

THE HICKOX CODE

Dragon Boat Paddling Technique

The radical new stroke that's making waves

by Mac Hickox

IN this issue, former amateur Canadian coach of the year, Olympic coach and paddler Mac Hickox details

the radical new hybrid stroke that helped his team win gold over much younger competition at last years Canadian Nationals

From the initial paddle set-up (square in the air) to the exit and recovery, each step is meticulously detailed and explained

Square In the Air

This is the "set-up" or "prep" phase of the stroke, in which the body and balance of the athlete, plus the paddle, are positioned to begin the stroke,

- Height of the blade above the waist is approximately 12-20 Cm, with the blade sq and the paddle in a positive angle and vertical - 90' (i.e. top hand just outside the gunwale)
- Bottom arm is fully extended with fingers hooked on the shaft and the wrist straight or in a neutral position.
- Top wrist is in a neutral position. and the top arm is straight or with a slight flex at the elbow.
- Top shoulder is back and positioned over the gunwale in line with the ear.
- The near hip is rotated forward with the knee flexed and the foot on the footrest.
- The athlete should feel that their weight is on the near butt cheek with their centre of gravity over the water-this is a balance point

The athlete goes forward from the waist with rotation in the hip and torso to achieve this set-up or

prep phase In this phase, the athlete is at the end of the recovery phase and is "Firming" the body in anticipation of the catch - this heightened awareness or anticipation of the catch is crucial - there is a slight hesitation in the "square in the air" position.

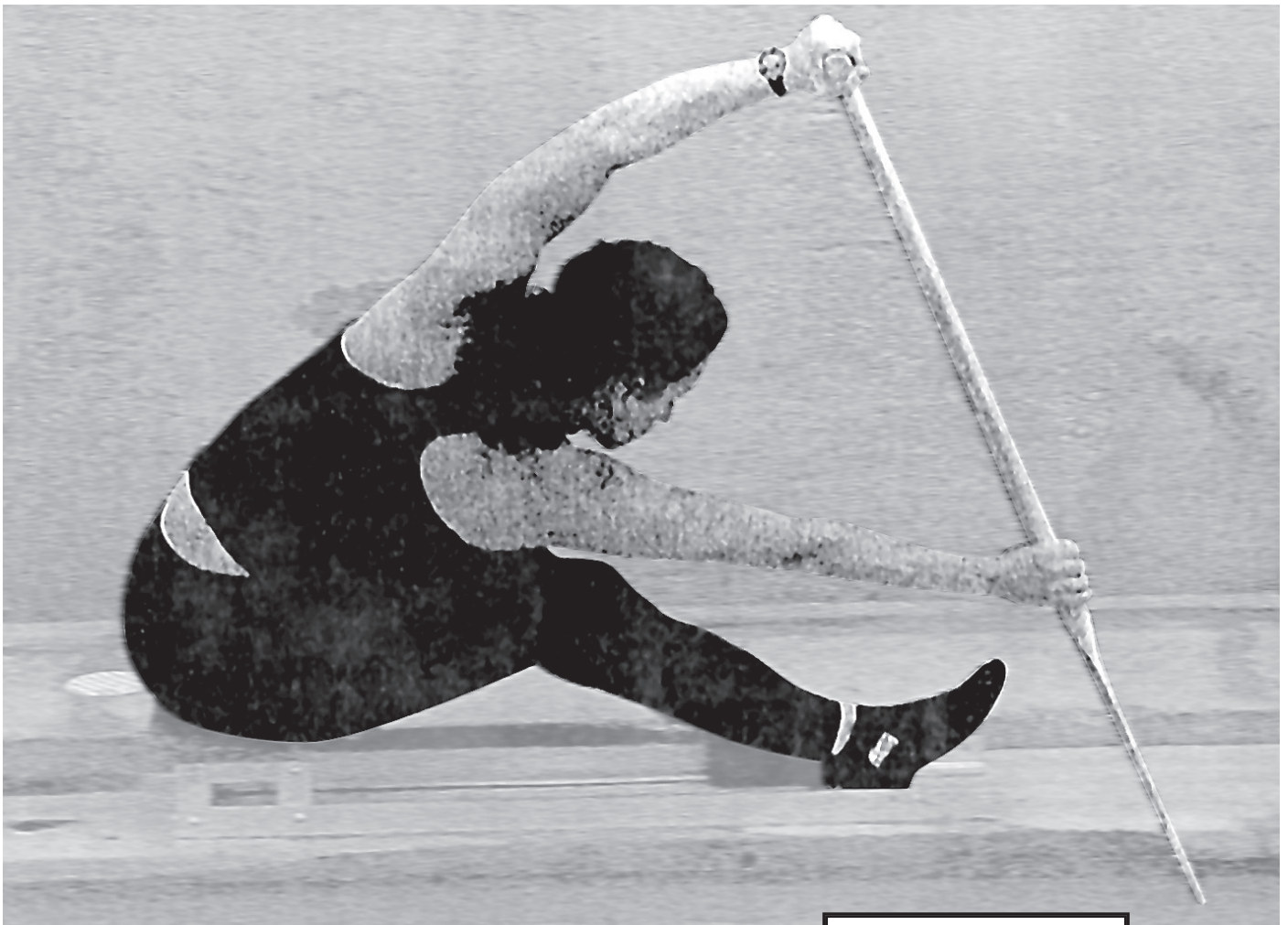
This "square in the air" position will also reflect an A-frame position with the paddle and straight arms, plus another A-frame position with the paddle, top arm, back and inside hip.

