## **Setting Up Blade Offset**

By Susan Ellis

I am often amazed at the amount of offset I see on blades in the many clubs I visit. Some clubs tend toward the extreme, while others take a more centered approach. Which is right? Well, once you get to a certain level you have to play with your offset to find what works best with your technique, your lean, the type of track you skate, boot type, cup height, etc.

In general, simple physics should guide the amount of offset you need, and you'd be surprised at how little is actually needed. The goal in skating is to apply maximum force in to the ice from the set down of the blade, right through the completion of the push.

To apply this maximum force you need a straight line of force through your center of gravity to the ice. If you were to stand on one foot on a 1-inch piece of board and balance you would have to stand so that the center of the board was in the middle of your heel and the middle part of your foot between the balls of your feet. This is a direct line of force to your balance point. If you were to move 1 inch to the left or right you would have a harder time balancing because the force is off center. Your blade works the same way. The more centered it is, the more direct the line of force.

Keeping this principle of creating a direct line of force, the only reason to offset your blade is when the boot hits the ice because of an increased ability to lean. And when it does have to be moved, it should only be moved in very small increments at a time.

The right skate will never need as much offset as the left because on the right, it is the skinny part of your foot that is in towards the ice. Therefore this blade should always start out as centered as possible, with the blade coming out from the heel in a straight line from the center of the heel, and the front of the blade coming out very slightly to the left side of the second toe (when looking at the blade from a bottom up view).

On the left, the fat part of the foot is to the ice and will require slightly more offset. Generally, centering the heel and having the toe come out right between the second and third toe is enough offset for a beginner to intermediate level skater to start. As you lean more, and the boot touches the ice, start by moving just the toe over very slightly and keep the heel centered. When you have to move the toe more than ½", then you can more the heel over a little too.

Too much offset will create off-center forces and take way from the force that can be applied to the ice. If the toe is offset too much or is angled in too much you will have problems getting to the ball of the foot and may find the blade slipping out from the heel or mid-blade. If the blade is angled out of the corner you may find the blade slipping out from the mid-blade to ball.

When aligning the blades turn the skate over and this is the view you would have looking at the bottom of the skate:



