Crewboat Technical Template

CanoeKayak Canada

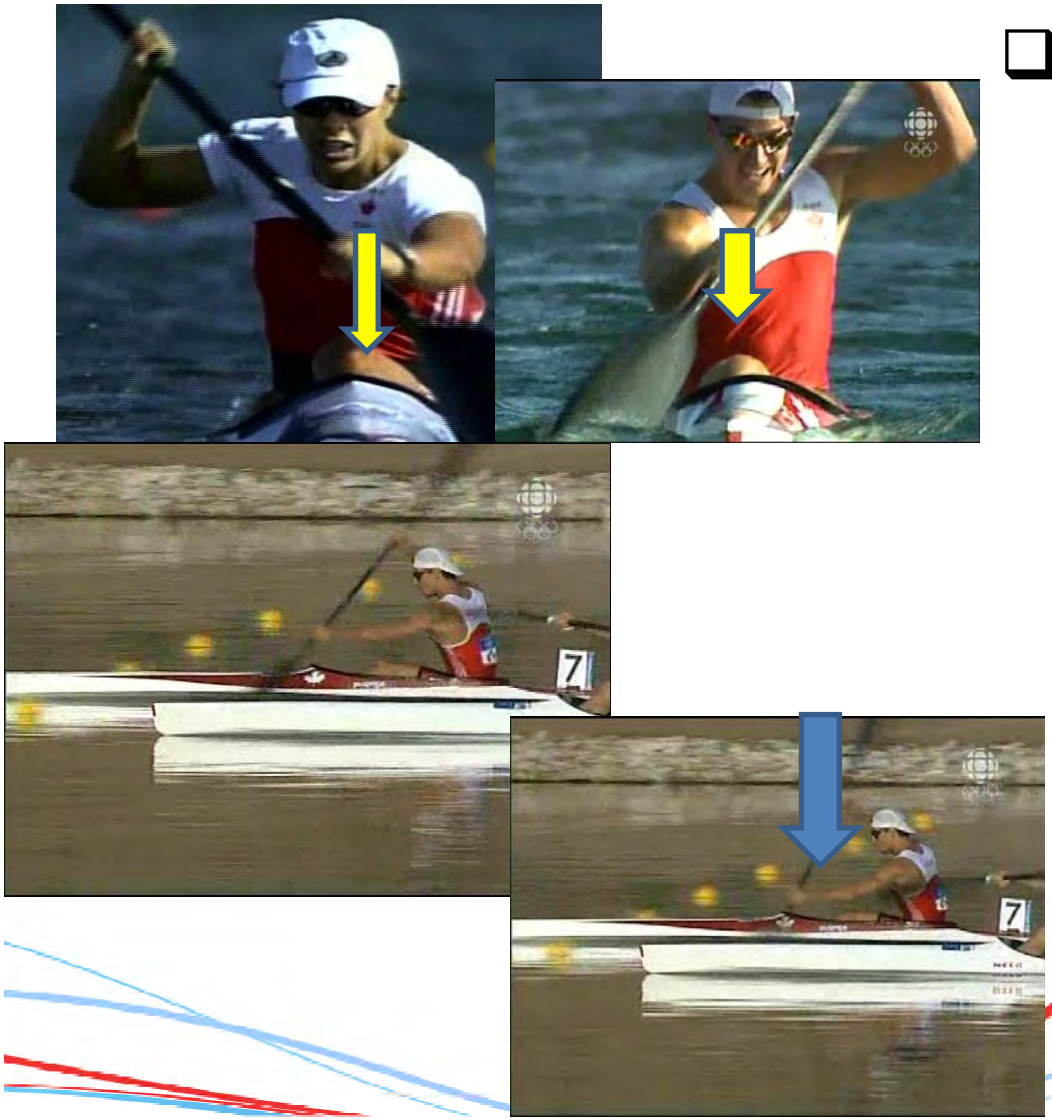
2012

A Review - The CKC Technical Template: "The BLOCK" Concept

DEFINITION: The "*Block Position*"

- ✓ Shaft parallel to chest, moves at speed of body
- ✓ Shoulder aligned with hips
- ✓ HOLD IT FOR THE FULL DURATION OF THE WATER PHASE

KAYAK
Set-Up & Catch



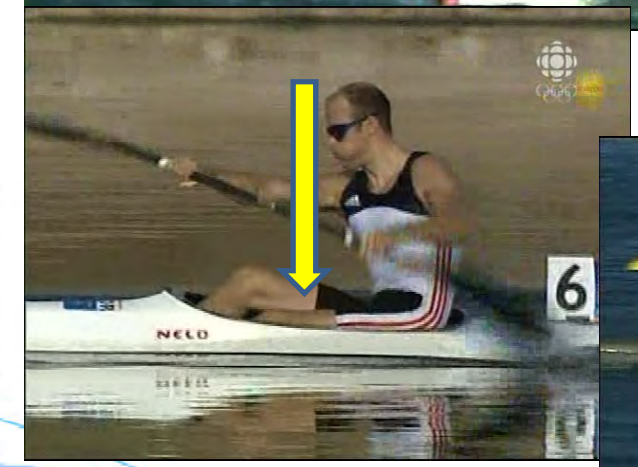
- **Knee on paddle side stays bent and BLOCKED torso stays in full rotation until paddle is submerged.**
  - ✓ Legs and torso held until blade is sunk.
  - ✓ Pressure on Footrest, from two hands down the Paddle shaft, and on paddle side of seat
  - ✓ Hold angle of entry as long as possible

DRAW PHASE

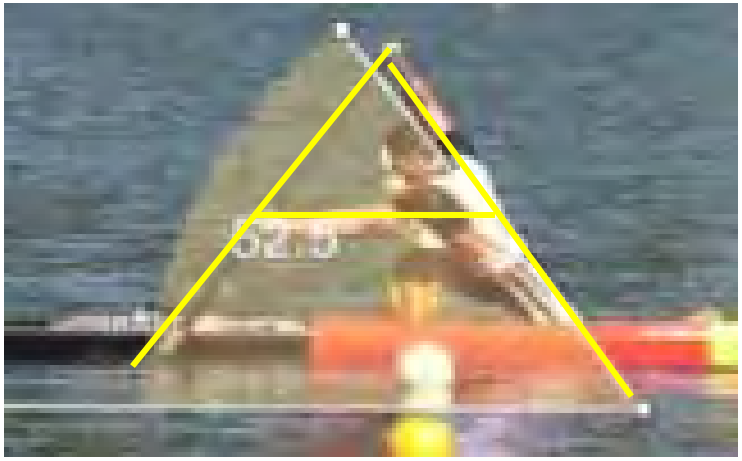
- **Torque and forward propulsion are created from block position – Hold blocked position from start to finish of water phase**
  - ✓ Shaft remains parallel to chest
  - ✓ Leg and blocked torso moves in relation to speed of boat
  - ✓ The boat moves in relation to the speed of the leg and the block
  - ✓ Paddle is fixed in water
  - ✓ Pressure with the top hand throughout that phase – the whole time the paddle is in the water – press down through the shaft with continuous pressure with top hand

