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Long Leg/Short Leg
Photo on the Summit

Photo courtesy of Chris Anthony. Chris Anthony is a Colorado native and longtime Vail resident. For a good portion of his life Chris competed at an international level and 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 25 years and continues to do so. 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.” Find out more about Chris by going to www.chrisanthony.com/.

Here is what Chris says about his photo:

This was a magical moment in the Chugach range of Alaska while filming for Warren Miller’s “NO TURNING BACK”. After the Ingrid Backstrom and Jess McMillan skied the famed Sphinx and I sat and watched them from the bottom it was time to fly home. I was a little sad as the day was perfect and we were too low on fuel and needed to keep things moving. Needless to say I did not get to ski it. But on the way home this perfect north facing exposure sat hidden around a corner. I manage to snap this photo before I pointed at it and asked if we could get it. The heli first landed our cameramen on one narrow ridge from across the valley. Than flew Ingrid, Kim, Jess and I over to the thin ridge of the perfect exposure. The landing required full power while we stepped out carefully one at a time and the pilot slide the heli forward in order for us to get out. One more slide forward we unloaded out skis and then he took off. I looked down the back it was a drop off. Down the front was this perfect face to a wide open Glacier with what appeared to be a crack across the lower part of it. The girls said I could ski it first. I was so stoked. I follow the directions of the cameramen to put myself in the best position. While I was doing so I quickly pulled a small plastic bag from my pocket holding some of my father’s ashes and tossed them onto the face just prior to dropping in... Later we found out that no one had skied this pitch yet. So with tradition I was able to name it. I named it Vino after my father Vino Anthony.

From the Top

By Witold Kosmala
The Publisher and the Editor of Peak Performance Gazette
PSIA-E Alpine, Level III
Trainer at Sugar Mtn. Resort Ski School, NC
K2 Ambassador
I hope this message finds you in good health, or at least good enough to ski. With all the preparations for the end of the year 2014, all the upcoming holidays, as well as with getting the winter season under way, perhaps you had no time to reflect and make your New Year’s resolutions. But, not only January 1 is around the corner and you want to be ready, but also what you do in days to come should be dictated by these reflections. So, take time out to think back and decide where your journey of life should take you.

Did you go, (or are you currently going), through some sort of dry-land training to get yourself ready for skiing? Or, perhaps you think you can just jump right into skiing with no preparation? Yes, I know, you are young, strong, agile, flexible and you might feel like there is no need for dry-land. But, there is so much more to dry-land than that. It should give you mental strength, readiness and knowledge as well as physical preparation. To get better prepared for the ski season you might wish to get Eva T.’s SkiStrong™ e-book by clicking http://www.evalstrengthandconditioning.com/eva-t-pocket-workouts/skistrong/your-one-month-preparation-for-winter/.

She is a 2X Olympian in Alpine Skiing and a 12-year veteran of the U.S. Ski Team – she knows the stuff.

Dry-land should get you excited about getting back on the hill as well as make you realize that there is more, much more, to learn and to improve. Benefits of dry-land should exceed strengthening. It should make you a better skier so you can enjoy the sport that much more and greatly contribute to the ski industry.

Your dry-land should include imagery as well as study of the equipment. I know that you can ski on old equipment, on pencil-shaped skis, on skis with dull edges, on rented stuff and so on, but when your life is at stake, wouldn’t you like to trust your equipment and know what it’s capable of, (and know what you are capable of)?

Imagery is a huge part of training. You might wish to reread my article in the July 2009 issue of Peak Performance.

Results of dry-land will put you on the snow with a new frame of mind. Your goals will change. You will no longer wish to ski like you did last spring. You will want to ski better. But, reading, learning, hearing, listening, strengthening, balancing, and so on, is unfortunately not enough. Now you need to put it all into work on the hill, in good conditions and in bad; in nice weather and in bad; on steep terrain and on flat. You need to have someone give you feedback since you cannot see yourself and feeling might be misleading. Work with instructors who are better then you are, have someone videotape you, attend all the in-house clinics that you possibly can, go to workshops and events put up by a ski organization. Go and ski at other ski areas. Try to get as versatile as possible because nothing in skiing stays constant, except gravity. But, even that may seem to change due to other factors including consistency of the snow and weather. Look at your body weight. Is it at the level favorable to your type of skiing? Consider going for a next certification exam. That should be a motivator in itself.

You reading this gazette is a step forward. I hope that the articles you find here will inspire you, make you a new and better skier and coach. Maybe this gazette will steer your life’s journey in a direction toward skiing improvement so that you can become passionate about this great sport and share it with others. Your first step to sharing is to inform others of this publication. Let others know that Peak Performance Gazette is out there with sincere hopes of spreading the love for skiing and promoting snow sports to the best of the abilities. I would really like to hear from you. Write me at Kosmalaw@bellsouth.net.

I hope that you will look up previous issues of Peak Performance Gazette by one of the following methods:

- Use the webpage www.peakperformancegazette.com/.
- Through the dropbox www.dropbox.com/sh/wjrz16pzcpho63i/PQr004dmUj.
- Through my university webpage www.mathsci.appstate.edu/~wak/ where you can read it online or download it to your computer.
- Look up the Facebook www.facebook.com/peakperformancegazette.
- Through Google search “Peak Performance Gazette” as the first item.

We are proud of this gazette and look forward to sharing it with our readers from month to month.

