

# The Rhythm of the Ice

Ken Hart

When we skate shorttrack there is a **standard** pattern to how we skate.

If you watch speedskating video at <http://www.speedskating.net/> , <http://www.ohnozone.net/> , or at <http://www.isu.org>, you will notice that part of the reason that the skating looks so graceful, is that all the skaters are 'in-step' with one-another. They are in-step, because they are all skating a 'standard track'. Most of their skating is done on the standard track, which they step out of to accelerate, pass, etc... A 'standard track' is often called a 'peanut track" because the pattern left on the ice has the look of 2 peanuts within their shell. This presumes that you have enough strength to skate at least a 15 second lap, and are not a youth.

At the 2006 World Shorttrack Championships, Southern-California coach Jerry Search took some great photos. The whole collection can be seen at:

<http://www.socalspeedskating.org/albums/2006Worlds@Minneapolis/Friday/0003.html>

Some guidelines for skating a 'standard track' include:

- A) A 'standard track' has one set of straightaway strokes per straight (1 left, 1 right).
- B) The rest of the skating is crossover strokes.
- C) We want to be on our right skate at the apex block.
- D) Our first step after the apex should be a 'step in' with our left skate.
- E) We want to start our crossovers before the first block, and the 'lay-in' even earlier.
- F) To adjust your timing for the lay-in, do extra crossovers at the exit of the previous turn.

## Setting up the Straight-Away

In this picture, we can see the last set of crossovers, the skaters in back are completing their last push with their left leg, while the skaters at the front are preparing to place their left skates for their first straightaway push.



Notice that everyone is skating the same track. The skaters at the back of the pack are still pushing with their left leg and the skaters at the front have completed their left push, and are planting their right foot, in preparing for the *lay-in*.



Here is another view of the same position, or slightly later. The left push is completing and the skaters are preparing to *lay-in* from the right foot.



## The Timing of the Lay-In

The lay-in starts, before the first block. Thanks to all the skaters skating a standard track, we can see the progression of the lay-in as we look from back of the group to the front of the group. In the picture below:

The skater off the back (#12) is doing their left blade push in the straight, preparing to place their left foot.

Next is skater #11. They have started to 'fall into the turn' by leaning in with the hip, and are preparing to place their left skate on its left edge.

Skater #10 (Italy) on the outside is in the process of putting her weight onto her left blade, and has nearly finished her push with her right leg.

Skater #22 (China) and the mostly hidden Canadian are both in the process of doing their first crossover.

And the Korean in front (#35) has completed one crossover, and is starting the step-in of the second crossover.

Notice that ALL of these skaters have started their turns well before the first block. And the Korean is starting a second crossover before the first block.



In the picture below, Notice that the left blade is on its left edge before the first block, and that around the time of the first block, the first crossover has started.



This **look of choreography** is possible because everyone is skating the same track. Notice that as the leader approaches the apex block that he is on his left foot. The skater in back is just completing a crossover, and is starting to unweight their left foot.



## The Timing at the Apex Block

Here is another angle of the position at the apex block. The skater in the third position is at the apex block, and on his right skate. The front two skaters are past the apex block, and have started to place their left blade.



As always, here is another reminder that the left foot does NOT push back in the crossovers.



# Getting your Hip Into the Turn

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We talk on a regular basis about the fact that a skater's Center of Gravity (CofG) is located in the hips of a speedskater and around the same height as the belly button.

This is true even in male skaters. Their CofG is slightly higher, due to extra muscle mass in the shoulders, but it is still located in the area of the hips, belly button.

To go really fast, it is important to get your CofG into the turn. Many novice skaters enter a turn with their shoulders, thinking that will improve their lean into the turn. They have made the incorrect assumption that: "Leaning into the turn is the same thing as getting your CofG into the turn. This is not true. In fact, leading with your shoulders normally places your CofG too far to the outside in a turn.

A more correct statement would be:

"Leading with your hips into the turn is the same thing as getting your CofG into the turn".

At the 2006 Olympic Shorttrack trials, Southern-California coach Jerry Search took some great photos. The whole collection can be seen at:

<http://www.socalspeedskating.org/albums/2006OlympicTrialsMQT/1TimeTrials/0001.html>

In this collection are several photos, which illustrate the point: "To go fast, the hips need to be into the turn".



Brigid Farrell, 11<sup>th</sup> place, 2006 Olympic Trials

Notice that her blades are pointed right at the camera, so that there is no "twist" to the photo.

You can see her left hip, but not her right one. Her right hip is covered by her shoulder. Her hips are inside of her shoulders by 3-4 inches in this photo.



Apolo Ohno, 1st place, 2006 Olympic Trials

Notice that his left blade is pointed right at the camera, so that there is no “twist” to the photo.

You can see that the hip is about 1-2 inches inside of the shoulders.



Kristin Biondo, 4th, 2006 Olympic Trials

The Camera has a slight twist to the photo.

You can see that the hips are inside the shoulders. She is going fast enough that she can still touch the ice with her shoulders out, and her hip into the turn.



Kimberly Derrick, 3rd place, 2006 Olympic Trials

Notice that the left blade is pointed right at the camera, so that there is no “twist” to the photo.

You can see that the hips and shoulders are even, with the shoulders evenly hiding both hips.



This photo is lined up with blades pointing away from the camera. You can see the skaters on the left and right have more hip than shoulder into the turn. The skater in the center is lined up with hips and shoulders even.



This photo is lined up with the 3<sup>rd</sup> and 4<sup>th</sup> skater's blades pointing away from the camera. You can see these skaters have more hip than shoulder into the turn.





If we look at a skater from the outside, we can see that everything lines up from left to right within the skaters position.

The skates are side-by-side and parallel to each other. The skates are under the CofG.

The left hand, even though it is on the ice, is inline with the CofG and the skates.

The hip is into the turn, and the shoulders are parallel to the ice.

The final observation is:  
Can you have too much hip into the turn?

## How Low Can You Go?

