



NORDIC ULTRATUNE UPDATE

News & Notes from NORDIC ULTRATUNE

134 Riverside Ave – PO Box 422
Winthrop, WA 98862
509.996.4145

Email: xcgrind@ultratune.net
Subscribe: newsletter@ultratune.net
WWW.ULTRATUNE.NET

November 2008

Volume 11, Number 3

News and Notes

October becomes November...

New skis arrived a little late this year, so new skis weren't rolling out the door till mid-October. In the meantime, I managed to work through a bigger than usual load of grinding work. Many skiers with new skis are getting "race bottoms" – grinds for specific conditions – and hotbox service so they'll be ready to rumble.

Senior Nationals is right after Christmas, in Anchorage, and there's no time to wait to get skis prepped after they've been "skied in". Show up at the start of your first race with skis that are ready, and you'll have one less thing to worry about. Fast skis make a difference of up to a few percent – that's just too big to ignore.

Newsy Newslettery Newsiness...

Ultratune newsletters are coming out monthly through the season this year, though they may be a few pages shorter than the updates from previous years. At the same time, Ultratune has added a blog to our web presence. The blog has short and timely articles on events, testing, product info, etc. Check it out at: <http://blog.ultratune.net>

Thanksgiving at Silver Star

The shop is usually closed on Tues/Wed each week, and with Thanksgiving on Thursday, it gives me and Margaret a chance to dash off to Silver Star for a few getaway days to ski together and see lots of ski friends. I'm looking forward to the coming snow, and I'm ready to click on some fast skis!
-Mark Waechter

Schedule

During fall and winter, Ultratune is open Thurs, Fri, Sat, Sun, Mon, 11-5. Stop in and say hello! Most days I'm in the shop earlier, but those hours are a sure thing. Usually Tuesday and Wednesday of every week are reserved for ski testing (when the snow arrives) and a little time off.



November Skiing

Random Structure Patterns?

I've been asked several times if I've considered trying a "random structure pattern" on ski bases. And I've often heard the phrase, "...like a golf ball!" added to the suggestion more than once.

The idea seems attractive – a surface finish that could be applied with a bead-blaster or other easy, automated or partially automated means.

Yes, it sounds like a possibility. But there's a simple answer explaining why it isn't a good thing.

Skiing isn't directionally random. An isotropic surface finish would be best for omni-directional movement, but would miss the opportunity to trade some increased side-ways drag for improvements in the long axis. The ski moves in a predictable and pre-defined direction, so the best solution is to use a directionally optimized surface finish.



photo credit to: Christian Haase

"Grind Over the Weekend" Schedule

Nordic Ultratune has a grind schedule to minimize the turn-around time for ski service. Skis that arrive by Thursday will be shipped the following Monday (4 days later) by FedEx, which assures the customer will receive their skis before the following weekend. With Ultratune's "grind over the weekend" schedule, skiers can ship their skis for stone grinding and miss only one weekend of skiing on their race skis. *There's still enough time to make your skis fast for the start of the ski season!*



Photo by Max Limb

Laura McCabe had golden results at WMC 2008 in McCall. Here she's standing with Peter Hale of Madshus, and showing off the Madshus SC skaters and Athena boots she used to win in the 30K. The skis got a 615b grind from Ultratune just a few days before the race.

The First Time Back On Snow

by Brian Gregg

Brian Gregg grew up in the Methow Valley and skis for the CXC Elite Team. He is an NCAA All-American and qualified for his first World Cup last winter in Canmore, AB. Check out his website www.xcSkiLife.com to follow his adventures throughout the year.



Back On Snow

Are you checking the internet for snow and ski reports daily? Are you looking out the window every morning to see if the frost has been replaced with snow? Are you about to head out for the first on-snow ski of the season? The first day back on snow can be one of the happiest days for a skier; unfortunately it can sometimes be frustrating. There are several things that can help make your transition to on-snow skiing more enjoyable.