For legality issues: the ideas, concepts and opinions expressed in Peak Performance are, as always have been, intended to be used for educational purposes only. Authors and publisher claim no responsibility to any person or entity for any liability, loss, or damage caused directly or indirectly as a result of the use, application or interpretation of the materials in these gazettes.
With this said, go on reading what our great authors have to say, and see what our great supporters show through their advertising. Let me give a special THANK YOU to our anonymous monetary donors. Your help is really appreciated. You all make this publication possible. Thank you again.

Merry Christmas and Happy New Year, Witold.

**Main Course**

**One Examiner’s Point of View**

**What’s Important in Preparation for the PSIA Alpine Level II Ski Exam**

*By Mickey Sullivan*

*Examiner, trainer and coach for the PSIA-E*

“It’s not about the ski tasks.”
It’s about the appropriate use of the skills of skiing.
My advice is don’t practice the exam tasks until you have mastered the following.

**DYNAMIC BALANCE**

When an examiner first watches a candidate ski an “overall impression” is formed. This will not be a final impression as the examiners are very open minded and allow for the candidate to adjust per the environment. However, first impressions are important because they usually represent your base. The most important thing regarding the overall impression is Dynamic Balance; Balance in Motion. First and foremost the skiers center of mass has to be supported by and moving with the base of support (the feet). **WITHOUT THIS NOTHING ELSE REALLY MATTERS!**

How do you learn good dynamic balance?
- You should be supported by your skeletal structure with the help of your muscles and connective tissues. Don’t rely on your equipment to support you.
- Roller blading (inline skating) and ice skating are great for this.
- Try cross country ski equipment on a green alpine trail. Don’t use telemark boots. Make wedge, wedge christie and parallel turns.
- Try beginner’s rental equipment and leave your ski boots buckled loosely. Ski on blue square terrain.

Don’t just try the above exercises once or twice, **master them**. If you do you will have learned good dynamic balance.

When you put your alpine equipment back on, be very careful not to go back to the “former” you. Act and feel just like you did on the cross country skis. Ski on the same terrain, at the same speed. Don’t rely and/or lean on your equipment. Get the same feeling that you did on the rental equipment. Ski the same blue square terrain at the same speed. Feel like you do when you were inline skating.

Warning: the faster you ski the more you will lean on your equipment. Transition to more speed a little at a time. Skiing fast is easy, skiing slow takes precision and good dynamic balance.

**POSTURE**

The ability to move the legs (femurs) easily inside the hip sockets comes with good posture.

When the low back is in an extreme reverse arch this causes the pelvis to tip forward and down. This posture does not allow the femurs to rotate easily inside the hip sockets. Hence good rotary skills are difficult to develop.

How to learn good posture. Stand as tall as you can with your hands reaching for the sky. By feel, notice the way that your hip area (skeletal structure) is. In this position the hips should be relatively neutral and the femurs should be neutral as they hang below the hip sockets.
From this tall position, keeping your hands pushing towards the sky, bend your ankles slightly. Do not allow your low back to change its posture (no reverse arch). If you also focus on keeping your “low abdomen” area (below your belt buckle) facing forward (not downward) this will help keep your hip sockets in a positive position for skiing.

Now allow your hands to take a skiers position and you should be in a stance with good skier posture.

I suggest that you try this same drill with your ski boots on. When you go from the tall position to slightly flexing your ankles only allow your shins to lightly touch the tongue of your boots.

If this is difficult to do in your ski boots there may be some other needs. Ski boots that have too much forward lean for you and/or too much heal lift can be a problem.

Adjusting and/or fitting ski boots is not the same for everyone. There are many different anatomy types and needs. An expert boot fitter can be a big help in getting you in the best skiing posture.

Once you master good “Dynamic Balance” and good ski “Posture” then the best use of the skills of skiing is possible. Trying to learn good edging, rotary and pressure control skills without good posture and dynamic balance is truly like putting the cart before the horse.

As an examiner when I observe exam candidates with good posture and good dynamic balance, they usually have an adequate command of the skills of skiing. Hence the tasks are generally well performed.

However, I seldom see a candidate with strong edging, rotary and pressure control skills that does not have good dynamic balance and good ski posture.

Once you ski consistently with good dynamic balance and good posture, mastering the other skills is much easier. While we use the exam tasks to provide structure for learning and the exam process, too much focus on them can be a hindrance to your development. An analogy would be a junior racer that skis gates for 80% of their on snow time and free skis for only 20%.

Good skiing is about good dynamic balance, good posture and good use of the skills. When this is in place, good demonstration of the tasks will fall into place.

Mickey Sullivan of Canandaigua, NY

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- Current Alpine Training Director and ski instructor, Hunt Hollow Ski Club
- Former Director of Education and Programs, PSIA-E, 2004 - 2012
- Served on the PSIA National Strategic Education Plan task force, 2010 - 2012
- Former Director of Winter Operations, Mountain Creek Resort, NJ
- Former Director of Marketing, Bristol Mountain
- Former Ski School Director, Bristol Mountain
- Served 6 years on the Board of Directors of PSIA-E
- Served 3 years as chairperson of the SANY (Ski Areas of New York) marketing committee
- Bachelor of Science, Business Administration, Plymouth State University, Plymouth, NH

High Altitude Training: Fact vs Fiction

By Karen Mirlenbrink, CSCS, PMA-CPT

Many athletes use altitude-training programs to enhance their physical performance. However, utilizing these concepts for fitness purposes can be a little tricky. Here are some of the common thoughts, right or wrong, regarding high-altitude training and how it can help or hurt you in your fitness pursuits.
Training at altitude is beneficial because the air is thinner.

