Director’s Turn

By Len Bauer
PSIA-E Alpine, Level III
AASI Snowboard, Level II

Director for 21 years
33 years at teaching
U.S. Ski Coach Assoc.

We are by far the strongest coaching, skiing and snowboarding school in the Southeast. Just look at the statistics. Our School that employs about 70 instructors includes:

- 13 PSIA level 1, 8 PSIA level 2, 5 PSIA level 3
- 15 AASI level 1, 3 AASI level 2
- 1 USSA level 1, 1 USSA level 2
- 5 Children Specialist 1
- 5 Ex-Directors of Snowsports Schools

not to mention PSIA certified and accredited trainers. Between all the instructors we have over 650 years of teaching and coaching skiing and snowboarding. How impressive. I am proud of all our instructors and most proud of Sam, Lili and Dakota, my three children, that have been able to grow up here at Sugar Mountain. This has been the best group of instructors and people I have ever worked with. A special thanks to

- Shannon and Charles who take care of the Bears
- Jim, Witold, Zack and Z.T. who help train the skiers
- Aaron K, Aaron M, Billy D. and John who help train snowboarders.

It was great to have John H. back this year. Aaron, Ross and Zach did great coaching our ski and snowboard teams this year. It was great to have Zach back. I think the ski and snowboard teams are moving in the right direction.

Getting open early and getting out with everyone for early skiing and snowboarding clinics got people excited in PSIA and AASI. Everyone who went for PSIA or AASI, I feel, we as a team got them ready.

A big, big thanks to Dwayne Dancey, who helped me out so much taking care of the people who come to us for help. We are a great team here at Sugar Mountain. Safety, fun and what we learn is why we do this. I really love coming to work with my friends
and being able to have my kids grow up at Sugar. Life is good when you get up in the morning and come to Sugar to ski, snowboard, teach and coach, and be with friends. And most of all, I feel we are a family. And you girls behind the desk – we could not do it without you. Thank you.

Thanks to Wendy who moved to group sales. We missed her at Ski and Snowboard School. But, it was great for Sugar because Wendy did a great job taking care of the groups that came here. We are a great team working together. We have the best mountain, best snowmaking (thanks Dave), best grooming, best Ski Patrol (thanks Tommy), best owner president manager Gunther Jochl who puts it all together so we can come to ride on the best snow in the Southeast. We should be proud to be part of the best mountain, best snowsports school and best group of people in the ski and snowboard world.

THANKS TO ALL!

From the Top

By Witold Kosmala
PSIA-E Alpine, Level III
K2 Ambassador

Yes, “thank yous” are all around. On the behalf of everyone in our Ski/Snowboard School, I want to thank our Director, Len Bauer for everything that he has done this season, including changing the plastic bags in the garbage cans. I doubt that activity is in his job description. Len had influential role behind the organization of all the PSIA/AASI events that were held at Sugar and were filled to their capacity.

Now, let me move to a selfish topic – that of myself. You are probably shocked about this because it is not a true reflection of my character. However, I want to use this opportunity for a purpose of motivating all our readers.

It is my time to celebrate. Yes, another day to live, another opportunity to make a difference (hopefully) for the better. This is my daily belief, and it is now stronger then ever. On March 4, I am celebrating 5 years since my life threatening skiing accident. I adopted this day as my new birthday. Indeed, I live on borrowed time, my life has changed, my frame of mind has been reshaped, my body has been patched up. I celebrate every day, and especially my 5th birthday. I celebrate whenever I do not wake up at night due to nerve spasms. I celebrate when I tie my shoes, I celebrate when I stand up from a chair and can actually walk away from it. Many people take these sorts of things for granted, but for me they cause issues. So many times my degenerate hips lock up when I sit, and standing up is difficult. There are times that after sitting it takes several minutes after I stand up before I can actually put any weight on my right leg. (I pray that this does not happen when I need to get off a chair lift on a hill.)

For me, it is impossible to put my accident into the past. Don’t get me wrong. It does not hunt me, does not give me nightmares or bad feelings. I just feel its effects every moment of my current life. It was an experience that was part of my life to go through. Interestingly enough, I knew that it was coming – just did not know where and when. Not much before the accident I remember talking to my wife and kids at the dinner table about what steps they should take if something was to happen to me. I knew I would get caught up in a “storm,” but just wasn’t sure when.

Now is time for a “clean up after the storm.” But, with my body many things will never be the same. Nerve damage is one of them. My left arm all the way to my thumb is partially numb. I can feel the touch, but faintly. However, other fingers on the left hand are OK, so I can still play violin!!! The left leg is also partially numb all the way to my little toe. Right leg is much worse. That’s the one that was shattered, has muscle flap, skin graft, rods, screws and staples put in, hematoma, hip more degenerated then the other side, etc. That leg has total numbness in the hip and mostly from knee down. You could poke me with a needle and I would never know it. But, I can feel the bottom of my foot and toes – essential for skiing. Other then severe movement restrictions in my hips, probably, worst of all: I have very limited dorsi-flexion. I can stand at 90 degrees, but cannot push boot tongue past that point. When I bend my leg to put knee over my toes, the heel comes up 3 inches. (Maybe I should pick up telemarking?) As you can tell, my ski boots are highly customized. Yes, both, since when my right leg goes on its toes, knee goes up, and it is very difficult to ski when one knee is 2 or 3 inches higher then...
the other because the pelvis gets also tilted. And, yes, you guessed it, pain all the time.

Thanks to great technology, I also have nice heaters for my boots. My circulation used to be very good, but now, with veins going sideways in my lower leg, toes get cold quickly. Even compression stockings, that are an absolute must, do not help enough. Furthermore, flexing calf muscle actually flexes my shin because that’s where the calf muscle was actually placed. Very weird!

So now you might wonder, why continue skiing? Perhaps investing in a rocking chair and rocking my life away would be easier; feeling sorry for myself and making life for others a misery as well. NO, skiing is my passion and love. A stress relief, an expression of self, change of pace, a thrill, a challenge, a sport to share, opportunity to help others and send a message. I let medical and technical advances help to put me back on the slopes and continue my journey of life. Everyone has hurdles to get over. Many have hurdles much bigger then mine. Now, I can relate to those people a little better. But, I want you to know that it is NOT the skiing that I live for, it is skiing that I live THROUGH, (among many other things.)

My message to you is: don’t give in to your problems, work through the deficiencies, believe in positive outcomes and try to leave everything better then when you found it. Be thankful for life, live your life to the fullest. Determine what matters to you the most and live by that. Don’t just “throw in a towel” and quit. Instead – count your blessings. It could be always worse.

Here is a secret: in my accident, when I was tumbling and flying through the air onto the rocks and trees on the side of the slope, I very clearly saw no possible survival. I DID throw in my towel and said: “This is it. It will take a miracle to get me through this....” And the miracle came indeed.

So now, back to our publication. I am thrilled with this Peak Performance. We have so many wonderful things to share with our readers. I hope you will enjoy this issue as much as I enjoyed putting it together. I also strongly encourage you to look up our previous publications and reread some of those great articles. Journey on to my web page that can be found at

www.mathsci.appstate.edu/~wak/

and look for Peak Performance posted on the bottom of the page. They can easily be downloaded. Also, please, don’t hesitate to write me at Kosmaw@bellsouth.net. Remember that our intentions for Peak Performance are to promote the snow sports to the best of our abilities, so your ideas are most welcome!

Don’t forget the great holiday of EASTER coming up at the end of the month. Since March is National Nutrition Month, try not to eat too much candy.