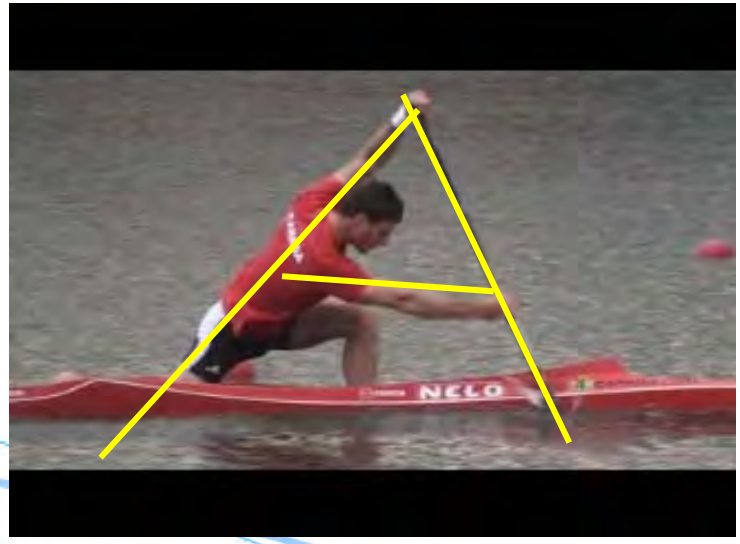
EXIT

- **Leg stays down until finish of stroke**
  - ✓ Keep pressure on footrest and extending leg until blade exits water
  - ✓ Boat reaction - Boat leans toward exit
  - ✓ Blade exits at the hip – ***hand never passes the hip***
  - ✓ Hip / torso rotation finishes the stroke
  - ✓ “top(front) hand” stays where it is – continues to apply pressure until paddle clears the water



CANOE:
Set-Up and Catch

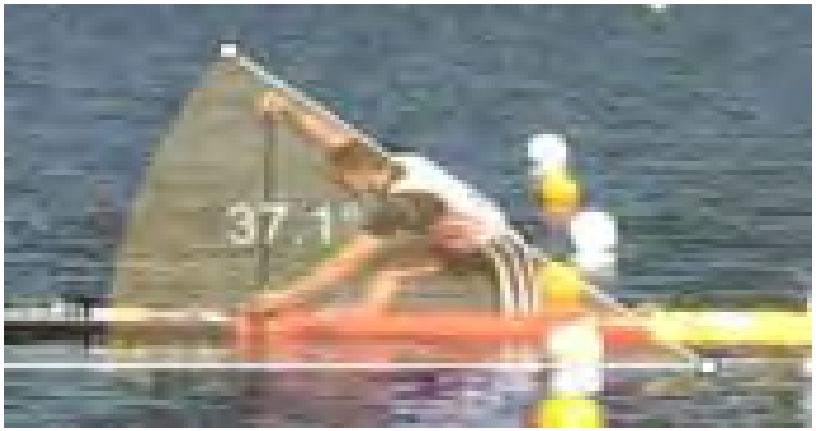




Hip and back held in forward rotation until blade is buried at The Catch.

- ✓ Body remains in blocked A-Frame position
- ✓ Hold rotation in A-Frame until blade is sunk
- ✓ Shift weight to blade and stay on blade from catch to exit
- ✓ Weight goes onto paddle
- ✓ Minimize centre of gravity movement towards the back of stroke
- ✓ No backwards movement of hips to achieve catch

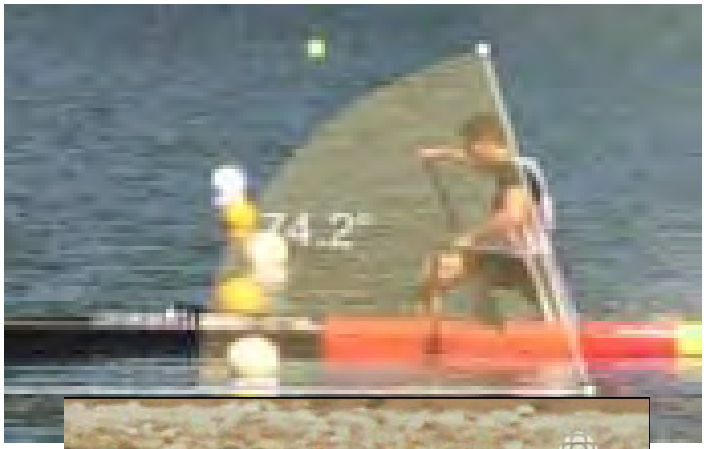
DRAW PHASE



Blade stays vertical during draw phase:

- ✓ Hip counter rotation initiates pull
- ✓ Sit up
- ✓ Hand and pulling shoulder stays parallel to gunwhale until the end of the hip rotation
- ✓ Hold **block position** with arms
- ✓ Timing of holding blade fixed in water
- ✓ Legs are connected to the boat and are *following / complimenting* the hip movement

Canoe: Exit



Body is aligned with kneeling leg at exit

- ✓ Hip comes forward, paddle exits while accelerating boat

EXIT

- ❑ **Hip comes forward, paddle exits while accelerating the boat.**
- ✓ Maintain pressure on the blade by pulling up with bottom arm and pressing down and in with top arm.
- ✓ Sit up tall with slight lean into the stroke.
- ✓ ***Keep moving forward!***

What's the difference between crew boat and singles technique?