FICTION
It’s not the lack of oxygen that makes your body work so hard at altitude. It really has to do with the barometric pressure. Even at 10,000 feet, there is still 29 percent oxygen in the air, and out of that 29 percent you only take in around 10 percent of the oxygen you breathe. The big challenge is your ability at altitude to extract the oxygen and get it into your bloodstream at altitude.

At sea level, your body uses air pressure to its advantage. It allows all of the weight from the atmosphere to help push the air into your lungs, moving the air from an area of greater pressure to lower pressure.

The same happens at a cellular level, where the pressure then allows the air (including oxygen) to be pressed into your bloodstream.

When you work at a place that is higher than sea level, you start to experience less barometric pressure. Thus the air is not forced into the bloodstream as easily, making the body work harder.

Over time, the body will grow more red blood cells to help ease the struggle of getting oxygen. These cells help carry oxygen through the body, which will result in better fitness/sports performance.

Training at altitude will make me more fit.

FACT
Professional and Olympic athletes have known the benefits of altitude training for years. After all, there is an Olympic Training Center in Colorado Springs, Colorado, for a very good reason. If someone trains at altitude, they will see improvements in their maximal oxygen uptake (the ability to take oxygen in and move it into the blood stream), increased lactate threshold (the ability of the body to get over the "burn"), improved power output, and better sleep (which helps repair the body). These benefits are all a result of the red blood cell production caused by the adaptation to low-barometric pressure.

If I train with a mask that restricts airflow, it will simulate training at altitude.

FICTION
As stated before, the benefits of altitude training are not found from areas that lack oxygen, but from areas of lower-barometric pressure. Restricting airflow does not simulate training in altitude. In fact, training with reduced oxygen can cause serious problems like hyperventilation, disorientation, rapid heartbeat, elevated blood pressure and loss of consciousness.

Better use of altitude training would be sleeping in a hyperbaric tent. These tents create an enclosed, simulated altitude that allows the body to see results of altitude training while residing at sea level. These tents can be purchased or rented and assembled in your own bed. Some places offer hyperbaric chambers that you can visit for a fee. The "altitude" is adjusted slowly as the body adapts, and it has been proven to yield positive results.

Though air-restrictive masks may prove beneficial for some athletes whose sport requires working with low-oxygen levels, the masks pose danger to those using them to "get fit."

If I train at altitude, then race at sea level, I'll see better performance.

FACT
Well, this is a tricky one. Depending on the environment, it could backfire on you. If you spend time training in Colorado, which is high and very dry, then do a marathon in Florida, which is low and very wet; you may experience some problems because of the humidity. However, generally, you should see better times, strength and recovery if you train at altitude (or simulated altitude), and then perform at sea level.

If I train at sea level and plan to do a race in the mountains, then it's probably a good idea to get there a few days early to prepare for the race.

FICTION
When you’re not accustomed to altitude, you have two choices: do the race immediately—within a day—or wait 7 to 10 days before racing. If you get to an event a couple of days before, your body has time to figure out that you are in a different environment, and then it will start making the necessary changes it needs to survive at altitude. Your body will become stressed, and then it will show in your performance.

If you do the event immediately, it will not have time to start adapting, and you should not see terrible challenges to your pulmonary system. If you get there 10 days ahead of time, your body will have plenty of time to fully acclimate.

Karen Mirlenbrink, C.S.C.S, is a credentialed fitness professional and Master Trainer for the Pilates Academy International. Her experience in the fitness field has brought her to a variety of clients from medically-based fitness patients to professional athletes. Karen owns the Dunedin Pilates Studio (see http://dunedinpilates.com/) in the Tampa Bay area, and is recognized as a competitive stand up paddleboarder, as she is sponsored by YOLO Board (see http://www.yoloboard.com/) and Garden of Life (see http://www.gardenoflife.com/). Read more about Karen at http://supilates.com/about-your-instructor.

Momentum is Your Friend

By Witold Kosmala
PSIA-E Alpine, Level III
Trainer at Sugar Mtn. Resort Ski School, NC
K2 Ambassador

How did you learn to ride a bicycle? Did your parent push you and ran by you holding the back of your saddle? Then you caught your balance and pedaled on faster then your parent could run. And, you were fine until the time came to stop. Your momentum decreased so it quit holding you up and eventually you probably fell.

The same is on the skis. Momentum is your friend. It makes skiing easier, just like riding a bike. It is tough on a bike to keep balance when going slow. At slow speed the bike wants to fall over on its side and you do all sorts of handlebar movements to keep upright. Don’t you admire cyclists that can stand at a red traffic light balancing on their bicycle without putting their foot down? The same goes for skiing. When moving very slowly, some might wish to have a wider base of support to improve lateral balance. It is so much harder to begin a turn when moving so very slowly. Many movements become easier when there is more momentum, some are automatically performed, like progressing from wedge turns to (spontaneous) wedge Christies, and then on to parallel. The body automatically needs to take on a favorable position for parallel skiing simply because it has to resist forces that come onto it. There is also angulation that comes out of having momentum, which puts skis more on edge.

Momentum is also your friend even when falling. When you are moving the impact when falling is less then that when standing still. I am NOT talking about flying down the mountain, but just moving at gentle pace.

Momentum is also a crutch. It will hide things which need to be improved. It covers up many of your imperfections. Movements happen often too quickly to realize that they are not accurate. (See photo and caption on the next page.)

