn the kayak in whitewater. For this exercise we are going to look at the following turning strokes. The low brace turn and the bow rudder. Both are used often and taught in the BCU star test scheme.

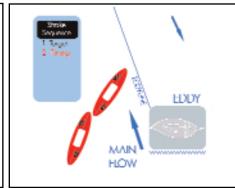
**Low Brace Turn:** a turn initiated with a sweep on the opposite side of the kayak, followed by edging into the turn, with the back of the blade trailing on the water's surface ready for support.

**Bow Rudder:** the blade is planted away from the kayak's side, towards the bow, with the driving face

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#### STROKE SEQUENCE









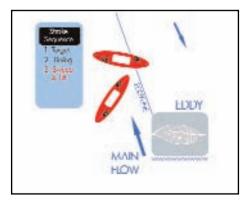
towards the boat and the leading edge away from the bow.

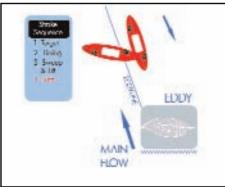
### MODERN TIMES AND MODIFICATION

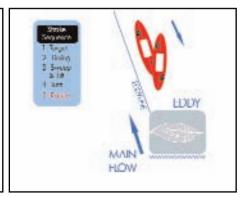
Both the low brace and bow rudder turns as taught at BCU 3 and 4 star level give an initial understanding and ability to turn. After some application in a modern boat design, it is clear that using this prescribed approach can be limiting - for example, when using a generic low brace turn in a modern boat like the Pyranha H3 on a class 3 rapid.

At the eddy fence the boat will simply spin, leaving the paddler neither in the eddy nor the main current and feeling quite unstable and liable to flipping on the eddyline. Short modern boats mean quick turns and new lines down rapids. For eddy turns the paddler needs to get the boat over the eddyline in a dynamic way. This can be simply achieved by increasing speed and in some cases this will be effective. With increased speed alone, controlling the turn can be compromised, in addition to the paddler being able to manage the boat's edge!

By merely adding a forward stroke to the inside of the turn at the eddy fence, the paddler can pull himself through and transform the paddle blade into a turning stroke. By changing the turning stroke in this way, the paddler drives the boat into the curve, and as a result has more speed after the turn.

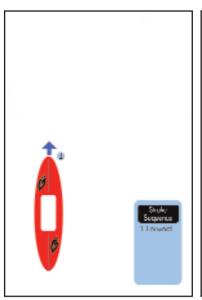


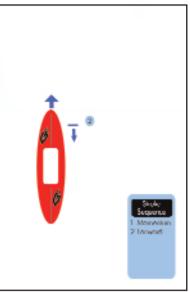






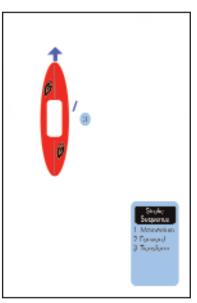


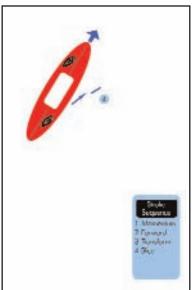


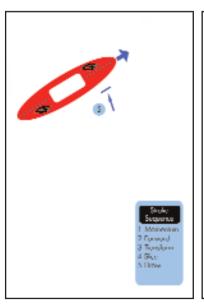


# moving WITH THE TIMES

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## LOW BRACE

Find a large, slow eddyline. Pick a target to aim at, such as a rock or something on the bank, with an appropriate angle. As you approach the eddyline, time the sweep stroke to start the turn at the eddyline. When the boat's bow cuts through the eddyline, make another forward stroke. Once the paddle is level with your hips, slice the paddle out away from the boat and rotate when the blade reaches the surface. You should finish in a bracing position. Once a turn has been achieved, the brace can be swept back into a stern rudder to stop spin momentum.

This is similar to the open canoe paddler's method of a low brace turn on their on-side. Additional advantages in this approach come from the continued momentum the boat has through the turning arc and the emphasis on paddle strokes on the inside. This ensures a positive edge into the curve of the turn. A disadvantage, however, is feeling exactly when to rotate the slicing blade into a brace. If rotated too early the blade will be lifting water.

#### **BOW RUDDER**

Find a clear and deep eddyline to avoid the paddle hitting rocks, etc. Get a good run up and as the boat approaches the eddyline use a sweep stroke to initiate the turn. When the bow cuts through the eddyline pull forward to bring the boat through the eddyline. Once the paddle has passed the knee, the forward momentum is then transformed into a bow rudder by winding up the wrist to rotate the blade. The oncoming water should start to bite on the driving face of the blade. Slice the blade out away from the boat, thus increasing the pressure on the blade face. The boat should carve into a turn. Draw the blade in towards the bow and unwind the wrist. This should re-transform the rudder into the start of the forward stroke. Put in a forward stroke and finish in a rudder to control the turn's spin momentum.

This bow rudder technique has been around in slalom racing for some time. In these modern, short boat times, its application for dynamic and responsive turns cannot be overstated. Hard chined boats can be driven dynamically down rapids and through turns using these methods.