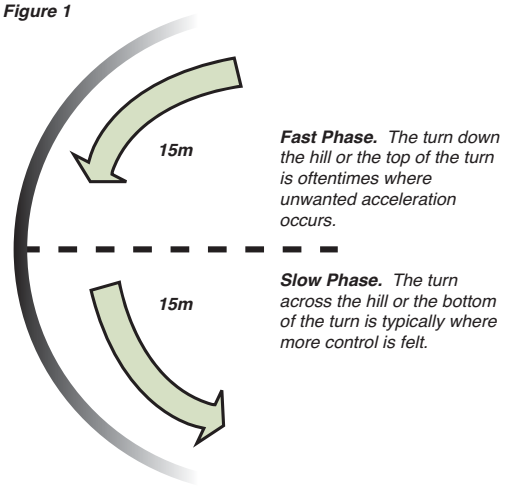
WHEN SKIING ICE, A LIGHT TOUCH WILL KEEP YOU VERTICAL

by JEB BOYD *and* MATT BOYD

Skier photo: Scott Sady; ice photo: iStockPhoto.com

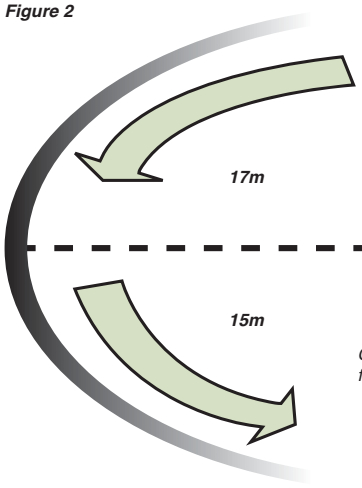
Figure 1



Fast Phase. *The turn down the hill or the top of the turn is oftentimes where unwanted acceleration occurs.*

Slow Phase. *The turn across the hill or the bottom of the turn is typically where more control is felt.*

Figure 2



Stretch the top of the arc approximately 2 meters.

Feel the patience and accuracy.

Gradually tighten the arc to 15 meters at the fall line.

Ice. The skier's brain intuitively reacts to ice in ways that have been reinforced over the years: a natural response to lateral slipping is to try and somehow get a grip on a surface with your feet. Toes curl, feet tip, muscles tense, teeth clench. If those actions don't work, survival instincts kick in and tell your body to try harder. The reality is that in extreme ice conditions, no amount of "gripping" will stop your slipping.

As they say in the commercials, *there's got to be a better way.* And just as they promise in those same commercials, *now there is.* In order to get a metaphorical handle on ice, you'll need the right technique and the proper mind-set. Once you have those, there are few things more satisfying than the knowledge that you've mastered icy conditions.

First off, this isn't about skiing in a World Cup racing environment. Skiing ice involves taking action that will allow the intermediate-to-advanced skier to find success in adverse conditions instead of skipping a valuable day of skiing while waiting for conditions to "improve." The typical skier's reaction to ice and firm snow conditions is counterintuitive: instincts will make you want to stay high and heavy on your edges in an attempt to "cut" into the hard surface in order to avoid losing lateral balance over the skis. In reality, though, such action can simply lead to pushing too hard on a ski's edge and can actually result in the skis skidding away from you.

So what's a skier to do on ice?

If you want to evoke envy in the hearts of your friends and onlookers, try softening your approach. That is, you'll want to keep your skis a little more under your body by using a slightly lower edge angle than you would on soft snow. Using such an angle, you'll want to trace round, smooth arcs.

One of the best ways to visualize such a carving technique is to imagine something we learned from an astute ski teacher a long time ago: to ski ice the same way a chef cuts a tomato. If that sounds crazy, try standing at your kitchen counter and slicing a tomato with a sharp knife. On your initial cut you'll need to use a gentle stroke in order to pierce the tomato's skin. Once the knife's edge cuts through, however, you can make subsequent slices by applying light pressure and forward strokes of the blade.

When you approach an icy slope, let go of your initial instincts and use the edge of your ski the same way you'd use that knife's blade. Instead of trying to mash those edges into the ice, keep your skis under your body and apply light pressure at the start of each turn. The general idea is to slow down your movements during turn initiation (and avoid any abrupt jostling) to maintain lateral balance and fight the natural tendency to shift directly to the highest possible edge.