Try this. Ski with a partner on a slope with very little pitch to it. Parallel turns are to be performed by the front skier as slowly as possible. The skier in the back calls out GOOD or BAD depending if the turn was exactly parallel or it started with a little wedge. If there are five GOOD turns in the row, front skier needs to slow down. A great (hard) little exercise which demonstrates how valuable momentum actually is.
Did you ever hold a bicycle wheel by its axle and then spin it? The faster you would spin it, the harder it was to turn it or tip it. That’s momentum at work. Faster you ski, harder it is to fall laterally. That’s why your stance can be narrowed.

Pretend you ski with feet directly through the analog clocks where 12 o’clock points straight forward. Did you ever move pressure directly from 10 o’clock to 2 o’clock without performing a circular movement pressuring progressively all around your toes? Momentum will permit such a lateral movement, but if there was very little of it, then the recommended circular movement through all of the toes would need to be more definite.

Point of no Return

By Witold Kosmala
PSIA-E Alpine, Level III
Trainer at Sugar Mtn. Resort Ski School, NC

At ski areas sometimes there are signs, which say “Point of no Return.” They mean that if you were to continue on your way, you will not be able to come back. These signs should be taken seriously as they might mean that:

- There is no changing your mind.
- There are no lifts on the bottom where you end up.
- There is no way out, dead end.
- Ski area boundary ahead (could be good.)
- Entering a private property.
- Going into another country.
- If you go on, you will end up on the other side of the mountain.

But, none of this is what I want to write about in this article. I want to address where the "point of no return" means not being able to return back to control. When you reach point of no return you will eventually need to bail out.

Take, for example, a truck driver. If they start going down the hill and their truck load forces become greater than the breaks and engine can hold back, then the truck will start to run away and will need to bail out before an accident happens. Truck driver might wish to rather lose truck’s suspension on a runaway truck ramp, than kill someone.

Here is another situation. You are standing in a shower on one foot while washing the other foot. You might start to wobble or start to tip over. All of sudden you increase pressure on your toes or make some moves in order to come back to balance. When this happens to me, I start thinking that I have a bottle standing
on top of my head, (you know, like those Russian dancers do), and often my balance returns. It is amazing how our brain is connected to balancing. However, if you tip over a little too much, there is no way to get back to balance and you have to put the other foot down, grab a bar, or lean against a wall. If you fight it too long, you might slip on the slick shower floor and fall. The moment when there is no coming back to balance is the point of no return.

Recognizing the point of no return is crucial in skiing. This point is usually when you get going faster then you can control it or make a tactical error or get out of balance. I know that for improving skiing skills it is good to push your envelope and get out of the comfort zone, but, you should do it progressively and carefully. Extend your limits gently so you don’t get to the point of no return and ruin your run down the hill or not finish a race. You might want to challenge the barriers of the envelope, but don’t cross to the other side, especially when there are big dangers awaiting. Now, when you think dangers are minimal, you may actually wish to get to the point of no return so that you can practice the bail-out skills. However, I would think practicing skiing skills and becoming a better skier will permit you to push your envelope further without going too far.

Since pushing the limits often involves excessive speed, speed control drills would be good to practice. Here are some suggestions for keeping yourself in check:

- Don’t let your skis “jet” by moving forward. Don’t pressure the tails of your skis too long.
- Finish a turn before starting a new one. Slow down to a comfortable speed first. Pointing the skis down the hill will normally speed them up, (not if you are doing a stevot turn). Also, keep in mind that when ski is more across the hill, it will hook quicker and easier the downhill set of edges, then when it is running away from you without turn’s finish.
- In general, use higher edges. Implement long leg/short leg. See article on page 16.
- Try to use smaller platform angle by pressuring edges of your boots into the hill. If you pressure in a big toe of the outside ski, then lift the little toe of that same foot and tighten the shin. You don’t want to pressure outside ski just down along the plum line.
- Start each turn cleanly so you can learn to scrape the snow and control the speed before you even reach the fall line.
- Don’t oversteer the skis at the end of a turn.
- Make turns very rounded with no sharp corners.

Here are some exercises that will help with speed control:

- Ski steep terrain slowly.
- Ski a “funnel” to a stop, starting with long radius turns and progressively making them shorter and shorter.
- Do hockey stops. Try spraying snow straight down the hill.
- Do hockey slips.
- Do side slips.
- Do pivot slips.
- Do railroad tracks to develop firm edging.
- Ski iced-over slopes.

Now, that you can control your speed, getting to feeling more comfortable in higher speeds is important. Here are a few ideas you can try that will help with feeling more comfortable with speed. Take note: do some of the suggested drills when slopes are empty and when ski patrol permits you to do them.

- Go on a gentle slope (one that is appropriate for you for this drill) and ski it straight down, no turns except to avoid others. This might not be appropriate when there are people on the slope since you might scare them when you go by them quickly.
- Do “J” turns. Make the straight run preceding the turn longer to get accustomed to higher speed.
- Do box turns. Ski straight down for 2-3 seconds before making a 90-degree turn.
- Do hockey stops with longer straight run before the pivot.
- Do long radius turns on an intermediate slopes.
- Do Pain in the “S” turns.
• Ski powder. In powder you need to maintain a higher speed.
• Jump off something and land in a “friendly” area so you can get back to control, just in case you were to lose it. When you are in the air you cannot be scraping the edges.
• Do leapers where you change your edges in the air.
• Skate straight down a slope.
• Go on a racecourse.
• Improve your fear factor by doing other sports.

I suggest that you push your envelope cautiously and skillfully, and not get to the point of no return. Consequences of crossing to the other side willingly may not be what you want to experience.