- Not much…
- Every criteria of correct singles technique must be *strongly* emphasized and applied in crewboat technique – ie "The Block"

- however…
- Slight variations and additional factors that come into play in team boats that require paddlers to make modifications to what they do in singles.
  - Adaptation of technique
  - Communication and leadership
  - Respect for team mates and trust, respect for the race plan
  - Team work

WHAT ARE SOME VARIATIONS AND FACTORS THAT MAKE TEAMBOATS DIFFERENT FROM SINGLES?

- ✓ Boat speed
  - ✓ “speed” of water and connection
  - ✓ Variations in water along length of boat
  - ✓ higher stroke rate
  - ✓ Affects how / where a paddler finds resistance
- ✓ paddling with 1 – 3 other people
- ✓ paddlers “lower” or “higher” to the water relative to singles
- ✓ Inertia of the boat K-4 / K-2 vs K-1; C-2 /C-4 vs C-1 is huge, very different
  - ✓ Need to overcome the inertia and get the boat to top speed
  - ✓ Fight to maintain the speed of the boat
- ✓ Training is different

Creating the K-2 & K-4

General Rule of Thumb:

- The size of the paddlers increases from 1st position to 4th
- More explosive paddlers in stern positions

Stroke / 1st Position:

- ✓ comfort zone in steering
- ✓ Good sense of rhythm in boat
- ✓ Best technically sound paddler, that can hold technique for race
- ✓ Smaller
- ✓ Fittest, to ensure stroke rate and technique remains for race
- ✓ Good tactical sense

2nd :

- ✓ Larger in size than stroke
- ✓ Good tactical sense
- ✓ In K-2 – most powerful, explosive, and can help push the boat and accelerate it well

3rd / 4th

- ✓ Larger paddlers
- ✓ Longer paddle(may need to increase)
- ✓ Most strength is needed as boat is more efficiently accelerated close to the stern
- ✓ Members that can accelerate the boat as quickly as possible
- ✓ Keep top arms high

Technique Focuses

- There are 2 feelings or sensations for members in the boat: “Pulling” or “Pushing”
  - 1 & 2 position feel they are “pulling” the boat
    - Strong posture, being big in boat
  - 3 & 4 position they are “pushing” the boat
    - keep top arms high to ensure good blade angle, prevent boat bouncing

- Pay Attention to the “BLOCK”
  - crucial that all crew members pay special attention to holding “The Block”
- LEGS, LEGS, LEGS:
  - Must be coordinated throughout stroke, and make sure they do not offset the balance of the boat
  - Feel pressure of foot pushing on footrests together

- Each successive athlete in the boat must be efficient in their catch, draw and exit phases so as to blend into one with the others.

- Line of site/focus : all members must make sure they keep their focus high (keep focus on the head of the team member in front, instead of looking at their back), and make sure your top hand is at the level of the head of the athlete in the front

- Find max resistance in moving water, powerful draw, or connection on blade with water. Feeling of when the paddle is immersed should always be “hard”

- More aggressive, more explosive CATCH

- Stroke and crew must be explosive and “dynamic” in the water. ACCELERATE the boat each stroke!

Set-Up / Catch

- Create time to pause – 2 – 4 members have to accelerate the boat together

- There should be an obvious separation of strokes and a good “pause” between each stroke

- LEGS, LEGS, LEGS:
  - Must be coordinated at set-up and catch
  - Cue: Hold opposite leg down in recovery until the catch
- Catch / finding resistance must be synchronized (it may not be what you think)
- Catch executed even faster, more explosive and aggressive:
  - steeper / acute angles (smaller catch angle than singles), especially in 2-4

- athletes need to feel the acceleration of the boat at each catch - when the paddle is vertical, It is very “violent”
- Solid Catch – Hold The Block:
  - Able to block top arm in order to maintain strong hip and trunk rotations through catch and early part of draw phase

Good Timing and “In Stroke” at the Highest Level – Finding Resistance Together

Draw Phase

- Hold “Block” to maintain strong hip and trunk rotations through catch and early part of draw phase:
  - Careful with top arm / hand to hold “Block”, careful not to allow it to extend too quickly
  - Draw- critical – and holding Block – thrusting arm sometimes extends too prematurely, breaking the block
- Feeling of when the paddle is immersed should always be “hard” – if it is too easy feeling, you have to modify
- Ability to maintain connection with water on blade through the draw phase
- Find max resistance in moving water – powerful pull, or connection on blade with water
- keep top arms high to ensure good blade angle, prevent boat bouncing
- Stroke and crew must be “dynamic” in the water
- Legs, Legs, Legs:
  - Leg – Paddle – Boat Speed
  - Pressure on footrests TOGETHER

Exit

- Finish the exit – must be faster than in singles or doubles as boat speed is so much higher
- “Finish it off” in exit phase under higher stroke rate and higher boat speed
- Paddles need to exit the water all together (aside from the catch).
- LEGS, LEGS, LEGS:
  - Keep pressure on footrest and extending leg until blade exits water

Canoe – C-2

A review of the Main Points from November

Some Quick Points

- Different rhythm in C-2 and C-4 than in singles
- Stroke executed in a shorter time
- Stroke length is shorter
- need to “feel the power in the boat” by the crew members
- Ride of boat is powerful, level and smooth

Setting up the C-2

- Bigger, stronger and more explosive paddler tends to be the stroke of the boat
- Stroke of the boat has good rhythm, powerful catch and solid exit
  - Powerful water catch, good rhythm, ability to achieve quick exit (without a "j-stroke"
- Stern paddler must be able to steer when required – more technically skilled to steer, and can follow movements
- Stern paddler must be able to follow and mesh with the stroke
- Stern paddler has the ability to "reassure" or control the bow paddler during the race

Set – Up / Catch

- Catch angle is sharper, smaller angle than in singles
- Catch is a more forceful, striking catch
- Catch must be synchronized
  - Blade, hips, legs
  - use video

Draw Phase

- Maintaining connection with water during draw phase requires more attention
- Hold “The Block”
- Hips and Legs need to be involved and coordinated– pushing together

EXIT – Recovery Phase

- Quicker, Accelerated Exit:
  - Exit phase requires acceleration of paddle and body movements — faster
- Stroke of the boat quick solid exit, (without a “j-stroke”)
- Ster paddler has to steer when required –
  - Work on timing at exit to maintain connection with water, accelerated exit
- Recovery phase must also be smooth and in sync

ACTIVITY – Video analysis

- In small groups, analyze the crewboat technique on your memory stick.
- Be prepared to present to the entire group on your analysis (if time)
  - Analysis of crew
  - Correction ideas

PRACTICAL CONSIDERATIONS

The Club, FUNdamentals-
Foundations, T2T Levels

~~"I've never paddled 3rd in K-4 before"~~

~~"I can't steer C-2, I've never steered before…"~~

Let Your Athletes Experience

- Ensure your athletes learn to paddle in different positions, regardless of size and characteristics
- Teach athletes the skills required in each position, and the role they play in those different positions
- Change up combinations

Teaching & Learning

- Train to learn the movements of the boat

- Drills, drills, drills
  - Timing drills
  - Balance drills
  - Catch drills
  - Exit drills
  - Set-up drills
  - Legs drills
  - “kinesthetic” drills (eyes closed)

- Video analysis
- Show video from top paddlers
- **train at controlled rates (70 – 80 strokes per minute) to focus on timing – allow the crew to progress to higher stroke rates**
- Perfect the singles technique and “The Block” – be efficient
- Team Work

Final Points on Crew Boats

- Finding the right combination for doubles or fours is part science and art – the gut feeling on the part of the coach
  - Do the athletes complement each other in the area of strength and endurance?
- Athletes need to buy into the concept of a team effort to achieve the long range goals of the program
- Honesty is a hallmark of the selection and training process
- Team boat success is special for all involved, and for the *overall team* chemistry
- The crew is as strong as its weakest link. Increase the level of all the individuals in the boat!
- Find a leader in the boat
- Communication is crucial

Sources and Acknowledgements

- Tamas Buday Sr
- Csom Latorovksi
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- "Racing Canoeing", Csaba Szanto
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