Keep it Simple

For your very first experience of the year, smile and keep it simple. Go out and ski for the simple joy of being a part of the greatest sport in the world. Don't think about workout time, intensity, or technique; you have the rest of the year for that. I recommend leaving your watch in the car, when you start getting bored of doing loops or get tired then it is time to go in. Go out and just have fun skiing.

Skate or Classic

The choice of whether to classic or skate is often limited by conditions and grooming. If you are proficient at both techniques and the conditions are suitable I recommend skating your first few times out. This will take kick waxing out of the equation. Also, skate roller skiing translates more easily to on-snow skiing than classic roller skiing.

Drills/Technique

Use other skiers to help tune your technique. Pick someone who skis particularly well, get in behind them and try to mimic their technique. Ski behind them for a kilometer, and then see if you can ski similar to them without being directly behind them. Everyone has different things to

work on with technique, to avoid overwhelming yourself work on just one or two things.

Lose the Poles

Incorporating a few 10-20 minute session of no pole skiing in to your workout is an excellent way to work on technique. Find a flat section or loop of trail and work on skiing as smooth as possible.

Skating

When skate skiing without poles begin with you hands behind your back and focus on using your legs. Focus on using your legs equally. Once you have the hang of this, begin using your arms as if you had poles in your hands. Switch back to having your hands on your hips to make sure you are using your legs equally and efficiently.

Classic

When classic skiing without poles, pretend you are using poles and swing your arms. On flat terrain diagonal stride and focus on being smooth and getting kick. That is often enough for the first few times classic skiing without poles. Once you become comfortable, try going up a slight uphill. If you are having difficulties wax with a bit warmer wax or use a softer pair of skis. Another thing to try is to drop one of your poles. Skiing with one pole will allow you to maintain enough speed to kick up steeper grades.



Skiing with out poles has a number of benefits. You will strengthen your ski specific muscles and improve your balance and body position. When you pick your poles back up, you should feel like a better skier.

These exercises will help you to become a better skier. Skiing without poles can be beneficial throughout the season and you can continue to incorporate it into your workout. Enjoy your first day on snow and enjoy winter.

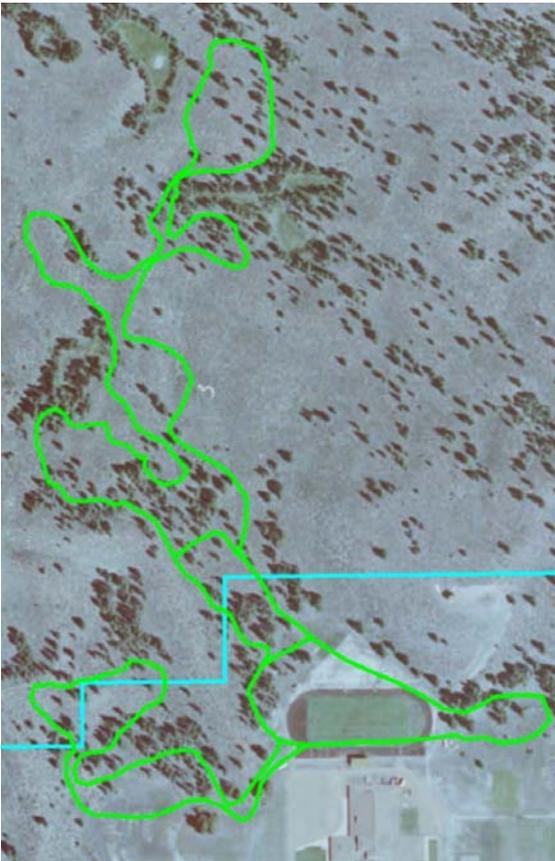


New Winthrop Race Trails

by Mark Waechter

The Methow Valley Nordic Club and the Methow Valley Nordic Ski Team, in cooperation with the Methow Valley Sports Trails Association (MVSTA) are racing against the clock to complete a new set of race trails.