One last remark. Did you notice that good skiers seem to be always under control, or if they do lose it, they get it back almost instantly? The trick is that they sense practically the smallest imperfections and correct them before they multiply to become visible to an outsider. These corrections are done almost subconsciously. They ski by feel and with anticipation, staying far away from their point of no return. You can try this for yourself. Stand on one leg with the other bend 90 degrees at the hip. Now close your eyes. Do you feel your toes at work? Sooner they detect a loss of balance and sooner they make a correction, longer you can stand on that leg without putting the other one down. No, really, try it now and then try it while skiing. Doesn’t this idea remind you of my article in the October issue of Peak Performance where I wrote about the “Reaction Time?”

Peak Performance INDEX
for NEW Instructors

By Gordon Carr
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All editions available at www.mathsci.appstate.edu/~wak, www.peakperformancegazette.com, and other portals listed at the beginning of this edition; these are my two favorite.

It is the start of a new season and we all welcome you, as a new ski or snowboard instructor, to our slopes and locker rooms! To each of you new instructors I bid you a hearty welcome to one of the best outdoor sports you’ll ever do. Skiing and riding, to be sure, are great. But teaching others to share your passion for the white stuff will give you a thrill that has to be experienced to be believed. A not insignificant side benefit is that as you teach others to love gliding down the slope you will yourself become a better rider and skier.

Of course each of our ski and snowboard schools has unique policies, procedures and recommended progressions for teaching especially the beginners. But we all rely on some basic principles of teaching those beginners, the very people we MUST retain in order to “grow” our sport. If we don’t share our passion, if we miss this one time chance to make their lesson experience SAFE and FUN, if we don’t create successful learning outcomes and create life-long enthusiasts, we may never get another chance! What we write about in the Peak Performance speaks to the general principles, the training concepts we all share which will help you become the best instructor you can be. If anything I or others write conflicts with your local policies, local trumps these generic words.

Also as a new instructor you become eligible to join PSIA/AASI, the professional organization of snowsport instructors. You will join one of the nine Divisions, ours is Eastern (PSIA-E). Through that division you can attend on snow training clinics of the highest quality. I cannot urge you more strongly to join PSIA/AASI. Talk to other instructors who are members and let them give you their endorsement; beg, borrow, or steal (well, maybe not “steal”) some of the PSIA/AASI and PSIA-E publications; find copies of the technical manual specific to your discipline published by our organization; when you become a member obtain all these information dense publications and hold them close for continued study; and, review past editions of this gazette. Access to ALL editions of the Peak Performance is free and is as easy as my favorite access method, www.peakperformancegazette.com. From the home page, click on the Drop Box for “All Previous Editions” and you enter a world (over 5 years, 9 editions a year) of information about skiing and riding. The gazette is a concentrated, single point resource of incredible knowledge for personal improvement in both teaching and on snow skiing and riding.
full index to the titles for all the 53 gazette editions is the first listed entry in the Drop Box...let your curiosity take it from there. These articles do not substitute for the PSIA/AASI Technical Manuals or Core Concepts Manual; the gazette is meant to augment your knowledge about our sport.

But informative as all these gazette articles may be, as new instructors you may feel the need to have ready access to articles more specific to this beginning phase of your instructor journey. If you are like most of us when we started you probably feel a bit overwhelmed at all the jargon, policy and procedures, teaching principles and other aspects of teaching others to ski or ride. It can, at first, be a little like trying to take a sip of water from a fire hose! So we have presented an index below of just the articles from previous Peak Performance editions which have special relevance for you, the new instructor. Use this index and explore the articles through the same web site, listed above, or use Witold Kosmala’s web site at the university, www.mathsci.appstate.edu/~wak, scroll down to the listed Peak Performance editions and select the one which contains the article you are interested in. Study them on line or print out any you find especially relevant. I hope you find this index helpful...let me know... gordoncarr@charter.net. And...WELCOME to teaching, the best on-snow experience you’ll ever have!

REMEMBER THE TWO FUNDAMENTAL RULES OF TEACHING SNOWSPORTS:

1. For Kids, if it isn't FUN, it isn't worth doing!
2. Adults are just BIG KIDS, refer to Rule #1.

WORDS FROM OUR SKI AND SNOWBOARD SCHOL DIRECTOR, LEN

DECEMBER 2011
Tips From Len on Being “Professional” and Creating Successful Lessons

DECEMBER 2012
Tips From Len About Being an Effective Snow Sport Instructor

SAFETY

DECEMBER 2010
Teaching Guests Skills Comes After Assuring Their Safety

NOVEMBER 2009
Your Responsibility Code

MARCH 2010
Save That Anterior Cruciate Ligament (ACL)

APRIL 2010
More Tips to Avoid ACL Injury

TEACHING THE BASICS

FEBRUARY 2009
Teaching the First Turn

NOVEMBER 2009
Basic Tips For Teaching Beginners

DECEMBER 2011
Ski Lesson 101: Fundamentals

DECEMBER 2009
Teaching Tips: The Turning Wedge, The Beginnings

DECEMBER 2011
Teaching Tips: Wedge Christie Turns, Spontaneous Christies, Narrow Wedge and Braking Wedge

JANUARY 2010
Teaching Tips: Wedge Christie Turns

FEBRUARY 2011
Instructions For Loading a Chair

NOVEMBER 2009
Tips For Gripping Poles

MARCH 2009
Hand And Pole Position

SEPTEMBER 2009
Use The Clock to Help Complete The Turn
Training

Skier’s “Home Position”

By Witold Kosmala
PSIA-E Alpine, Level III
Trainer at Sugar Mtn. Resort Ski School, NC

It is hard for me to even say the word “position” because in skiing there is practically no fixed position of anything at any moment. Everything is moving all the time. “Home position” is a position which skiers would like to be in as much as possible. So, after they leave it, they like to get back to it relatively quickly. Home position is something that skiers “pass through” as they navigate down the hill. I would prefer referring to “home position” as a skier’s “stance.”
Suppose that, for example, you are on a lake in a narrow rowboat (or a canoe) and you choose to stand up in it. What position will enable you to maintain standing without flipping it over? There is not a moment when you don’t have to adjust something in order to keep the balance. This may range from just adjusting pressure on certain toes to definite arm and whole body movements. You keep moving all the time, but you hold on close to one basic position. If your movements are gradual (not jerky) it will take you longer before you get to the “point of no return” and flip the boat. (See an article on this topic in this publication.) This, somewhat squatted position that you will have while standing on the row boat is called “home position.” It is kind of like as if the lake was really calm, but a wake from another boat was coming your way and you were standing in such a way that you could manage the upcoming wave.

In skiing, this home position may vary depending on skier’s abilities, and what varies the most is the skier’s stance width. Some, due to fear and limited skills will prefer to have wider base of support, even when standing still. Other then that, position of most other body parts should be common to most skiers. I will try to describe how, in my opinion, skier’s body should be in their “home position.”

Feet should be 4 to 8 inches apart. Body should be tipped in such a way that balls of the feet are pressured to the footbeds more then the rest of their feet. Skier should feel every toe being pressured gently to the boot’s footbed.

Ankle should be bend as much as the ski boot permits, where the pressure of shins against the boot is mild but constant. The result is that the toes and the knee should both touch a vertical pole. (See the photo on the right.) If this is not possible, skier should have their ski boots adjusted by a professional boot-fitter. If the knee is off to the side of the vertical pole, then canting needs to be corrected. If the knee cannot reach the pole, boot’s flex might be too big or boot’s cuff needs to be tilted forward. If the knee touches the pole but the shin does not touch the boot, or it touches just barely, then the boot is either too soft or it is tilted forward too much.

Thighs should be soft to touch and angled so that the middle of the hip is over the middle of your downhill foot.

The torso should be arched forward just a bit so spine is in a relaxed state, relatively parallel to the lower legs. Back should not be straight like solder’s. Definitely skier should not stand as if hugging a tree. (See photo below.) That causes too much arching back in order to make room for the chin. Slouching, which parents always correct kids about at a dinner table, is actually recommended in skiing.

Looking at my right hand, how the vertical pole at the tip of the boot is touched by my knee. As the knee touches the pole, there should be a gentle pressure of shin against the front of the boot. There should be a definite change of pressure in order for the shin to go past this point.

Since we are only talking about “home position,” twisting of the body will not be discussed here. So, shoulders will be left alone in their comfortable position.

Head should be positioned so eyes are looking straight out at a point on the snow about 15 to 20 feet in front. It is normally easier to stay in balance when focusing on an object close by, so looking further away may be more difficult.

Arms, yes, arms. This is a big one. They should be gently flexed in the elbows so that wrists are lower then the belly button. Elbows should be (almost) in front of the torso. Depending on the turn size and type of poling used, normally wrists are a continuation of the forearms. Arms should be so that wrists are barely visible in peripheral vision on the bottom of the goggles. The hands are wide apart as if hugging a large lady. I hope I am not hurting anyone’s feelings, but there are large ladies and they need to be hugged. So, since lady might likely be shorter then you are (since you are in ski boots, on bindings and on skis), you will most-likely have to arch your back forward in order for your shoulders to get close to hers and still giving her privacy. And since she is wide, your wrists will be in a diverging position, that is they are not parallel to each other and not pointed toward each other. (Sorry – no photo of hugging.) I would encourage you to reread the article written by PSIA-W examiner Gary Elliott published in the September issue of Peak Performance Gazette.
Good thing is, home position can be practiced anywhere. However, it does help to have your boots on for the sake of shin contact. It does help to have skis on due to heel-rises that all bindings have built-in. All that affects the angles.

If the stance is correct, then the skeleton will support the body instead of muscles having to hold it up. This leaves muscles to help with technical aspects of skiing. There will be less fatigue and the skier can ski longer and better, with improved reaction time. Not only for new skiers it is difficult to tell whether they have a correct, but for many skiing veterans. Here are some suggestions on how you can tell if you have a proper stance.

(Easy stance self-test)
- When standing across a hill, pick up one ski at a time.
- When standing across a hill, gently hop up and down.

(More advanced stance self-test)
- “March” down a gentle slope by picking up one ski at a time?
- Traverse and pick up entirely off the snow one of the skis for one or two seconds. How about for a longer time?

(Even more advanced stance self-test)
- Hop along the way, whether skiing a straight run or a turn on intermediate slopes.
- Pick-up high one ski at a time while navigating down a blue slope.

On the left, my daughter Alina (16) is ready to put the tray down. Her arms resemble arms of a skier.
- Tray must be big so arms are not too close to each other.
- Must hold it on the sides furthest to each side of the tray so wrists do not bend in or out.
- Tray must be low enough, like placing it on the table, so wrists are below belly button.
- Table needs to be low enough so that back will need to arch forward.
- Tray must be round so arms are forward enough, so that elbows are in front of torso in order for the tray to clear the body.

Here, I demonstrate a correct body alignment called “home position.” Note how the hip is lined up above the boot. Back and lower legs should be close to parallel. Also note that I am not standing like a tree, but the line through my body is perpendicular to the slope.
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I discussed long leg/short leg in the previous 2 issues of Peak Performance Gazette. Those articles predominantly dealt with ways of obtaining long leg/short leg on dry land. Now, that we have snow, I will take this topic to the slopes. Long leg/short leg on slopes translates to skiing on edges of your skis. If you are turning, then this is a desirable scenario. Also, long leg gives stability and strength, it is less tiring, and it has ability to flex and absorb. Furthermore, long leg puts hips in their proper place.

There are many ways you can achieve long leg/short leg configuration when on the hill. Here are some ideas for moderate slopes at moderate speeds.

- Start with side-stepping. (See photo on the right.)
- Traverse or just simply stand on a steeper slope. Downhill leg will be the long leg. (See photo on next page.)
- Side-slip on steeper terrain. (It is hard to side-slip when slope has too little of a pitch.)
- Ski down trying to show the bottoms of your skis to imaginary “spectators” as you complete a turn, or equivalently, show the graphics of your skis to imaginary spectators on top of the slope.
• Ski down trying to show the bottoms of your skis to imaginary “spectators” on the sides of the slope.

• Ski with outriggers, that is, dragging poles on the snow. Do not sit back. (See photo below.)

You can tell that the spot where my brother Andrzej is standing is a little steeper then the one on the horizon because his legs are close together but one ski boot is definitely lower then the other. Long leg/short leg.

On the left is a demonstration of outriggers dragging on the snow while skis come close to each pole when making a turn. One leg has to be longer then the other.

• Same as the outriggers but for imagery think that you are skiing in a low tunnel so you need to be squatted between the turns. (Do not sit back or bend your body forward.)

• Ski while holding ski poles across your body but parallel to the slope. (See photo on the right.)

Observe that tips of my poles are facing each other for safety (to others.) Because poles overlap only a little, my arms are somewhat close to each other, but this explicitly shows how poles are parallel to the slope. Note that my left leg is definitely long.

• Stop below your partner and pull the partner by their poles asking them to resist and not to let you pull them over. See how their edge angles increase and how the downhill leg will need to be longer in order for them to be able to withstand your pull. (See the photo on the next page.)

As you noticed from the above list, anything that creates hip angulation will create long leg/short leg configuration. Here are a few more ideas.
• Basically, any tipping of the skis creates long leg/short leg. (See photo below.)

Here I am pulling my brother Andrzej by his ski poles. If his skis had only a little edge angle, then he would slip. If he did not angulate, I would pull him over. “Catching a rabbit” down the hill is never much fun. So, in order to resist the pulling forces he has to angulate and the uphill leg has to step up and get shorter in order to make room for the lower leg’s

• Blocking pole plant. (See photo below.)

Here I am performing a blocking pole plant. This causes my hips to angulate.

• Drawing circles on the snow with pole’s tip. (See photo on the right and one on the next page.)

I start skiing holding poles with tips pointing up. While turning, the outside pole draws a circle where thumb is the lowest of the fingers.
• If you reach with the uphill arm to the downhill knee you will create hip angulation resulting with one leg long and the other short. However, be careful with this movement. It is NOT normally performed when skiing since it counter-rotates the upper body. In normal skiing, you should ski into a countered stance with your feet under a stable torso and not twist your upper body. (See photo below.)

How about just simple touching with the uphill arm the downhill knee? Well, maybe not?
Turn to Wisdom

• When confronted with a Goliath-sized problem, which way do you respond: “He’s too big to hit” or, like David, “He’s too big to miss”?

• The only fool bigger than the person who knows it all is the person who argues with him.

• What counts is not the number of hours you put in, but how much you put in the hours.

Deep Stuff

• Every year thousands of people try skiing and snowboarding for the first time. The majority never come back. Why? Everyone takes a lesson if they want to learn how to play violin. They are required to take a lesson to drive a car. What will you do to encourage people to take a ski lesson? Why would it be good for people to take a lesson?

Thoughts for the Month

• What are “sequential” moves and are they good to have?

• What is an altitude sickness?

• Can one ski with no dorsi-flexion?

• What are tree wells?

Elaborations on last month’s Thoughts for the Month.

Question. Give some examples where in skiing momentum is your “friend.”

Answer. See article on page 7.

Question. What does “Point of no Return” mean?

Answer. See article on page 8.

Question. When you are standing with your feet side by side 4 inches apart, is the pressure on the inside of your feet the same as on the outside of your feet? How about when your feet are 12 inches apart?

Answer. No, the pressure is higher on the inside of the feet, unless you are standing in an unusual way. Here, try this to see for yourself. Stand up and place your feet 4 inches apart. Now, try lifting one leg up. Does your body shift laterally? Yes, so that the whole foot would be equally pressured. Now, if your feet were 12 inches apart, body would have to shift laterally that much more if one leg was to be lifted up.
Question. Why are bicycle pedals 6 inches apart?

Answer. If the pedals were closer together, rider would be uncomfortable. Their feet would feel like the ankle bones will hit each other. Saddle would rub the legs really hard. On the average, people do not like standing with feet any closer to each other than 6 inches. If the pedals were wider apart, a cyclist would feel like they are riding a horse, or a motorcycle. A cyclist would not have as much power to put into the pedals and they would likely strain inside parts of their thighs. In stepping, they would have to flap the bike from side to side a whole lot more in order to pressure the pedals. Their body would not be lined up with handlebars where lots of pulling takes place.

This and That

CHRISTMAS TREES

I visited friends at their house in Louisiana during Christmas time. When the conversation got quiet, you could hear, what seemed like, hail on the roof. It kind of sounded like, perhaps, sleet. But, no, it was the pine needles falling off of their Christmas tree. They were bouncing on the hardwood floor. Hosts said that falling needles was not a serious problem, but sliding off glass ornaments was.

It made me think how nice are North Carolina Fraser fir trees. They are shipped to Louisiana and more expensive than their local pines, but they are worth the extra expense. White House spends whatever it takes to get the best Christmas tree, and every year it is a Fraser fir from North Carolina.

Fraser fir was named for John Fraser (1750-1811), a Scot botanist who explored the southern Appalachian Mountains in the late 18th century. Fraser fir is a uniformly pyramid-shaped tree which reaches a maximum height of about 80 feet and a diameter of 1-1.5 feet. Strong branches are turned slightly upward which gives the tree a compact appearance. Fraser fir is andricous, meaning that both male and female flowers (strobili) occur on the same tree. Flowers are receptive in May to June depending on elevation and other environmental conditions. The species is wind pollinated, and cones mature in a single season. The combination of form, needle retention, dark blue-green color, pleasant scent and excellent shipping characteristics has led to Fraser fir being the most popular Christmas tree species and North Carolina produces the majority of them. It requires from 7 to 10 years in the field to produce a 6-7 feet tree. It grows naturally only at elevations above 4,500 feet in the Southern Appalachian Mountains from southwest Virginia, through western North Carolina, and into eastern Tennessee.

For me personally, the nicest characteristic of Fraser fir is not just its perfect appearance, but the fact that its needles are so very soft that you can simply hug that tree. This means that putting one up in the house is in fact painless, (there is a double meaning in this last word.)

There is a Christmas tree farm behind our house. Nothing better then Christmas everyday.
SCAMS, SCAMS, SCAMS. Beware of scams. Below are some popular ones. Don’t fall for them.

Lately, people have been receiving telephone calls from callers claiming to be with Internal Revenue Service (IRS), local Police Departments, and Sheriff’s offices. The callers tell the students they owe money for various reasons. The callers are spoofing the telephone numbers of the agencies to make the call seem more legitimate. If the student hangs up, the caller calls back almost immediately and spoofs 911.

There are three parts to the “signature” of this attack:

- The victim receives a telephone call with a spoofed caller ID to make it appear to be from either the IRS (they often spoof the “1040 hotline”), a law enforcement agency geographically close to the potential victim’s location, or 911, the emergency contact number used in the United States.

- The victim will be told that they have committed a crime, which may include running a red light and being caught by a traffic camera, failing to appear for Jury Duty, failing to pay your taxes or failing to pay them on time, or, if an international person, having a problem with immigration paperwork.

- The victim will be instructed to send a payment immediately, with amounts ranging from $500 to $2,500, and threatened with immediate arrest if they fail to comply.

This is a known scam and alerts have been issued by the FBI to the public. No law enforcement agency will ever require a payment over the phone. If you receive this type of call, tell the caller that you know that this is a scam and that you are contacting police. Hang up and do not answer return phone calls.

If you wish to report the call, please file a complaint through the Federal Trade Commission at https://www.ftccomplaintassistant.gov/GettingStarted#crnt and submit the required information. If you have already been the victim of this scam and paid money, please contact the local Police Investigations.

HOW ABOUT THIS ONE? At least here you can see poor spelling.

Dear User,
Your Yahoo account will expire soon. You must upgrade it immediately or your account will be disable. We recommend that you upgrade your account within 24 hours to avoid suspension.

Renew Your Account Here

Regards
Yahoo! Mail Team

Your Yahoo account will expire soon. You must upgrade it immediately or your account will be disable. We recommend that you upgrade your account within 24 hours to avoid suspension.

HERE IS YET ANOTHER. These people should be skiing instead, .... Or, maybe not. Who wants them on the hill?

From: James Newton Howard <kyototour@aol.com>
To: kosmalaw@bellsouth.net
Sent: Tuesday, October 21, 2014 9:22 AM
Subject: Job Offer !!
Hello,
I am James Newton Howard, Recruitment Specialist with Sights On Service Inc. “We have a mystery shopping assignment in your area and we would like you to participate”. Secret Shopper® has been in business since 1990. We are a charter member of the Mystery Shopping Provider’s Association (MSPA), the professional trade association for the Mystery Shopping industry. There is no charge to apply to be a Secret Shopper® and information is protected. Secret Shopper® is accepting applications for qualified individuals to become mystery shoppers. Its fun and rewarding, and you choose when and where you want to shop. You are never obligated to accept an assignment. There is no charge to become a shopper and you do not need previous experience. After you sign up, you will have access to training materials via e-mail, fax or postal mail.

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PERSONAL INFORMATION:
First Name:
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Age:
Current Occupation:
Email Address:

We await your urgent response. Thank you your willingness to work with us. We look forward to working with you.
Sincerely,
James Newton Howard.
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MORE SCAMS YET. You get emails to update your accounts, to update you email addresses, to keep your accounts from being closed, to upgrade, and so on. Hope you already know that www.craigslist.com scams can wipe you out clean. Beware. Don’t give out your private information unless you are certain whom you are dealing with. There are other things that are much better to do – SKIING!!!
YET ANOTHER FEAR. Trees don’t move. Watch for soft snow close to trees as well. It may compress more then you think and not let you turn on time. Remember, tree will not move out of your way. Even the thinnest trees close to the ground can be deadly. However, (according to Witold,) the best way to avoid them, is not to look at them. Look at the white between the trees. And, before you enter, make sure you know there is a wide enough path for you and a way out. Trees don’t move.

The Bottom Line

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