Main Course

Why Smaller Areas Produce World Class Talent

By Tom Butler
PSIA-E Alpine, Examiner
Ski School Director, Sugarloaf, Maine

Do you want to know why Rocky finally beat Ivan Drago in Rocky III? It’s because he went back to basics and made use of everything in that Siberian barn where he trained: wagons, bags of rocks, he even climbed a whole mountain range in a leather jacket! He used everything at his disposal and killed it.
Drago was seen as the presumptive champion with all his technology and support, plus he had Brigitte Neilson monitoring his progress. How could he lose? I mean seriously, the might of the Soviet Union vs…. Rocky; not a fair fight. Drago should win every time, but he doesn’t. Just as why nearly 40% of U.S. Olympic alpine medalists over the last 60 years have been from ski areas with less than 1400 feet of vertical. Brantling Ski Center and Buck Hill, Cemetery Hill and Swain, Gunstock and Lutsen; these areas among other smaller areas have produced Olympic greatness. What insights can we gain from this?

Think of some of our nation’s biggest and most famous resorts such as, Vail, Aspen, and Park City. All have tremendous terrain and development programs. They host World Cup events and possess world-class training facilities for their athletes. These athletes should be sweeping podiums the world over, right? Or think of it this way, Harvard is arguably the best college in the world. It would stand to reason then that all who have a Harvard degree are the best in their fields and are wildly successful in all that they do. However, this is not true just like how skiing success isn’t tied to the biggest vertical drop or state of the art facilities. What is it then that allows ski areas with the word ‘hill’, in their titles to produce world-class athletes? Coaching certainly has a hand in a program’s success, as well as vibrant development programs with support at all levels, but there’s more to it.

The next time you are out skiing, take the time to watch some of your local race kids or ski school instructors train. When they finish a course or come to a gentle beginner trail, do they straight line it for the lift? Or do they stop, clear their heads and proceed to practice wedge turns or painfully slow open track parallel or some other fundamental drill? I for one rarely see it at my mountain but that is precisely the level of practice that is required for greatness.

Warren Witherell, while working with a US Ski Team camp in Europe back in the 1970’s had the opportunity to observe a rival team training on a nearby course. That team’s athletes repeatedly finished the course then ran it straight to the bottom of the t-bar. All that is except one athlete, who collected himself and proceeded to do very slow giant slalom turns all the way to the lift, after every run…every day. On that glacier, Coach Witherell was observing a key reason why Ingemar Stenmark would go on to be the most successful ski racer in history. He used every inch of terrain at his disposal and continued to refine his movements, even when podium finishes were commonplace for him. Was this method the secret to Stenmark’s success; on some levels, yes. We need to understand what slow GS turns over moderate terrain, in the hands of a world-class skier can do.

The most successful people know more. They aren’t necessarily smarter, but they do know more. Top performers, in any field study their craft incessantly. Quarterbacks watch video, chess players study volumes of matches long since played and pitchers know every detail about the person squaring off 60 feet 6 inches away from them. More knowledge presents more options and allows the individual to look further ahead. For instance, tennis serves regularly reach speeds of 150 mph. It takes about a quarter of a second for the ball to make it to the opponent from the time it leaves the racquet. If players focused on the ball, it would be past them before they could get a racquet on it. The best tennis players look at their opponent’s body for clues that hint at where the ball will go so that they can move to that spot before the ball has even left the racquet.

For a baseball player, hitting the ball is extremely difficult. Batters improve their chances by searching for clues, about the pitcher and his delivery. By watching the pitcher’s body in motion, a batter gains extra time prior to the ball being released to make a decision about what is coming at him. The early information affords him time to react, time to draw on their store of pitching scenarios, and respond with the appropriate swing.

The greatest athletes, artists, and musicians use information to improve their performance, and they take it further than other competitors. The 80-20 rule states that 80% of your gains in a sport occur quite rapidly. The last 20% is the elusive bit that separates the ‘best evers’, from merely the greats. Many athletes ‘practice’ their sport on a weekly, if not daily basis. What are we ‘practicing’? What specifically is being trained? The best athletes once again train specific movements. It takes roughly 10,000 repetitions of a single movement to commit that movement to memory. Once you ‘got it’ though it’s safe right? Not so fast, because once you have it, you kick into what researchers Paul Fitts & Michael Posner termed the autonomous phase of performance. Basically the
athlete is on autopilot, clicking into an autonomous mode and performing easily without much thought. Top achievers fight to stay out of the autonomous zone by constantly “focusing on their technique, staying goal oriented, and getting immediate feedback on their performance” because this is where the final 20% ‘pot of gold’ is. These athletes train specific aspects of their sport in unusual situations to keep their movements and attention sharp. Soccer players will practice barefooted to dial up the sensory experience and focus their attention on a new facet of their game. Runners will train on sand to increase strength and endurance. Tiger Woods, in addition to the thousands of sand shots he has grooved will take it to another level and step on his ball, before trying to hit it cleanly. It is practicing that one in a million shot that makes him so good but that very shot is nothing without the foundation that he has spent his life working on.

Training fundamentals isn’t sexy. It is tedious! Similarly, working on excruciatingly slow open track parallel on novice terrain could scarcely be described as thrilling. But this is where the gains are made, where that extra 20% lives. Engaging in high repetition, solo practice, designed for your sport is hard. Mentally, this kind of specific practice is taxing. Renowned violin instructor Leopold Auer keenly understood this when he commented, “Practice with your fingers and you need all day. Practice with your mind and you will do as much in one and a half hours.”

Phil and Steve Mahre set up courses and hiked after school to practice ski racing. While the challenge of going faster is fun, they would make the courses more challenging in order to keep it fresh. Without realizing it, they avoided becoming autonomous with their movements. Belgian soccer coach Michel Bruyninckx commented on his athletes, saying that, “By constantly challenging the brain and making use of its plasticity, you discover a world that you thought was never available. Once the brain picks up the challenge, you create new connections and gives remarkable results.” For the Mahres, their brains picked up the challenge and the White Pass turn was born, which led to Olympic, World Championship, and World Cup successes.

Here’s the bottom line: practice is hard. Deep practice, the kind of practice that sees athletes incessantly training specific skills and weakness, for hours on end by themselves is excruciatingly hard, which is why it is so difficult to be the best, which brings us back to our alpine Olympic medal winners. If Aspen and Vail are the biggest and best then why aren’t their athletes making up the whole roster of the US Team? Coaching of course cannot be discounted, but I feel a major part of athletic success is using what you have at your disposal. Diann Roffe Steinrotter got her start training at the Prantling Ski Center outside of Rochester NY. Lindsay Vonn came from Buck Hill Minnesota and fellow Minnesotan Cindy Nelson trained at Lutsen. World Championship DH medalist AJ Kitt grew up skiing at 650 vertical foot Swain Ski Resort. Terrain is important but what goes on between your ears is more important. Mentally these athletes were forced to train harder, to be more creative, because they couldn’t rely on vertical drop to train them. Every bump, berm, slope and ripple became a training tool, to help keep it fresh and give them more information.

These athletes used every inch of their limited, spartan terrain to their advantage. There will be only one Stenmark, but we can follow his and other’s leads when we go out to ski. Look at every green circle between you and the lift, slow it way down, keep the practice fun, and see an opportunity to learn more.

