NTN Revelation

Contributed by Craig Dostie
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Sometimes you need to make a wrong turn to know what the right way is. Or as National Lampoon pointed out several years ago, two wrong (left) turns don't make a right, but three do.

Such, it seemed, was my experience with the New Telemark Norm (NTN) system. But all is well that ends well. Here is the story of how, despite clinging to established ideas and norms I broke through to a NTN revelation.

Keep in mind I'm an old leatherneck who waited four years to switch to plastic boots, so I have a history of being cautious with new technology. My preferences are driven by a pragmatic desire to minimize weight because I prefer to earn my turns. The result is a preference for lower cuffed, 3-buckle boots, limits on ski girth to 80+ mm, straight 80mm climbing skins, and 3 lb free heeling, free pivoting binders. Some call that a compromise, I consider it judicious balance. It's more than enough power for navigating 50 degree couloirs, or 38 degree bowls of waist deep powder.

First Turns, January 2007

My first impression of the NTN system was surprisingly positive and the results are online and in Backcountry Magazine's annual Gear Guide for 2008. Those first turns may have been wrong, so to speak, but only because the beta version tested wasn't the version that showed up on retailers shelves Fall 2007. At the least it proved NTN had potential.

Second Turns, March 2007-08

It wasn't until getting on the production models for 2007 that I choked and began to seriously doubt the value or necessity of NTN. I was blissfully ignorant of the necessity for more power to yield better control with super fat skis.

With NTN there is a rather firm limit of about 40 degrees to the range of motion the boot can make without causing it to deform. Once the heel has gone past the 50 or 60 degree range, which it does by the cuff bending more around the ankle, the bellows then collapses onto your foot. If you crashed, or over compressed, or simply prefer deep knee teles, then your toes would eventually cease to exist. As a result all models of NTN boots were stiffened between the beta and '07 production versions to prevent the toebox from collapsing. In addition, Rottefella stiffened their spring offerings.

Unfortunately those changes stiffened the entire system to the point where the smooth, sweet engagement phase of the telemark turn was completely lost. In testing we noticed that power was transferred to the tip of your ski even before you lifted your heel. That's fine for alpine turns, but the sensation of telemarking mandates a slow, progressive engagement.

I was aware of these problems before testing commenced this season and knew enough to avoid the overly stiff boots. Certainly Scarpa's softer flexing boots for next season were an improvement, but in direct comparison to existing 75mm systems it wasn't enough. The 75mm systems may have lacked the edging power of NTN, but NTN lacked the smooth, progressive engagement that is a hallmark of the telemark turn. The NTN system still turned on like a step function. The result was a sort of fish-tail response of the ski, where the tip would engage but the skier wasn't ready to fully load it.

A part of me was also wondering if perhaps a shift in style was necessary. Indeed, the transition from leather to plastic required adjustments, but the result was completely worthwhile. And while NTN may require a similar adjustment in style, it appeared to elude most of us. Clearly, more testing was required.

Third Turns, May 2008

The third time was more than a charm. It was a revelation. I'll admit I was secretly hoping to continue being unimpressed, even annoyed. It was a combination of Rottefella's NTN bindings, G3's El Hombre skis, and Scarpa's Terminator X-Pro that did the trick.

Shredding fresh pow on a firm base with big sticks and Scarpa's Terminator X-Pro
The fluidity and responsiveness of this relatively behemoth rig hit me upside the head like a baseball bat. It seems that, besides matching boots to skis—a higher cuff with a wider waist—one should also consider matching bindings to skis—more width demands more power for adequate control.

It turns out the excess power in the initial phase of a telemark turn with NTN equipment was magnified by using low fat skis, in particular K2's World Piste. However, once paired with modern fat skis, such as G3's El Hombre or Karhu's new Storm, that excess power at the beginning of a tele turn was perfectly moderated resulting in a more familiar smooth engagement. There was still a twinge of suddenly turning on, like a step-function, but nothing like it felt with smaller planks.

To superfat ski aficionados it seems obvious, and I'm sure I've suggested more powerful bindings are advised for bigger skis in the past but part of the reason I didn't fully comprehend the depth of that generalization myself is because I had never experienced adequate control of beached-whale sized skis with 75mm bindings. Perhaps if I'd beefed up the HammerHead to #4 I'd have been more satisfied, but inherent biases aren't easily overcome (see above).

The NTN really kicks in once you're in the power phase of a tele turn-especially if you're on skis wider than 100mm at the waist. As you raise your heel with a 75mm binding, your boot lifts off the bottom of the toeplate, thereby reducing the binding's hold on your boot. There are simply limits to how much torsional rigidity you can eek out of a wedge shaped toe box. The higher you lift, the less sidewall contact is made and lateral control must, of necessity, be compromised.

With NTN your boot is grasped in a box that holds the sole of the boot rigidly from side to side. There is a bit of baseline wiggle in the baseplate, but nothing compared to the large flex of a 75mm boot sole. As a result, transferring power to your edges is more direct, and hence more control is experienced with fat, super-fat, and even obese skis.

Thus, another nice side affect was the performance of fat skis on firm snow. Physics predicts that narrower skis will hold an edge better on firm snow than fat skis. All things being the same, if the binding can provide a tighter lateral grip, as NTN does compared to 75mm bindings, one would expect better firm snow performance even with fat skis. And so it is.

The obvious corollary is that big boots and powerful bindings can over power low fat skis. In hindsight it appears this was a key factor in my disappointment with NTN this year. In addition, it pointed out flaws in our test methodology. In simple terms, I was assuming that what had worked before would work today. The problem was the method may have been fine, but using skis that are out dated with current trends yielded bogus results. Recognizing this was key to finding where NTN works, and doesn't. Thus, even though we started out wrong, the results weren't a waste, just unexpected.

Bottom Line

For those who prefer their ride wide, NTN offers a system that promises to improve big rig responsiveness by infusing it with unrivaled power and lateral stability unheard of in the telemark world. Indeed, for those who have concluded that telemark will always be second to alpine in terms of downhill performance, the New Telemark Norm is the first evidence that belief may soon be outdated.

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