The new racing trails are located right next to Liberty Bell High School. Liberty Bell High School serves the entire Methow Valley from Carlton up to Mazama. Although the MVSTA already maintains a huge network of 200 km of trails, locating ski trails at the high school offers some real positives.



*Okay, the scale doesn't do it justice...
The new MV Nordic Race Trails.*

The new race trails will allow the local Junior team to train right at the school, which will greatly simplify the logistics and time considerations that can be a real problem. The new trails will use the football stadium as a start/finish area, creating a terrific spectator environment for watching races. In addition, the facilities at the

school (power, water, locker rooms, etc) will make the site very user-friendly. Having a dedicated race venue will also alleviate schedule conflicts and congestion at the Chickadee trailhead, the traditional site of the local JOQ race.

The trails consist of a 5km loop with cut-off options to allow races from sprints to longer distances. The terrain is a hilly mixture of pines and shrub-steppe terrain, and is being built to FIS standards for trail width. The trails were planned with a forward-looking view of providing a race course that could accommodate national-level competitions.

Jay Lucas, the MVSTA's director, points out that the new trails will NOT be public use trails, but are specifically set aside for race training and races. The trails are being constructed on forty acres owned by the school district and adjacent private land that is being used with the generous permission of the property owners. Grooming for the race trails will be managed by Methow Valley Nordic, rather than the MVSTA.

The Methow Valley Nordic Club plan is to have the trails completed before the snow flies, and use the new race venue to host the JO Qualifier. The Race of the Methow, this season's local JO Qualifier race, will be on Feb 7 & 8th, and consists of a 1.2km skate sprint on Saturday, and a classic technique distance race on Sunday. Details are found at:

<http://www.mvsta.com/winter/raceomethow.html>

over 200k of groomed trails

*Ski Methow
Valley Style!*

5K & 10K Ski Rodeo 12/27
15K & 30K Pursuit 1/10-1/11
30K Rendezvous 1/24

MVSTA www.SkitheMethow.com

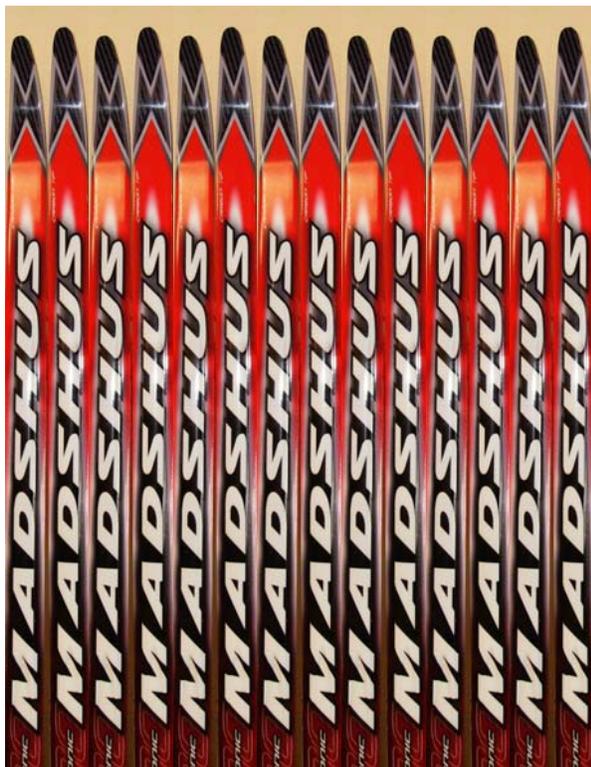
The Madshus Nanosonic

Yes it's true, it's a Nordic ski that's actually made in Norway.

The Madshus Nanosonic is really an evolution of the Hypersonic, but developments for the 07/08 season were big – more than minor incremental improvements – and Madshus decided that it was time to give the ski a new name. So it was rolled up to the Nanosonic last season.