Tom Butler is married and has 2 boys (7 & 4 years old). Tom is a Director of the Sugarloaf Perfect Turn Ski and Snowboard School as well as Professional Ski Instructors of America Eastern Division Examiner. In his off season spare time he enjoys running and camping with his family.
E = M C² and the Curly Footed Shuffle

By Gordon Carr
PSIA-E Alpine, Level II

Well, maybe it isn’t exactly Einstein’s famous formula which is related to improving your crud skiing with the Curly Footed Shuffle, but there is a formula involved and I’ll get to that point in a moment. I thought that what with the spring conditions and the heavy, loose snow which bunches up as the day goes on, this would be a good time to make a few suggestions for improving our skiing performance in crud. Cut up crud…chicken heads…sierra cement…slop…mashed potatoes…glue and goo, no matter what name you have for it, bunched up, heavy snow calls for a little “extra” to ski comfortably. (NB This article is NOT about skiing breakable crust, especially unpredictably breakable crust; unless you are an incredibly experienced, powerful and athletic skier who can do hop turns or leapers down the slope, breakable crust of either variety is not for the faint hearted.)

But to the background for this article…a really very accurate mental picture of how it looks when someone is NOT technically comfortable skiing bunched up snow can be obtained watching the Magic Carpet stop and then start up suddenly with inexperienced and unprepared beginners on it. The carpet stops suddenly (in crud, the skis slow down suddenly upon impact with a pile of glop) and the beginner typically bends forward at the waist. Instead of the usual long pause, visualize that the Magic Carpet starts up almost instantly after it stops, just about the time the beginner has bent forward (the skis suddenly speed up again as they, finally, come through the pile of crud). The usual visual scene on the Magic Carpet with the sudden start, is the beginner then straightens up too quickly and too much, off balance to the rear, while their hands come up over their head. Same too when watching someone ski chopped up conditions with which they are uncomfortable and technically unprepared. They ski cautiously and slowly, hit a pile, the skis slow down and the skier bends forward at the waist a bit. Just as they are trying to straighten up, the skis continue on through the pile and speed up suddenly, and the beginner is thrown off balance to the rear, weight and balance shift suddenly onto their heels, and their hands and poles jerk up toward their head. On just such a crud day, this pattern of bowing forward and being thrown off balance, is the more typical picture when folks aren’t comfortable in crud: repeated breaks forward at the waist then hands up over head with balance thrown back towards the tails of the skis. One of the tactics you need to overcome this repeated slowing and speeding up of the skis, but out of synch with the bending and straightening of your upper body, is a strong and disciplined “core”. I sometimes visualize my belly button getting aggressive and pushing through the pile of glop…for me this seems to add discipline and firmness to my core (also provides a humorous visual image).

But to the formula: OK, it isn’t E = MC²… but it is “Momentum = Mass × Velocity”. Although this is the technically correct formula, I believe the average Joe Six-pack thinks about moving objects and the destructive force thus generated more like “the heavier a moving object is, the more damage it will do if it hits something versus a lighter object moving at the same speed”. Conversely in everyday parlance, “the faster something is moving the more destructive damage it will do if it hits something versus the same weight object moving more slowly”. So, we are relatively light (some more than others) objects skiing down a slope with chopped up snow piles, moving tentatively and rather slowly, hoping and praying our skis don’t “hit a pile” and get diverted. We frantically scan the trail ahead as we traverse looking for a “good” spot to turn in this mine field of potential dangers. But, being light and skiing slowly we generate the minimum momentum and therefore only “damage” the crud piles minimally. Score: Crud Pile = 1, Us = 0. We can’t change our weight but we can change our speed.
and thereby increase our momentum. Within reason, skiing faster and generating greater momentum force is more likely to tip the scorecard in our favor. But “faster” is the very point which is counterintuitive to and fearful for the inexperienced skier. And so we come to the Curley Footed Shuffle, a way to instantaneously increase the ski speed temporarily and thereby generating more momentum without perceptibly increasing overall velocity down the trail.

So what skills can we develop to become more comfortable in glop and crud? First and foremost: GET OUT AND GET IN IT! Just as with ice, moguls or pow-pow, you can’t learn the skills and tactics to ski unfamiliar conditions and terrain unless you get into it and practice! Sure it helps if you have a mentor and guide who can offer tactical hints and guide your learning path for new skills, but ultimately YOU have to get out into it and push your comfort zone. You really aren’t foolish to do so and you don’t look like a doofus; those who can ski crud comfortably do remember their early years and hesitant starts and respect you for giving it a go. Also as I said in the Peak Performance, March 2010 article “Ice is Nice” you don’t look to others nearly as awkward and out of whack as you probably feel. So give it a go!

Back to the formula: Momentum = Mass × Velocity. Put a dent in the snow; don’t let the piles of glop put a dent in you! Maybe you don’t want to fly down a slope full of cut up crud at top speed, but if you look at the formula, the slower you go, the less momentum you have and the MORE likely your skis will be deflected when striking piles of glop. So how can you generate instantaneous bursts of forward speed without increasing your overall speed? The Curley Footed Shuffle (CFS) may give a boost to your momentum and help you blast through.

The drill to develop facility with the CFS is within the realm of fore-aft balance, and is one where you alternatingly scoot both your feet (and skis) forward and rearward. To develop this skill progressively, first take a run on groomed snow on a comfortable pitch and move your entire body forward and rearward exaggeratedly by flexing the ankles excessively. Don’t just bend at the waist; try to move your entire body from the ankles up. Your weight and balance will shift waay to the front of your foot and waay onto your heels. As you make smooth medium radius turns continue this exaggerated fore-aft movement of your body throughout the turns. It feels like your skis remain relatively fixed and your body is moving forward and back over the (relatively stable) skis. See how rhythmically you can make this movement. Now really exaggerate this move. When leaning backwards see if you can get the tip (only) of your skis to lift off the snow. And now the reverse; while leaning very forward with your whole body try to hop just the tails of the skis off the snow. (Riders play with this action all the time). Now do the reverse. Again on a gentle run and at reasonable speed, sort of hold your body in place and schooch your skis FORWARD. This will feel like your weight and balance has suddenly shifted to your heels. Now pull your skis waay back under and behind you. It should feel like your skis are shooting out in front and then lagging behind your relatively stable body. To someone watching from the trail side, the move “looks” very similar, but believe me, to you doing the drill it feels VERY different. The move of the CFS uses the same flexing of the ankle joints as when you are exaggeratedly moving your body fore and aft. For me moving the body seems easier more natural than schooching the skis fore and aft, but either can become comfortable with practice. Do several runs schoochooing your skis fore and aft throughout a series of continuous slow medium radius turns until you are comfortable with these alterations in your balance point. (Besides being a tactical skill for blasting through piles of chopped up crud, playing with altering your balance point under foot also expands your balance comfort zone and helps you make “recoveries” when terrain suddenly and unexpectedly tosses you around.)

To get ready to actually use the Curley Footed Shuffle in crud you must practice the “timing” of this dent producing maneuver. The best way to get this experience is on groomed slopes. Ski along at various speeds and pick “anything”, a leaf, a shadow, a section of ski or snowboard track which is identifiable and as you approach this trail feature, practice timing the maximum impact of your “schoocho” forward to blast the leaf (or shadow etc). This sudden, explosive shuffle of your skis forward is a burst of velocity which therefore adds to your momentum and adds to the impact your skis are making into and onto the stable object (crud pile). Therefore it becomes more likely that you will make the dent and will win and that the crud pile will lose! Also to produce the forward foot shuffle, your core muscles tighten to provide the resistance platform against which your (now this is just me talking about what I feel… it may not be true) hip flexor muscles brace to schooch your feet forward. That core tension then also makes the forward collapse, the bend at the waist, less likely or pronounced
when crud piles are encountered. Get on out there…the CFS takes practice, but this skill has a big payoff and makes crud skiing easier than skiing consistently hard “glare” or blue ice.