Drive and Drop, or Catch

This is the critical phase in the dragon boat stroke; it is what separates the good paddlers from all the rest. It is all about angles - maintaining the angles of "square in the air" while both arms and shoulders drive/press the paddle forcefully into the water. This powerful driving down is assisted by having the weight of the athlete out and over the paddle. The paddler's core muscles are set. In order to avoid catching the water short, the athlete should remember:

- Keep the top shoulder back vs. moving forward.
- Bottom shoulder presses down toward the water, Think of the bottom shoulder moving forward and down vs. back. Think of the bottom hand going forward vs. going back.
- Keep torso and hip rotated, and maintain the two A-frame positions.

The entry of the blade into the water in a forceful manner while maintaining angles from "square in the air" is critical in transmitting power to the catch or lock position.



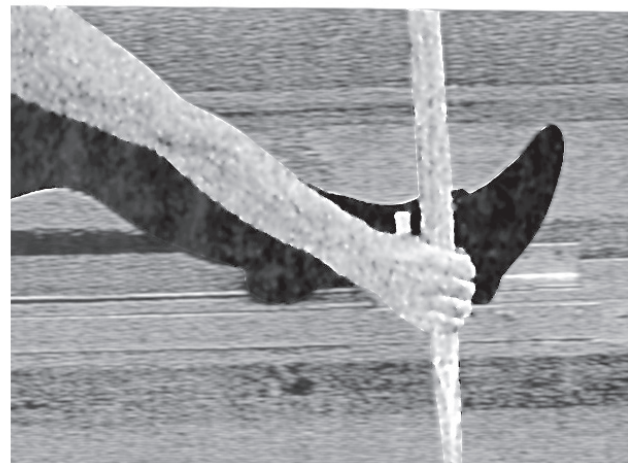
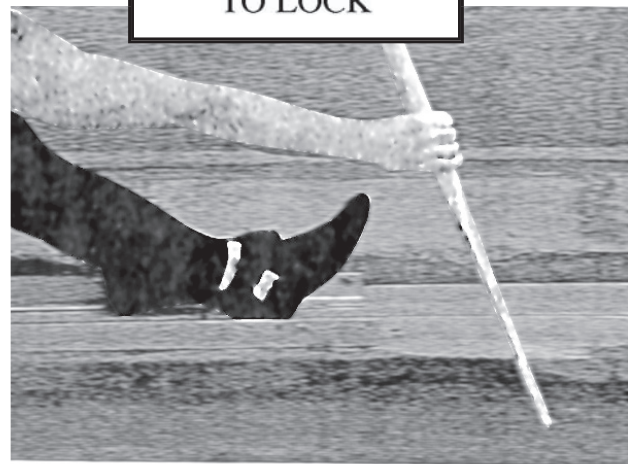
Lock or Press