One way to think about such movement is to consider that there's a fast phase and a slow phase to every turn, and this especially holds true when it comes to skiing ice. The fast phase on ice usually runs from the top of the turn to the fall line and is generally where a skier accelerates as he or she turns down the hill. Conversely the skier experiences deceleration at the bottom of the turn where the skis turn across the hill.

Because our natural, instinctive reaction to sliding downhill is compounded on ice, we tend to rush through the fast phase of the turn, moving our skis quickly and abruptly to the slowing phase. It is this reaction, however, that causes chatter, skidding, and loss of traction. Back to the tomato analogy, rushing turn initiation with harsh movements would be like taking a cleaver to a tomato—you'll cut through it all right, but don't count on being able to use the finished product. It's during this initial portion of the turn when too much rotary and/or edging movements can create havoc. Instead, you need to slow these movements down to make sure you have just enough to get the job done.

LEADING WITH A COLD SHOULDER

The next time you find yourself on an icy slope, practice "slicing the tomato." Start out by setting up a base point for your next moves. Begin the process by making a series of carved, medium-radius turns on gentle terrain. Be sure that all of your turns have approximately the same radius—for instance, make each turn about 15 meters (fig. 1). Additionally, you'll need to pay close attention to your movements, sensations, and accuracy at the top of each turn. Focus on your tipping and guiding movements here. Are they harsh, quick, or abrupt? Do you find yourself standing on your inside ski because you occasionally tip too far to the inside? If so, try to slow these movements to an appropriate level.

Once you have established a baseline, begin stretching the first half of the turn by an extra 2 meters or so (fig. 2), before returning to a 15-meter turn radius at or around the fall line. (Although it might sound like a case of obtuse semantics, it's important to focus on *stretching the top* of a 15-meter turn instead of *tightening the lower half* of a 17-meter turn.) Compare your sensations at turn initiation with those of your last run. Note that moving with the intention of creating a larger arc at turn initiation helps slow down rotary and edging movements, leading to more precise and controlled ski hook-up and better lateral balance. Similar to the knife on the tomato, the skis move gently as they cut into the ice, providing a smooth, controlled turn initiation, allowing for a more successful turn completion.

At the end of such a drill, some skiers might admit that they feel as though they're being "passive" or "lazy," assuming that they're basically creating a drastically asymmetrical turn. Ironically, what's really happening is that the skier is creating powerful, accurate turn initiation over one of the most challenging terrains you can ski. Basically, the individual employs a consistent radius from top to bottom—pressuring the skis throughout—and then removes the pressure at the finish of one turn as it leads into another.

When doing additional run-throughs of the drill, practice moving the point where you tighten the radius (e.g., from 17 to 15 meters) to various points along the arc of the turn. By employing the new, more accurate movement pattern, you should be able to tighten the radius above the fall line as well as below it. You can also explore different turn sizes, applying the same concept of "gently slicing the tomato" throughout to capture a feeling of the kind of finesse you'd experience during more desirable conditions while producing a similar level of symmetry, shape, and control.

CONCLUSION

By using solid, accurate, and precise movements at the top of your turns on an icy slope, you'll be in a position to guide your skis through each arc as you maintain a delicate interaction between friction and balance. Although your skis won't grip the ice completely, the use of careful edging will offer enough connection to the slope's surface to provide some confidence on a slick surface. With the right mind-set and skill set, an ice day can morph from a frustrating experience to a great time on the hill. Plus, you have the added satisfaction of conquering slickened slopes that would normally send mere mortals indoors for a game of checkers or bridge. Why not don your superhero tights and enjoy the less crowded slopes? 32°

Jeb Boyd is serving his second term as a member of the PSIA Alpine Team. He is also an examiner coach in PSIA's Eastern Division.
Jeb's brother, Matt, is also a member of the PSIA Alpine Team. In addition, he coaches Eastern Division's development team. Together, Jeb and Matt run their own alpine training and consulting company, Arc2Arc, based in Canon Mountain, New Hampshire.