Here are a few more tactical hints. Quit Turn Shopping! Quit looking for a good place to turn… there are NO GOOD places, they are all basically crappy… that’s what chopped up crud is… tough going. When you traverse looking for “the good place”, the skis de-camber and you lose the beneficial dynamic tension inherent in the rhythm of turns. Remember, the first turn of a run on the slope is the most difficult; after that, the energy and rhythm of the previous turn leads into and helps develop the next turn. So, maintaining the rhythm of your turns is more important than WHERE you turn. Also, skiing crud is made easier if you narrow your normal stance a bit. You don’t want to “lock” your legs and boots together (which prevents independent leg action), but a narrow stance ensures that both skis will be reacting to similar snow crud and will be less likely to be separately diverted. This is analogous to narrowing your stance in pow-pow and in moguls where you want the skis to act more like a “single platform” reacting to the same snow or mogul conditions. Of course the practice for this stance alteration is to play with stance width on groomed slopes. Ski a very wide stance for a run, and then a very narrow stance…and do this on groomed slopes when you really don’t need to use the width tactically. Like all other arrows in our skills quiver, we need to become comfortable with a range of muscle movements in any and all of the muscle movement skills.

If you think about it a minute, in various skiing and riding scenarios Witold and others have talked about moving into your self-created future rather than reacting to the past. Ski and ride the future down and forward, don’t just be reactive to what has happened; it is already over! While you are trying to react to the pile of slop which just threw you off, it is already over and waaay in the past. Be proactive, move into the future…. ski and ride the mountain, don’t let the mountain ride you! Put a dent in the snow; don’t let the snow put a dent in you!

Actually I like the slop of spring conditions late in the day when things get sporty. The little piles of snow become the beginnings of little moguls and with practice and comfort you can dance with them and make a new kind of magic music on your ole familiar mountain trail. Remember no matter how strange the snow or how funky the trail, to develop skill, to get proficient, and to expand your comfort zone you must get out of the lodge and onto the slope. I think also you’ll find there is a significant role played by mental attitude in expanding your comfort zone in new skiing conditions. You have to become like Jonathon Livingston Seagull… you just have to believe you can fly faster!

Good Luck and Sunshine Over Your Shoulders

The Long Snowy Journey (Part 2)
Warren Miller Shoot 2009 – Northern China

By Chris Anthony

7:40 PM “BEIJING” Feb 16, 2009

The billions of lights of Beijing passing by the outside of the van seemed surreal. My mind was still on walking with my horse and chana on the cold, silent, snowy road of Northwestern China where I could not get warm. A place where only the sound of the horses’ hooves and my steps broke the cold silence. Now I was on a super highway flying into the heart of the booming modern civilization. The contrast was amazing. Massive modern buildings and high-end cars stood over small wooden shacks and flew by horse-drawn buggies. China is amazing. There is evidence of both history and progress everywhere. Two days ago the basic necessities of life was all I needed to survive: water, food, warmth and dry cloths. Keep those items in check and life is good. Now, from the center of Beijing, those items were trivial as I was surrounded with anything and everything at my fingertips. According the thousands of billboards, neon lights and images on large screen TVs, I could have anything in minutes. All it took was a credit card.

Peak Performance
Morning came quickly. As an insomniac, sleep is rare in my world while Ambien is not. With one pill I shut down for 3 hours which, unfortunately, felt like two minutes. Not something that I’m particularly proud of, but something I have dealt with since my early teens. I do not dream so the joys of sleeping are lost on me. When I finally do sleep without Ambien, my brain downloads all of the stored dreams and nightmares in a hail storm and wakes me in a cold sweat. On that particular morning I woke up thinking I was dreaming. Then it hit me; I was not dreaming. I really was in a hut on top of a pass, surrounded by Kazaks, Uygur, Mongols and Canadians lying side by side and snoring. It was as if I had woken up two hundred years ago in a mosh pit.

Our cook was already busy trying to create a meal for all of us over the small stove tucked in the corner. I was just trying to get motivated to unzip my –20C sleeping bag in order to attempt to get dressed without waking everyone else.

We dressed and ate in the cramped quarters and eventually wandered out into the cold world. The snow was coming down so hard that anything that sat still for more than a minute had an inch of snow on it. To our benefit, the snow was dry. Not a breath of wind could be felt and the temperature was only –20C instead of –30C. I was already getting used to it.

While we loaded the chanas, the horses shook the ice and snow from their thick fur as they patiently waited to go back to work. I was amazed by these creatures. They barely ate or drank and yet had the endurance and strength like no other animal I had ever seen. They were able to stand outside all night letting the sweat from the prior day’s work freeze, encasing them in a shell of ice covered with several inches of snow. And now they were ready to go again.

With a snap of the whip and a yell, the horses surged and the chana train was once again on the move down the trail. I immediately jumped aboard my chana, reins in hand, hoping that I could stay out of the deep snow for most of the day in order to avoid getting snow inside my currently dry low cuff boots.

Into the cold grey day we trekked; further away from any chance of instantly being rescued and further away from home. We were slowly climbing in elevation giving me comfort in the fact that it would be a descent most of the way back home. But these momentarily happy thoughts quickly ended when we summited our second mountain peak and then started descending for what felt like 20 miles. The comfort of an “easy” exit disappeared. The horses were having an equally tough time pulling the sleds downhill as they had been uphill in the fresh snow.

At one point the lead horseman led the first several horses off the main trail towards a “shortcut.” I noticed this move just in time and held my horse up thus stopping the remainder of the train behind me. It did not feel right or make any sense to me that we should be experimenting with shortcut at this juncture in the trip. I was right. Two of the horses with heavier loads instantly sank up to their chests in the unpacked conditions and were stuck. For a moment the horses did what they could to wrestle their way free while the horseman yelled encouraging statements at them. But eventually they just stopped moving.

I took the initiative and guided the remaining horses down the pre-established route while the horseman that made the mistake dealt with the small crisis by muscling to free the horses and chanas so as to get them down the remainder of the shortcut they had chosen. Needless to say, after 15 minutes later we intercepted the shortcut 20 minutes ahead of the group who took it. By this point the skies had opened up, the sun was shining and the temperature had dropped further due to lack of insulation from the clouds. For the first time we could see our surroundings. It was beautiful. Massive peaks had magically appeared around us.

Eventually we stopped to rest at a small home in what appeared to be a community in an abandoned yet modern resort the Chinese had developed as a summer retreat and then boarded up and left for the winter. The home belonged to either a Kazak or Mongol family. I wasn’t sure and was too out of it to ask. A young woman holding her infant invited us into her very modest 20’ by 20’ bedroom/dining room/kitchen for tea. Then she exited while our cook used her stove to cook up a quick snack for us. The home was tiny but accommodating. Its one room held five beds and a table. As in most of the homes, a wood-burning stove was tucked in the corner and
played the role of both heater and oven. The small family probably wondered what in the world a bunch of white men in bright clothing were doing in their neck of the woods at this time year. After a quick snack we were once again out the door and on the trail for another 7 hours.

Night was starting to fall upon us as our next goal grew closer yet felt further away. The surroundings were going by very slowly - as if time itself had started to freeze. No one was saying a word. We were all exhausted. Everyone was just counting footsteps and trying to stay warm. The horses had their heads down and seemed to be in a trance as they walked. “Whitey,” the horse we appropriately nicknamed because he was the only white horse out of the bunch, always seemed to follow right behind me. The end of his snout sometimes bounced off my shoulder as if he wanted to rest it there for warmth. My eyes looked down to an area just behind the chana where fresh ski tracks from the skids had just been laid down by the runners crossing the snow in front of me. I tried to land each step in these tracks and to avoid landing outside it in the eight inches of fresh powder surrounding us. It was a balancing act that kept me awake with a goal of keeping my feet warm and dry.

