

## Canoe — Tech Chek

### Introduction

The *canoe tech chek* (CTC) is a tool for a coach to use in detecting and correcting technical deficiencies in an athlete's performance. It has been developed as an appendix to the Canoe Technical Template. The CTC identifies the scope of the performance analysis and correction that is expected of a coach in the Comp Dev context.

It has identified the "key performance factors" of canoe technique using the Canoe Technical template as a guide. Each phase of the stroke has a number of key elements that represent the "ideal" for that component of the overall performance.

The coach "in observation" of an athlete paddling, rates each element within each phase of the stroke. This can be done while observing video or in the field. The rating scale uses a range of zero, one or two — 0 — "*Element is not observed*"; 1 — "*Element is observed but is not ideal*"; 2 — "*Element is observed consistently and is ideal*". The coach in utilizing the *tech chek* as a printout gives the athlete a complete technical breakdown of the components that are ideal or at variance from the ideal — Bandwidth Principle.

The CTC also requires the coach to recognize *potential causes of the performance errors*. These causes identify factors that could have an impact on performance and may include: **Equipment**; **Environment**; **Affective**; **Cognitive/Mental**; **Physical/Motor** (**Strength**, **Balance**, **Flexibility**, and **Fitness**). The CTC steers the coach to reflect upon these potential causes based on the gap between the ideal performance outcome and what is actually observed.

**Equipment** - Examines canoe equipment that could be a limiting factor on the performance – length of paddle, type of boat (too advanced), floorboard, footrest, kneeling block, clothing, etc.

**Environment** - Examines any environmental factors that could lead to performance deficiencies – direction of wind, force of wind, waves, temperature, sun, etc.

**Affective** - Examines internal factors that could be related to the performer's perception of the task or activity - fear, anxiety, motivation, etc.

**Cognitive/Mental** - Examines factors that relates to the athlete's thoughts or thought processes that are used to execute a given task or action - lack of understanding, confusion, concentration etc.

**Physical/Motor** - Examines the physical abilities that could have limiting affects on the performance - strength, balance, flexibility, fitness, etc.

The coach now reflects upon the potential causes of any variance, while deciding if the gap between the observed performance and the ideal performance requires an instruction intervention. If instruction is required, the coach must now decide what corrections will address the cause and how these corrections might be implemented.

For example, in the *catch section* of performance factors, the coach may apply a zero to the key element "*weight is on the paddle*". Under the potential causes of this variance from the ideal the coach may check the following columns – Environment – crosswind & waves; Equipment – block is too high; style of boat is too advanced; Affective – afraid of paddling on lake; Cognitive – does not understand that at the catch weight must shift out onto the paddle from front foot; Strength – not an issue; Balance – needs to develop; Flexibility – tight through shoulders; Fitness – not an issue.

The coach critically reflects on the information gathered and makes a decision on the priority of corrections that are required. Also the coach decides which activities, tasks and drills are to be implemented to affect the necessary move towards the canoe stroke ideal.

**NOTE: This tool can be modified to suit the level of the athletes in question...for example, by simplifying / reducing the number of elements within each phase or by reducing the number of variables in the potential causes section.**

<b>CANOE "TECH" CHEK</b>	<b>COACH:</b>	<b>ATHLETE:</b>	<b>DATE:</b>
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Key Performance Factors	Rating			✓ Potential Causes								Corrections / Drills	
	0	1	2	E	E	A	C	S	B	F	F		
<b>Set up</b>													
'A' frame – arms straight – elbow high													
Near hip rotated forward													
Kneeling leg is moving forward													
Trunk rotation – top shoulder back													
Bottom shoulder forward													
Wrists neutral													
Bottom hand – palm open													
Blade height – 120 - 150 cm above water													
Boat is level													
<b>Catch</b>													
Drive down with top arm/shoulder													
Angle at catch is 60 degrees													
Blade buried completely													
Weight on paddle													
Clean entry													
Rotations still in place													
Boat is level													
<b>Pull / Draw</b>													
Sequence of movements is correct													
Near hip counter rotates first													
Bottom hand stays forward													
Arms are fixed – bent shaft													
Top arm presses down													
Athlete presses trunk up													
Paddle angle 90/90 early													
Hip starts to move forward in second half as paddle angle decreases.													
Leg movement complimentary													
Sequence of movements is smooth													
Boat is level													
<b>Exit</b>													
Paddle angle less than 90/90													
Hip moves into paddle													
Pressure continues on the blade													
Bottom arm pulls up													
Top hand presses down and away from gunwale													
Wrists in neutral position													
Finish it off – paddle continues to move.													
Sequence of movements – hip, legs, shoulder, elbow, wrist													
Athlete sitting tall – slight lean forward													
<b>Recovery</b>													
Blade clear of water													
Near hip leads initially													
Rotation begins with hips – lower back, trunk, shoulders													
Top arm moves in, across midline of boat and back up to set up position													
Tension released in arms and hands													
Boat is level and glides													

<b>RATING SCALE</b>	<b>0</b>	<b>Key element is not observed.</b>
	<b>1</b>	<b>Key element is observed but still requires some attention.</b>
	<b>2</b>	<b>Key element is observed consistently with high quality.</b>