This phase begins when the blade is totally buried in the water. The paddle is very close to the 90°/90° position. The bottom hand is below the gunwale, with the baby finger touching the water. There is a sequence of events that are occurring in order to maintain a smooth, strong and continuous movement pattern:

- Just as the blade is totally submerged, the near foot exerts strong pressure on the footrest to assist the near hip in beginning a counter-rotation.
- The drive down with the top arm is continued with a steady press in order to keep the blade buried while the bottom shoulder assists in connecting the blade with the water, with a slight shift back.
- The top shoulder is kept back while exerting only a downward pressure, and the bottom arm is straight ---the A frame position of the arms is maintained.
- This is the strongest position in the stroke and the athlete is trying to keep the paddle in this position as long as possible
- The top hand is slightly above the head --- an external cue for the athlete --- the athlete: tries to support their weight on the paddle while sitting up, the blade stays in the 90°/90° position as long as possible. the athlete presses up so that the head and top hand change relative positions as the press phase continues,
- As the paddle angle begins to lose the 90°/90°, the weakest part of the stroke is beginning and the athlete is now trying to accelerate the body and paddle movement patterns.

The summation of joint forces is the principle being applied to this.

DRIVE AND DROP
TO LOCK



STRATEGY SESSION >>>

phase as two counter-rotations will occur:

1. Just as the blade is buried, the near hip begins a backward movement while the other hip moves forward. This is a torque action while trying to keep the paddle vertical --- $90^{\circ}/90^{\circ}$,
2. The torso rotates following the hip movement but is delayed as much as possible in order to again maintain the strongest paddle position.

Exit

With the paddle angle less than $90^{\circ}/90^{\circ}$, the bottom hand is now nearing the: hip and the weakest part of the press phase. The athlete now tries to accelerate through this zone by:

- Squeezing the hip and bottom hand together --- accelerate the speed of body / paddle movements in order to get through the exit as quickly as possible.
- The top hand continues to press. It breaks from the channel (position just outside the gunwale) and moves in and up, toward two o'clock for lefts and 10 o'clock for rights.
- The bottom hand lifts and moves laterally, trying to compress the water trapped on the near side of the blade as it cuts out of the water.
- Remember as the bottom thumb moves forward it is "cued to the hip", which has already started to move forward. Thus the hip and thumb are in concert, executing a strong, powerful and yet smooth, aggressive exit.
- The exit is at the hip. Think of the hip as a wall. and try to:
 1. accelerate off the wall
 2. hip and thumb are in concert
 3. stay on the gunwale: keep weight from shifting inside the boat, keep your weight on the near butt cheek
 4. go forward with the paddle.

Recovery/Relaxation

When the blade breaks from the water, the main emphasis is on muscle relaxation and breathing. The torso is upright, and as the athlete moves forward, a rotation around a vertical axis occurs to establish a strong "square in the air" position. This setup or "firming" position is at the end of the recovery phase.

Summary

Although this dynamic paddling motion contains a number of phases, the coach/athlete must think of set-up to set-up as a powerful, sequential, continuous, coordinated motion. It takes a long time, many kilometres, hours of practice, patience and attention to detail. The art of coaching is in creating drills to teach the patterns of movement. In breaking down a dynamic movement pattern into a series of meaningful static drills with external and internal cues, the drills teach the muscle memory patterns of movement and allow the athlete to feel the desired connection to the water.

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