Through the darkness I was worried we were walking into a valley surrounded by avalanche terrain. From time to time when the clouds broke long enough to let the moonlight illuminate the night sky I would look up and see large peaks looming over us. I would later find out we had indeed been surrounded by some deadly mountains. Beginning a few hours later, six class five avalanches came down, covering the entire valley in places we had crossed only hours before.

Into the night we continued to walk. It was getting darker and much colder. My energy was low and even the horses were starting to wear down, stopping every 30 or so yards. We had to urge them on. Eventually in the darkness we came across a lone horseman. Our guide spoke to him for a bit. There appeared to be some communication boundaries but eventually the lone rider pointed at a narrow trail that led up the steep side of the valley and through the trees. I thought, “NO WAY!”

The horsemen moved the horses into position for the climb. I took a deep breath and held my judgment for the moment. While the rest of the crew bounded ahead, I stayed behind, worried as to what would come. I pulled our guide and the horseman we had nicknamed “SMILEY” aside and expressed my concern. It was cold, we were extremely tired, and the horses were exhausted. Was everyone is thinking straight? Was this our only option? Through a back and forth conversation and mixture of translations, I concluded from the body language not the verbal language that this was our only option. Then I found out (through broken English) that the horses had never traveled this far in the winter with this much weight before. I thought, “Oh great! This is the perfect time to find out what they can do!”

The sound of a horse slipping from the trail and tumbling through the forest made me sick to my stomach. Trees snapped as both horse and chana disappeared down the dense slope and into the darkness. My imagination of what had just happened to the horse ran rampant and the thought of it made me angry. I immediately ran ahead to the point where the horse had flipped off the trail and then dove off the trail in the direction of the fallen animal.

This was the horse with the heaviest load. The awkward weight of chana pulled him from the trail, rolled over, then flipped him. Both horse and chana had come to rest trapped against the broken trees and upside down. I was horrified as to what I just witnessed. The horse lay motionless but alive. I wondered what was broken and would we have to put this horse down? We struggled to release the pinned beast from the chana and broken tree branches in which he was tangled. I hoped for the best and crossed my fingers that I was not going to witness something that I did not want to see.

The horsemen worked their way through the bottomless snow and tried to free the animal from the restraints that trapped him. The moment the last constraint was removed the magnificent animal bucked himself to his feet. I was astounded when he shook himself off and looked at me if nothing had happened.

A horseman spanked him on the butt and the horse bounded up the steep slope toward the trail where he waited while they checked him out and eventually strapped the chana back on. My adrenaline was pumping so it was easy for me grab a couple of ski bags, throw them over my shoulder and climb the steep slope through the waste deep snow back to the trail. Once on the trail I refused to make the horse carry the same load so I continued to shoulder two ski bags until the trail leveled out at which point I noticed I was at the edge of a snow covered
At the opposite end was a hut, its windows illuminated by a faint candlelight and one tiny solar-powered light bulb on its last minutes of life. The rest of the horse train was already stacked up in front of the hut, the gear lying on the ground surrounding them. I laid the two ski bags down next to the rest of the gear and went straight for the front door, grabbing my big florescent green duffle bag before darting inside. On the other side a Mongolian family stood frozen in their tracks and a little stunned by their late night surprise guest. They looked at me as if I were from Mars. As far as they knew, I might as well have been. I paused for a moment, thinking about how rude I had just been, barging into this family’s home like a bull in a china shop. Our eyes met. There was an awkward moment and then I smiled and gave a small bow. They did not really smile but pointed to a door off to the side of the main room where the rest of the crew had already set up camp. I can only imagine what was going through the family’s minds.

Their home was cozy and warm. In one corner there was again a wood burning stove that doubled as the kitchen. Nearby were a small table and two very small beds with two young sheep tied to them. They bring the young livestock in to protect them from the −30C temperatures outside. The second room where the crew had settled had a large raised platform lined with colorful handmade blankets. This would be our bed. Hanging above it was an image of Genghis Kahn and in front of the bed was a table where we would eat. I dropped my bag down in the corner next to a window and quickly realized my bag was almost as large as the room itself. I was still shaking from the horse rolling incident and exhausted, all at the same time.

Our cook, who had so far not really done anything to surprise us, stepped up his game and delivered an amazing meal in a short period of time out of nothing. We all sat in a daze trying to warm our bones and absorbing what had just taken place over the last several hours while we ate a warm meal. Retracing it in my head while I started to fade towards bed was no use. I had lost track of the days. I only remembered the stops. I think I left home six days ago. And now I was here, somewhere in the Altay Mountains.

Once again the morning came too quickly. I was getting used to the routine. I could slip in and out of my sleeping bag and instantly into my ski clothes and then spin around for breakfast less than a foot from where I had slept. With so little room we all learned how to operate our daily routines in a very confined space. Of course once in a while things did get a little confusing like when I accidentally used hair conditioner as lotion and rubbed it all over my face and body in the middle of the night. Why I had hair conditioner with me was a mystery to both me and the crew. The next time I would wash my hair or bathe at all would be several days from that point. The event did provide a good laugh for the rest of the crew - a crew that got along amazingly well! It blew me away. Of course each of us had our own quirks that bugged another but those became the source of some great jokes.

That day our excitement grew as a young, strong looking Mongolian man by the name of Munke arrived with a pair of handcrafted skis. Up to this point we had only seen images of what they had been using for equipment and now I was actually holding a pair. It was surreal. The craftsmanship, weight and shape of the skis were impressive. I was looking back in time at what could perhaps be the beginning of our sport. The sensation was amazing. I was paralyzed with excitement and just stood there, studying them. The skis stood around 205cm in length, had reverse
side cut and perhaps a tiny bit of rocker. The bases consisted of horsehair with the bristles running from tip to tail as to allow the skier to be able to walk uphill yet slide down efficiently. The bindings were simple leather straps punched through from the base of the ski. The straps wrapped around the front of the skier’s foot and left the heel free so they could walk through the deep, dry Altay snow.

Instead of poles, they carried one long, straight stick. One end of the stick was shaped as a comfortable grip and the other was carved into a blade to act as a rudder. The stick, although functional, was also a matter of personal choice. It had to look and feel just right.

Standing outside the hut I pulled my brand new Salomon skis from the bag. Munke was fascinated by my skis as well as my heavy ski boots. We did not speak the same language but I could read his body language. He was really curious about the Fritchi AT bindings and how they worked. He studied everything with intrigue and to the detail. I demonstrated the technology. He smiled when he understood. Next he turned the skis over to look at the bases and indicated they were too slick for walking uphill. I pulled a pair of skins out of the bag and showed him how I would apply them. I could tell he thought that this was way too much work and that my equipment, though colorful, was a little too heavy and, to my fault, not wide enough for the conditions.

I laughed, flashing back to packing for this trip and trying to decide which skis to bring. I went with a mid-fat all mountain ski with a side cut I could use in every condition. Of course, now that I was here and it had snowed so much, I wished I had brought a wider ski. This is always the case.

Munke indicated it was time to go skiing. Everyone reacted, putting on their equipment on in front of the hut. Munke skied away from the hut towards the mountain beyond the homestead and like sheep, we followed. Immediately I noticed how much more efficient he was moving through the snow on his gear than we were on our modern gear. We ascended the mountain behind the hut through the bottomless, unconsolidated snow. The temperature was still below zero and I was sweating like crazy while we were working to gain elevation. Eventually Munke pulled off to the side and motioned for me to break trail. Throughout this portion of the journey, Patterson was trying to capture every movement with his Bolex and Elia was running around trying to stop the action with his still camera. The energy was awesome. We were actually here in China, near the Mongolian boarder, with a real descendent of an ancient skiing community.

A Warren Miller cameraman’s job is not easy. They not only need to be able to keep up but to run ahead as well. They have to carry a tremendous amount of weight, be extremely organized and be able to think from the perspective of an editor and through the lens of a camera. They need to be clear communicators while thinking about a thousand other things at the same time. The job is tough and in this deep, bottomless snow on the side of a mountain with sub-zero temperatures, it is that much more difficult.

Peak Performance
We finally reached our destination and it was time to ski. The first descent we made was an experience that I will remember forever. The moment when we saw our first Mongolian skier rip through the bushes and small trees of the steep, rocky terrain at 30+ mph. It was impressive. The first thing that grabbed my attention was the rate of speed in which he did it. He just pointed and went - mainly in the direction of where he wanted to go. He did this by leaning back and using the long pole as a rudder. Watching this made me realize a couple of things: could they have possibly been the first straight liners in our sport and were they the first to have reverse side cut skis with a bit of rocker? Maybe Shane McConkey had studied the way of the Mongolian skier before finally talking the industry into producing some reverse side cut with reverse camber skis.

Back at the bottom of the hill, Munke would simply turn around and start walking back up while I had to take my skis off, unlock my bindings, pull the skins from my coat, put them on, kick the snow off my boots, click into the bindings and then start to chase him down. He laughed at my process. At the top of the climb I would have to do everything in reverse while he waited. At one point he broke his pole so we went into the woods and cut new one. A little later another skier broke a binding. They mended this by pulling excess leather from other material they had with them. As I watched this all I could think was, “if I break any of my equipment, I’m screwed.” I was literally a world apart from anything that I could replace it with. However, we did have a roll of duct tape.

The next day the skies cleared for the first time and the massive mountains around us appeared. With almost three feet of fresh snow, it was beautiful out. The clear skies also meant a drop in temperature. The snow conditions were perfect for filming some really good ski action but also dangerous as the snow pack was very shallow and dry. There wasn’t much of a base above the debris of the earth’s dry surface. Conveniently enough, the Mongolian hut we had made home sat in a meadow on a plateau above a valley. The drop to the valley was through steep gladed trees. Without much effort we had plenty of opportunity to ski for the camera under blue skies, in feet of fresh, dry snow, over rocks and logs with our Mongolian friends.

For the first run I thought I would ski right behind Munke in order for the camera to get a contrasting shot of old and new. Patterson set up his shot a hundred yards down slope and I counted down, finally giving Munke the command to go. I let him have a head start because I figured with my modern equipment that I would be able to catch him right away. I couldn’t have been more wrong. He was flying and I had to lean back as far as I could on my skis as well as get in his tracks to try and chase him down. We went over the caress of the hill and into the steeps. All I could see was a cloud of white in front of me with momentary flashes of his dark clothes. He was going straight with a slight left turn and moving fast. I did all I could to avoid the obstacles that were both above and below the snow. We descended a couple hundred feet in a matter of seconds before coming to a stop. I wondered when I looked back up at Patterson if I was even in the shot. I think he also was surprised by Munke’s speed.
I prepped my gear to walk back up the steep pitch and in doing so noticed that two more Mongolian skiers had appeared. They were Munke’s younger brothers and were ready to show their skills. The funny thing was that they were familiar with being filmed because they been once before by a documentary film company. Therefore, before they even moved, they wanted to work out some sort of compensation. Once the negotiations were done, they were ready to show their skills. They really stepped up their game and were hitting jumps and wrecking as hard as anyone I’d ever seen in the parks back home. The energy was tremendous, the smiles wide and the link between us and them grew stronger.

As time went by we used up all the terrain below the hut and decided to head up in elevation. Behind the hut was a mountain with a good-sized open yet avalanche prone slope. The brothers moved quickly up the spine of this slope and stayed near the exposed rocks away from the open area.

Along the spine the Mongolian brothers went up through the rocks like Billy Goats. It was impressive. They were having fun watching as our crew, with all its gear, had issues negotiating the rocky terrain. I eventually caught up with them, passed them and then decided to continue further up the ridge. I got a little worried when I noticed that a cornice a couple thousand feet above me and near the summit had failed. There was a fresh crown and below it a small slide. The snowpack had a feel to it that I was not comfortable with so I opted to not be on the same slope with the brothers. Instead I put myself where I would be able to take a shot at the slope from an aesthetically pleasing camera angle but away from being trapped by anything triggered by anyone other than me.

Below I watched the Mongol skiers tear up the slope, descending toward and into the trees at warp speed. It was scary to witness and I could hear the cameramen yell with enthusiasm. As I moved into position to ski a long, open slope with an impressive background the snow settled beneath my feet with a large WHOMP. For a moment, my heart stopped. The hair on the back of my neck stood up and I stood motionless, ready to run for my life. Luckily nothing happened and I continued to move across the slope to another safe point where I would wait for the camera to roll before exposing myself for the ski shot.

I received the countdown and pushed off. I sank in the bottomless snow and once again wished I had brought wider skis. I put my feet together for more surface area and leaned back. Eventually I was up on top of the snow going around 40mph. Every turn was met by the ground and rocks. I tried to stay light on my feet and aim for areas where there appeared to be more snow. I was a long shot from the camera and was hopeful I would just be a small part of the picture so no one would be able to tell how I was hacking my way down this slope. I tried to hold composure and not get hooked up on anything. A head plant here could be devastating for my health and humiliating on camera. But I held it together and skied the slope with success. A good scenic shot, as we would say.

The brothers did a few more straight runs into the trees. All I could hear were breaking branches. These guys were crazy! Austin and I followed up but with a bit more control since we could turn shot our way into the afternoon and early evening. Eventually it started getting too dark to film action shots anymore so we headed back to the hut. As we removed our gear, Munke grabbed a hold of Patterson’s ski boots and skis and started walking awkwardly up the slope to test the modern gear.

I could not help but to follow him in order to lend a hand. The first thing that got him was the fact that he could not walk uphill with the skis on. So he marched through the deep snow carrying the skis and boots. I caught up to him when he was at the top of a gentle slope and was struggling to put the gear on his feet. He again complained about the weight of everything and laughed. Once we had him sufficiently clicked into the bindings and his boots buckled he was out of the gate like a rodeo bull. I thought for sure he was going to crash but he didn’t. In fact, he did two turns and then came to a stop when the slope flattened out! He had a huge smile on his face and I was blown away by his skills. First time out and he skied an ungroomed slope, made two turns and did not crash. Damn!

He jumped out of the bindings and Patterson ran to get his camera. I ran back down the slope to help him put the skis on his shoulder like a pro. He was ready to go again and again and again…

Eventually he was eyeballing a steeper slope. I figured, why not? It was obviously in his blood. So we grabbed
the gear and I pounded out a boot trail up a steeper slope much longer in length. By this time the rest of the Mongol family was out of the hut and watching from below. The children, with minimal clothes on considering the −35°C temperatures, bounded their way up the slope to try to take part. Everyone was smiling and laughing - including the mother who, up until this point, never changed her expression. I think I even saw her laugh.

Munke put the modern skis down on the slope. I helped him get the snow off the ski boots and he clicked in, took two deep breaths, waited for the countdown from Patterson and went for it. He dropped off the steep slope with no fear and a perfect stance on the new skis. He stood hard on the right one, leaned a bit forward and starting arcing a turn to the left. A moment later he would do the opposite. He flew through the fresh snow, off the steep pitch and back into the meadow above the hut. Everyone was yelling with excitement. Once again to my surprise, he did not even come close to crashing. It was amazing. When he came to a stop he raised his hands above his head as if he had just won a World Championship. In the last bit of light I ran down the slope through the waste deep snow to catch up with him. As I ran I thought about how amazing he had performed. But at the same time I couldn’t help but wonder, had we just interfered with the evolution of things here? I mean, he literally just jumped ahead in technology from where he was by a couple thousand years. Would this ruin everything?

I finally caught back up with Munke at the hut. He was out of the big, bulky ski boots and had just finished admiring the modern skis before putting them up against the wall for the night. He looked at me, pointed at his wooden skis with the horsehair on the bottom and motioned to me that they worked much better than the modern ones. We both gave his skis a “thumbs up.” I smiled and decided he was right considering the environment and lack of access to a ski shop.

The remainder of our days was spent emerging ourselves further into this lost civilization of ancient skiers….that and trying to stay warm.

7:51 PM “BEIJING” Feb 16, 2009

Thinking back on the prior week and a half from the warmth of the bus as we were touring Beijing, it all seemed like a dream. Unfortunately, the fatigue did not. I was tired and now, back in the comfort of modern civilization, all I wanted to do was lie down and go to sleep. But then again, I also could not wait to get back to the US to tell the story of the Mongols we lived and skied with, the Kazaks we traveled by horse with, the Uyghur that acted as our amazing guide and the impact of the Chinese on a part of the world so foreign to most westerners.

Chris Anthony, a Big Mountain skier is a Colorado native and longtime Vail resident. For a good portion of his life, Chris competed at an international level, including World Cup, as well as traveled as an athlete and on-screen personality with the Warren Miller Film Team. Chris has filmed with the legendary action sports production company for 23 years and continues to do so currently. His feats are displayed in the annual Warren Miller feature film as well as numerous television programs and
documentaries such as “Warren Miller Global Adventures.” Chris is a former Alaskan Extreme Skiing Champion, a veteran of 9 World Extreme Skiing Championships, and US Heli Ski Association Level 3 Mechanized Ski Guide.

Between film shoots and sponsor appearances Chris manages specialized ski programs under his company “Chris Anthony Adventures” in Alaska, Italy and Colorado. Additionally, Chris co-hosts the “Camp of the Superstars” every August in Portillo, Chile. Also, Chris is available for speaking engagements. His website is www.chrisanthony.com.

Equipment

KneeBindings

By John Springer-Miller
Chairman – KneeBinding, Inc.

KneeBinding Alpine Ski Bindings are making lots of news now, as they complete their fifth season on the market. KneeBindings are the only binding specifically designed to reduce knee ligament injuries on skis. The company is based in Stowe, Vermont, which is also where the binding is manufactured.

ACL tears are the #1 most reported type of injury on skis today, with 70,000 occurring each year. A skier starts to fall backwards, bends hips and knees, and then catches an inside edge. Once your hip is bent, it locks in one direction. For example, if you’re sitting (hips and knees bent) you can put your right leg on your left knee; your femur rotates in your hip socket. But you can’t swing your foot directly sideways to the outside because your femur can’t rotate in that direction. If you happen to be in a “sitting” position when the snow catches an inside edge and pulls your foot to the outside, a knee injury is likely.

All ordinary bindings have two methods of release – forward at the heel and sideways at the toe. These two methods of release were created to reduce the incidence of broken legs, and they do a great job of that. But neither of these releases has any way to reduce the incidence of knee injuries.

KneeBinding has a third release mechanism – complete with its own DIN setting – that can detect the forces that cause most knee injuries on skis and can release before the forces are great enough to injure a knee ligament. The binding has been very successful at combating knee injuries associated with rearward-twisting falls. The rate for this injury is 1 ACL for every 1,900 skier days. But after five years on snow, no one has ever reported this type of injury on KneeBindings. For more information, please see a recent video, produced by KneeBinding for American Airlines at http://www.kneebinding.com/KB-InformationCenter3.aspx?settyp=Play&vid=q-k-Q1GBq7U.

One thing working in KneeBinding’s favor is the recent, rapid movement from “system” skis to “flat” skis. Several years ago, the US market was about 50% systems and 50% flat – but systems have been declining rapidly, in all markets. Now, only about 35% of the skis sold are “systems” – and many of those are really just flat skis with a binding system screwed on (these can be removed to mount KneeBindings).
KneeBinding is the only independent binding company in the world, and produces a “flat Ski List” for the industry. For the 2012/13 season alone, the KneeBinding Flat Ski Database includes nearly 2000 model/length combinations. The list is available in document form and also through an interactive application with sorting and filtering capabilities. To take a look, go to: http://www.kneebinding.com/kb-flats.aspx.

K2 Chargers

By Witold Kosmala
PSIA-E Alpine, Level III
K2 Ambassador

I am a ski instructor and a trainer at the Ski/Snowboard School at Sugar Mountain. Top quality performance is what I expect from myself, and this calls for the top quality equipment. Since there is equipment designed for every type of snow, every type of terrain, every type of skier and every type of skiing, making a correct equipment decision is of outmost importance to me. I need a ski that will help me perform to the best of my abilities in every situation that I encounter.

I have been blessed with possession of a number of pairs of skis of many types, and so an appropriate decision as to which ski I should take on the slopes is up to me. My home mountain may have variety of snow conditions, from (very) hardpacked to powder, but most often the surface is firm. This means that I would choose a fairly stiff ski that can release easily from an old turn and nicely initiate the next. Gently rocker tips are great for this. A ski that is also torsionally stiff and can hold a good edge would be also great for these types of surfaces. Sugar has the vertical drop of 1,200 feet, so I need a ski which will make more then just a few turns. This means that the sidecut radius needs to be relatively small. However, I normally ski on our double-diamond slope, which one year I measured to be over 60 degrees in some places. An appropriate ski for the steeper slopes is one which does not have too much shape. The same goes for the ski on which I might like to make snake turns, meaning one-legged railroad track. Then again, there might be a few bumps here and there, which definitely call my name. For them I need a ski with softer tips. Furthermore, Sugar has some flatter open terrain, which always wants to be cut up with high-speed carving. That means that I need a ski that thrives at high speed and holds a strong edge. Not too wide, so it goes quickly from one edge to the other. The same goes for a possible run down a NASTAR course. Then, of course, I love short radius turns for which I want a ski with lots of energy and plenty of life in its tail. Surly, here and there, I might want to do a drill or two. Perhaps some low edge maneuvers. For that I want a ski which is not too narrow.

If I was a golfer, I could use a different club for each of these needs, but, being a skier, only one ski at a time can be used. My choice of great performance skis which fully satisfy my above mentioned needs are new, 2012/2013, K2 Charger 165cm. My Chargers have dimensions 122/74/106 with sidecut radius 14 meters. This year, Chargers beefed up their firm snow performance. The Charger belongs to men’s all-mountain performance line of skis with the added torsional rigidity of K2’s new ROX technology. It’s designed primarily for high-speed performance on hard, flat snow, but has a wider tail.
for positive turn finishes. K2’s Speed Rocker combines 90 percent camber with 10 percent tip rocker to smooth the ride, enhance forgiveness and improve soft-snow flotation. ROX technology combines the forgiveness of tip rocker (K2 calls it Speed Rocker) with performance-enhancing Mod Technology (an independently acting secondary core, raised above the deck, works in conjunction with a strategically placed dampening module to lessen vibrations and improve edge grip) and extra carbon-fiber reinforcement placed so as to stiffen torsional rigidity.

Chargers are extremely versatile and agile skis, yet really solid. They seem to be never pushed to their hold limit. Their high-speed stability is overwhelming, and the amount of energy that a skier can store in them is simply unreal. Tails and rebound can make you feel like you are on slalom skis. In open, long railroad tracks, Chargers feel like GS skis. In bumps they exhibit bump-ski properties. They are definitely designed for expert skiers, but there is good news for those that are not at that level yet – Chargers will help you get there. They are not like slalom skis, which are not forgiving anything that lower level skiers will do to them. With Chargers, you can actually grow into them. They will progressively help you improve your skiing. Quality moves are enhanced, but many poor moves are forgiven. Incredible!

So, now, said all this, is there any room for improvement? Always. They perhaps could ski on their own??? But, let’s get realistic. There is something that I would do to improve them – make the company name more visible. There were people that looked at my skis and said: “Nice skis, what are they?” However, to comfort everyone, the next year’s models have new graphics with very visible “K2” on them.

For more information on 2013 Charger skis, and other K2 equipment, go to http://k2skis.com/.

ROX TECHNOLOGY
Core: Strength and Structure
A K2 ski is designed with a primary core and structural layers that determines the flex.

MOD: Suspension
A secondary core that essentially acts as a suspension system quieting the ride of the ski but does not affect the overall flex of the ski.

Carbon Web: Increased Edge Hold
A raised X-Shaped carbon support is laid on top of the MOD furthest from the core to increase the torsional rigidity for greater edge hold and grip.

Speed Rocker: Effortless Initiation and Accuracy
Without Rocker, a ski with this much torsional rigidity strength would be nearly impossible to initiate into a turn.
SPEED ROCKER
ROCKER: Easy initiation, versatility, agility CAMBER: Control, edge hold, rebound. This slightly elevated tip and increased tip length provides effortless initiation and flawless transitions, while camber along the rest of the running surface delivers precision, power, and edge-hold. Simply put, Speed Rocker offers high performance precision and edge hold on firm snow.

The indicated “contact with the snow” region is only when the ski is flat. Once the ski is tipped, the entire edge from tail to almost the very tip is engaged.

Turn to Wisdom

- Some people are humble and proud of it.
- Sometimes it’s the smallest decisions that can change your life forever.
- Life is a gift, unwrap it.
- Better a red face than a black heart.

Thoughts for the Month

- What is referred to in skiing as “park and ride,” and is it good to do or not?
- Firmer the surface, the more weight skiers should put on the outside ski; true or false? Explain.
- Is it really that bad when skiers drop their poling arm? Why or why not?

Elaborations on last month’s Thoughts for the Month.

Question: One coach said that “on modern skis if you lay them way over you can arc just about anything;” do you agree or disagree?

Answer: Disagree on several accounts. For one, to greatly decamber a ski one needs to exhibit a lot of pressure on a very highly edged ski. This pressure may not be there and/or ski might not have enough sidecut to make that even physically possible.

Question: When your intermediate student overtips, overrotates, or has abrupt movements, or is not centered over the skis, or has too narrow stance, what would be some tasks (drills) you could ask them to do to start correcting their problems?

Answer: The low edge maneuvers: sideslips, pivot slips, falling leaf, garlands, whirlies, bunny hops while making medium radius turns, edge release at different points of a turn, stivets. A fun drill performed with a partner involves the second skier skis right behind the first and at certain moments the second skier calls “hop” to
the first skier who needs to hop gently up at that very instant. In order to do that, the first skier needs to be centered and possess proper angles and stance.

**Question:** How can you tell if your boots have a proper forward lean?

**Answer:** When NOT on skis, can you get in a tuck position and maintain it for a while? If so, your boots have a correct forward lean. When ON skis, put your pole vertically in the crack between the front binding and the boot. Does your knee touch the pole while exhibiting average pressure on it? If so, your boot has a correct forward lean.

***This and That***

**ANNOUNCING THE REGION 3, 4 & 7 BOARD ELECTIONS FOR PSIA-AASI EASTERN DIVISION**

There are two (2) candidates running for the PSIA/AASI Eastern Board of Directors in Region 3 (CT, MA, RI), three (3) candidates running for the PSIA/AASI Eastern Board of Directors in Region 4 (NJ, PA) and four (4) candidates running for the Board in Region 7 (states south of NJ & PA). The Board candidate receiving the most votes in each region is elected the Regional Director; the candidate with the second-most votes will be elected the Regional Representative (within compliance of the association bylaws provisions relative to Board elections). The three-year Board terms will commence April 1, 2013 and end on March 31, 2016. No write-in votes for any positions are accepted.

The candidates for election to three-year terms of Board seats in Regions 3, 4 and 7 are as follows:

**Region 3:**
- Dave Beckwith Sr. – Mt. Southington, CT
- Richard Paret Jr. – Blue Hills, MA

**Region 4:**
- Steve Kling – Liberty Mountain, PA
- Mark Malinoski – Roundtop Mountain Resort, PA
- Bob Shostek – Elk Mountain, PA
Region 7:
John Cossaboom – Gatlinburg Snowsports Center, TN
Paul Crenshaw – Massanutten Resort, VA
Walter Jaeger – Massanutten Snowsports School, VA
Ty Johnson – Wintergreen Resort, VA

Information on the election process and candidates is included in this e-mail to all eligible voters as well as the dedicated election website and the forthcoming winter issue of the *SnowPro*.

To Vote:
- Link to our special PSIA-AASI Eastern Board Elections website at www.psia-e.org/vote.
- Click on the graphic at the top of the page, to log in to the site using your last name and PSIA/AASI member number.
- You must be a member in good standing and affiliated with Region 3, 4 or 7 as of December 31, 2012.
- Before voting you are encouraged to spend some time reviewing the candidate profiles as they provide important information on both qualifications and philosophy of the candidates.
- Follow the steps at the website to complete your secured voting.

Thank you to our candidates and members for your participation in this important annual process.

Eligibility to Vote: Eligible voters are all members in good standing as of December 31, 2012. Voters are eligible to vote in only one region. Your designated region for voting is the one in which you live, unless you have specifically instructed the PSIA-E/AASI office, in writing, that you wish to be recognized as a member of the region of your snowsports school work affiliation.

Voting Process: Please review the election candidate profiles and make your selection to indicate your two representatives to the PSIA-E Board of Directors in your region. The candidates selected will be serving three year terms from April 1, 2013 – March 31, 2016.

Board Candidate Eligibility: Please note that in compliance with PSIA-E Bylaws Section 10.3.A, only one candidate having an education staff employment affiliation, as either an Examiner or ETS Member, with PSIA-E may be elected in each region. Candidate employment with PSIA-E/AASI is indicated where applicable.

Voting Deadline: March 15, 2013. The online voting system will be deactivated after this date.

Results of Voting: Election results will be announced at the Spring Rally during the Annual Meeting at the Spring Rally the weekend of March 23-24, 2013 at Whiteface Mountain, NY, on the www.psia-e.org website and in the Spring issue of the SnowPro.

Thank you for participating in this important membership benefit – your right to choose your own regional leadership.

**BRAIN-STORMING**

What do you LIKE about this magazine cover that is on the next page?
Announcements


• 2014 Spyder Sample Sale is going on right now and runs through the end of the ski season. Exclusively at Sugar Mountain Sports. Don’t miss it!

Funny Turn

Mike Simmons, thank you for amusing us with these lines:

• Money can’t buy happiness, but it sure makes misery easier to live with.
• There's a fine line between cuddling and holding someone down so they can’t get away.
• I used to be indecisive. Now I’m not so sure.
• You’re never too old to learn something stupid.
• To be sure of hitting the target, shoot first and call whatever you hit the target.
• Change is inevitable, except from a vending machine.
• Going to church doesn’t make you a Christian any more than standing in a garage makes you a car.
• Where there’s a will, there are relatives.

I’m supposed to respect my elders, but it’s getting harder and harder for me to find one now. (By Mike Simmons.)