As compared to the Hypersonic, the Nanosonic has a carbon triaxial braided fiber material, and a core material that won't absorb resin and thus saves weight. Madshus says the skis are 500 grams per ski, which puts it in the "very light" category. My measurements at Ultratune show the weight slightly higher, but still very light.

The Madshus skis have the NIS plate on all the models. Binding positioning affects ski speed, and optimizing binding position helps optimize ski speed. NIS does that. Enough said. You can still use Salomon bindings, of course, if that's your preference.



Some of the new 2009 Madshus skis

The skate and classic skis are extremely well matched (i.e. both skis in a pair are "the same"). Also, Madshus has done a great job preparing the bases – they're flat and easy to tune. The factory structure is still a bit too coarse – in my opinion – for racing in most conditions, but a grind will make them race ready.

Nanosonic Skate Skis

The Nanosonic skate skis are available in three versions:

- The "SC", which Madshus calls as soft-conditions ski, but which I think is a great all-rounder. It has less side-cut (44-43-44) and feels really good under foot.
- The "R", or regular, is the all-around version of the Nanosonic skate ski, with a 44-40-44 side cut that handles well in a broad range of temps.
- The "HP", or hard-pack, version has a stiffer tip. It has the 44-40-44 sidecut and although it has a stiffer forebody, it's often the all-around pick for skiers over 160 pounds or in areas where hard-packed skiing is the norm.

Which skis are the World Cup skiers using? Apparently there are some who ski only on the hard-pack and "regular" models (with the sidecut), and others who ski solely on the SC.

To me the real gem is the SC, which skis beautifully in conditions ranging from soft new snow to very firm conditions. I'm using a 195cm with reserve camber of about 0.25mm, and flattening at 108% of body weight. I think this ski really handles nicely and is particularly smooth at rolling edge to edge. Anyone who uses the outside edge of the ski with a V2 or V2-alt will really like the way this ski rides.

Nanosonic Classic Skis

I like the "plus" version of the classic ski. It has a little bit higher and more active camber. Fit, of course, is the key to getting a ski that kicks well. A well-fit ski of this version kicks nicely and will have room for a bit of klistor, so it'll make a great all-around classic ski. The bit of sidecut, and a not-too-soft tip make this ski a good handler on the descents, too. Like the skate skis, the Madshus classic skis are really nicely matched, ski-to-ski, so good pairs are the norm.

Availability

Ultratune has a lot Nanosonic skate & classic skis in stock. If you'd like a pair hand-picked for you, drop me a line. They're priced at \$524.

The Rossignol Xium Carbon



By now you've seen the bright orange cosmetics on the Xium skis, but have you looked closely? The ski is a different design, compared to the old red/white Xium, and that's worth a close look.

For starters, the orange ski is a cap ski. It has a full cap and no longer has the hard side-panels of the old Xium. Along with the cap fabrication comes the flanged base edge, similar to what is found on an Atomic skate ski – it's pretty pronounced.

The ski has a full carbon deck under the surface, and you'll find a noticeable hump running along the centerline of the ski; it's about an inch wide. And the ski is lighter and thinner than the old red/white version, shaving a millimeter or so in width along its length.

Skiing it... The Xium skate skis are smooth, fast, and easy to control. The skate skis have good edge control in icy conditions, and turn easily. They're a super race ski, both for experts or for beginners who put a premium on a skate ski that's easy to balance on.

Fitting remains largely unchanged from previous incarnations of the Rossignol ski; half-weight camber length and camber height measurements are about the same, and reserve camber at 100% body weight is about the same in relationship to sizing. Also pressure-to-close in relation to body weight is still the same. Consideration of the more compliant forebody is important in fitting the ski.

Also the reinforced tip/tail sections, that has been incorporated into the Xiums the past few years, is still part of the ski (clearly visible in the photo).

What about the classic skis?

The C2 classic skis are such a hit that I'm very happy that there aren't any changes to it. The skis I've seen so far this season (Oct 2008), have been coming in a bit firm, so getting a carefully fitted ski is critical. It's the same ski as last year, but if the rack is full of stiff skis, it makes getting the right pair more challenging. They ski beautifully, though.



A new Xium on the test bench

Availability?

Ultratune has about 60 pairs of new Xiums in stock right now if you're interested. The price, including stone grind of your choice and hotbox service is \$524. If you'd like some, let me know! xcgrind@ultratune.net

The hand picked ski program works like this: You send me a note letting me know what you want; I'll need some size and weight info, along with information on preferences. Boot size helps, too. I pick the skis, then I'll contact you for grind info and payment. They'll be stone ground, hot-boxed, bindings mounted, etc, and shipped to you.



Skis have arrived, and we're picking carefully, with lots to choose from.

MORE HEADLAMPS

Petzl MYO XP

"Hey Ultratune! Do you have a good headlamp for under \$100?"



The response to October's article about the Mila Headlamp was very positive. However, one recurring question was, *'that's great, but do you have a good headlamp for under \$100?'*

So, I did some research and looking around, and found the "best under \$100 headlamp" for XC Skiing. The Petzl MYO XP with belt battery pack.

Is it any good? Yes it is. Ultratune became a Petzl dealer in order to get this one single product from them – I think it is

good enough to go to that much effort for this headlight. The bang-for-the-buck factor is terrific.



The Petzl MYO XP is a very bright lamp, with a sturdy harness. It's got the "over the top" strap, which I consider mandatory for skiing, since it really keeps the headlamp in place on your head.

The MYO XP has three power levels and also has a "state of charge" battery indicator. It's an LED light, so battery life is extremely good – according to Petzl it will run 180 hours (!!!) on the lowest power setting. It

runs on three AA batteries (which are included!) but doesn't have a recharger. With the super-long life due to the LED setup, this is a reasonable configuration.

It's a bright light – 150 lumens in "boost mode", which is about half the light output of the max setting on the Mila, but still very good for night skiing in familiar terrain. The Petzl has a wide angle lens so the beam spread is good. The

light beam is adjustable and extends far enough ahead to work well on descents while night skiing.



A close-up of the lamp on the Petzl MYO XP.

The belt battery pack is something that people often wonder about. The belt battery pack is good in two important ways: 1) in cold weather it keeps the battery pack out of the wind (in a bottle carrier, or a pocket); and 2) it keeps the weight off of your head – the strap/lens portion is only 3 ounces.

The Petzl MYO XP sells for \$84, which is really reasonable. Contact Ultratune if you'd like one sent to you (xcgrind@ultratune.net or by phone at 509.996.4145).

If you want an economical headlamp this is a great value. No, it's not as bright as the \$329 Mila headlamp, but at \$84 the Petzl MYO XP it's a very good night-skiing option.

Need Boots?



Madshus & Rossignol boots are in stock.
Nordic Ultratune 509.996.4145

Stone Grind Your Skis!

Skis are subject to damage every time you ski on them or wax them, or just leave them sitting around. Abrasive skiing conditions, heat from wax irons, and exposure to air all degrade your ski bases. The performance of your skis is greatly affected by the condition of the P-Tex and the surface condition of your skis.

If your skis have base damage, they can be improved with a fresh grind. Any of these symptoms can be remedied with a new base finish from Nordic Ultratune:

- *Skis just aren't fast as they used to be...*
- *Surface scratches*
- *Skis won't hold wax*
- *Over-heated, oxidized, dried out*
- *No structure remaining*
- *No longer flat – convex or concave*

In addition, you can choose the base structure that you need – whether it's an all-around structure for your one-and-only pair of skis, or a special purpose grind for specific snow conditions.



The Tazzari Grinder converts depleted p-tex into weapons grade ski bases!

Hotbox Services at Nordic Ultratune

I routinely get emails asking for clarification of our Hotbox services. Here's what we offer:

Hotbox Basic - In our basic Hotbox process, skis are waxed with a warm paraffin and placed in the Hotbox for 90 minutes for thorough wax penetration. **At \$15 it's a bargain.**

Hotbox Deluxe - With the Hotbox Deluxe process, the skis receive an antistatic treatment using a special process, followed by a warm paraffin, then Hotboxed for 3 hours, providing super-saturation. The Hotbox Deluxe is highly recommended for all stone-ground skis, especially if you plan to race very soon after receiving your skis from the grinder.



More on Why to Grind New Skis

Skis intended for specific conditions will need to be structured for the best possible performance. Ultratune can help you choose the best base structures for your needs. Get rid of excuses by getting the skis prepared for top speed, right away.

It certainly true that the p-tex bases on new skis are better than they were in the past. But it's very likely that your new skis have been sitting in a warehouse for the better part of a year. Often new skis have dried-out, oxidized base material. **It's also common for new skis to have a relatively aggressive structure on the base which can be slow for all but wet or icy conditions.** Sometimes new skis have scratches and often brand-new skis aren't perfectly flat.

Naturally, you want fast skis. A grind and hotbox will have them race ready.



Please clean your skis - don't send them looking like this!

NORDIC ULTRATUNE

September 2008 WORK ORDER FORM & PRICE LIST

(Please attach one copy of this form to each pair of skis)

INSTRUCTIONS:

- Please: we must have a fully completed order form to begin work on your skis!
- A personal check or charge card info (Visa/Mastercard) must accompany your skis.
- Remove all wax from skis - there will be a \$5.00 surcharge for removing wax from skis.
- Tie skis together with rubber bands or tape - ski ties will not be returned.
- Fold this form and tape it to your skis. One work order form per pair.

SHIP SKIS TO:

**NORDIC
ULTRATUNE**
134 Riverside Ave
Winthrop, WA 98862

Grinds (all grinds include travel wax):

	Prices in US\$
LJ03 - general purpose "all around" grind; very good on classic skis	\$ 64.00
MVX - universal layered cross-structure for skate skis in "east slope" conditions	\$ 64.00
MVL - general purpose linear grind for classic skis in colder "east slope" conditions	\$ 64.00
615B - fine, layered, interference pattern for skate skis in colder conditions	\$ 76.00
XC01 - for extreme cold conditions; linear grind with a secondary polishing stage	\$ 76.00
XC02 - for cold & dry snow; linear grind with a secondary polishing stage	\$ 76.00
SLC02 - an excellent klister grind for classic skis; a 2-stage compound grind	\$ 76.00
R2.3, R3.3 - for coarse, transformed snow, high humidity - 3-stage compound grind	\$ 88.00

Waxing (add to the above price):

Hot Box Basic - paraffin wax with 90 minute hotbox soak	\$ 15.00
Hot Box Deluxe - anti-static treatment followed by paraffin wax & 3 hour hotbox soak	\$ 25.00

Additional Services (add to the above price):

Binding Installation (specify boot size _____)	\$ 12.00
Ultratune Flex Analysis	\$ 15.00
Rush order and overnight shipping (please call in advance)	\$ 35.00

Subtotal: \$ _____

Washington residents add 7.7% sales tax: \$ _____

Packaging, Shipping & Insurance: \$20.00 first pair, \$10.00 subsequent pairs \$ _____

Total: \$ _____

SHIPPING ADDRESS

SKI INFO

NAME			
ADDRESS			
APT / SUITE			
CITY			
STATE		ZIP	

BRAND			
LAST 4 DIGITS OF SERIAL NUMBER			
SKATE	<input type="checkbox"/>	CLASSIC	<input type="checkbox"/>

SKIER INFO FOR FLEX ANALYSIS

SKIER HEIGHT		WEIGHT	
--------------	--	--------	--

NOTES

DATE		/		/	
------	--	---	--	---	--

CHARGE CARD PAYMENT INFORMATION

NAME ON CARD			
VISA / M.C.		EXP	/
SIGNATURE			

