

# Instructors Race Report: “Classic Craftsbury!”

by: Joe Bouscaren, [www.sportsmedicineonline.com](http://www.sportsmedicineonline.com)



## Silver Star Ski Camp [www.xccamps.ca](http://www.xccamps.ca)

January 28, 2006, TD Banknorth Craftsbury Marathon Craftsbury Outdoor Center, Craftsbury Common, VT (*NEMS, Zak, Club*) Classic technique marathon, 25 and 50 km.

The Craftsbury marathon offers both 25 and 50 km races and a touring class where warm soup and other delicacies are served. The entries are limited to 1000 and they fill every year.

Most years Craftsbury offers plenty of snow by late January and temperatures in the single digits. It is not unusual for the race to go on a short hold due to temps well below zero.






This year the whole eastern US has had a warmer than usual winter with plenty of rain and northern Vermont is no exception. You can see from the picture that the snow was very thin and mostly transformed.



While the race is usually point to point from Highland Lodge to Craftsbury Common, the course was changed due to the low snow situation. As John Broadhead explained at the start, on beautiful sunny lake Hosmer: “pay close attention on the lap (2 laps for 50km), since the finish goes off on a 3-4 km spur up to Craftsbury Common”.

The distances were approximately 27 km for the shorter race and 44 km for the full marathon.

As you can see from the historical weather data from a nearby airport the day warmed quite dramatically from the morning until the 9am race start.

11:54	SW 9		Fair	44
10:54	SW 13 G 18		Mostly Cloudy	44
09:54	Vrbl 5		Overcast	38
08:54	N 3		Overcast	25
07:54	N 6		Mostly Cloudy	19
Time				Temp f

The temps continued to rise throughout the race making kick waxing a challenge.

Recordings at the race site showed that the overnight temperature was colder than predicted at 21 f and 77% humidity at 6am.

By race start at 9am it was just above 32 f with full sun and temps would be in the high 30's at the finish.

**Waxing, ski and structure selection:**

Craftsbury is a long drive from Cambridge, MA so I waxed 4 pairs of skis Thursday to get ready for the long drive Friday morning.

The race site had received 2" of new snow within the last 48 hours, but this was on top of a thin icy base. Thursday morning I called my ski waxing and grind guru Zach Caldwell to discuss ski selection and kick waxing. He was quite sure there would be a significant amount of new snow around by race time since it was not predicted to get above 32 degrees f all day Friday.

The kick wax call from Zach was a tried and true formula: either a Toko green or rex orange hard wax binder, followed by swix extra blue (-1 to -8 or so). I tried to make the case for a klister binder/underlayer fearing icy tracks in places but I was warned that if I encountered any powdery tracks (and water coming up in low spots from the recent very warm temperatures) that the klister would be vulnerable to icing up.

Based on our best weather information at the time it would be below freezing for most of the race, so waxless (Fisher Zero's or Rossignol AR's) would not be called for; but wanting to have all possibilities covered and because of the low snow situation and predicted temps near 28 f at the race start, I sanded the kick zones and glide waxed:

- 1) Fisher zeros (waxless) The kick zone has an inlaid section of much softer, gummier material that gets roughened up with sand paper.



- 2) Madshus soft/powder ski (just in case there was loose snow in the tracks)
- 3) Fisher Classic 812 construction (medium stiff/soft wax pocket)





- 4) An older pair of very stiff Fisher klister skis

I used Swix high fluoro "black devil" 8 (-4 to +1 C) and planned on adding HWK M9 powder to the chosen pair of classic skis after the Friday afternoon reconnaissance session. To wax all these skis I enlisted the help of my homemade hot-box. I ran a saturation layer of soft yellow hydrocarbon at 55 degrees C for an hour, followed by another hour for the Swix HFBD 8.

After a relaxing drive up 93 North, I arrived in Craftsbury at 3:30pm in time to meet my brother for a short ski. While the tracks in the upper field had a very thin layer of some fine transformed snow, the tracks in the woods were very hard and icy. I made the decision to wax with klister covered with hard wax, wanting solid kick on the icy track. I really hadn't seen the kind of new snow that makes you worry about icing up the klister, especially if it's well covered.

The Rode violet special I tested under hard wax on my soft Madshus was not adding much to the kick on the icy track so I decided to go with the K30 violet on my race skis, which has an extended range up to +1 C.

	<b>K36 - VIOLET SPECIAL</b> for transformed, icy or coarse-grained snow with temperature between -1c° and -5c°		<b>K30 - VIOLET</b> for snow changing from icy to wet. With rainy weather spread a little of KLISTER SILVER. Temperature between -3c° and +1c°
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I chose my newer Fisher Classics knowing the wax pocket was soft enough to get kick even when tired, but just hard enough for klister covered with hard wax.

**Warm-up and wax evaluation:**

Wanting to avoid the usual classic race morning panic wax, I put myself on a strict time schedule Saturday morning:

- 6:30-6:50am: breakfast
- 6:50-8:00 am: initial kick wax application and testing
- 8:00-8:30am: final kick wax adjustment and testing
- 8:30 to 9am race start: relaxed start area evaluation and final warm-up

Over a very thin rex blue klister binder, I put on a medium thick layer of the Rode violet klister, spreading and flattening with my iron. After cooling and taking the air and snow temperature I decided to cover initially with Swix VR50, this combined with the klister underlayer would give me solid kick even with temperatures now above freezing near the race start.



I tested this and had roller-ski like kick, awesome!! There was a slight bit of icing so I covered this with VR45. Further testing revealed this was still icing a bit, so in the last few moments before 8:30am I re-ironed the kick zone to flatten and reduce the thickness some, and added a start blue (-3 to -10 C) kick wax with molybdenum and fluoro to harden things up and prevent icing. After hitting two layers of the blue lightly with the iron and cooling, I tested it and it was gliding and kicking well with no icing!

Ready to race, I headed down to the mass start on Hosmer Lake. By this time it was a beautiful sunny day, and all the racers seemed happy to be there, despite the waxing dilemmas.



There was a very thin film of transformed snow over the icy tracks on the lake and I had plenty of kick but slightly draggy glide; I knew that as soon as we got off the lake the tracks turned icy, so I felt ok about giving up some glide on the relatively long (7 to 8 minute initial lake loop).

#### Strategy:

I went too hard in my last classic race, so I decided to try to keep my HR in the 160-165 range (89 to 92% of max) for the first third of the race. This would preserve some energy for this longer 27km race with a grueling 2 km uphill finish. I wanted to keep my movements quick and light to avoid premature muscle fatigue.

#### The Race Experience:

I lined up in the second row behind Jimmy Fredericks the Rossignol Rep, who I found out later had elected to go with his waxless AR's. The gun went off, and after a km or so, keeping within my prescribed HR's, the lead pack was easing away from me very slowly. I was slightly concerned about this, but knew I'd have kick on the icy tracks to come.

Sure enough, once we hit the shore, the trail turned up and I started to pass people; I had good kick and glide on the rolling fields and followed Joe Holland, a good skier from

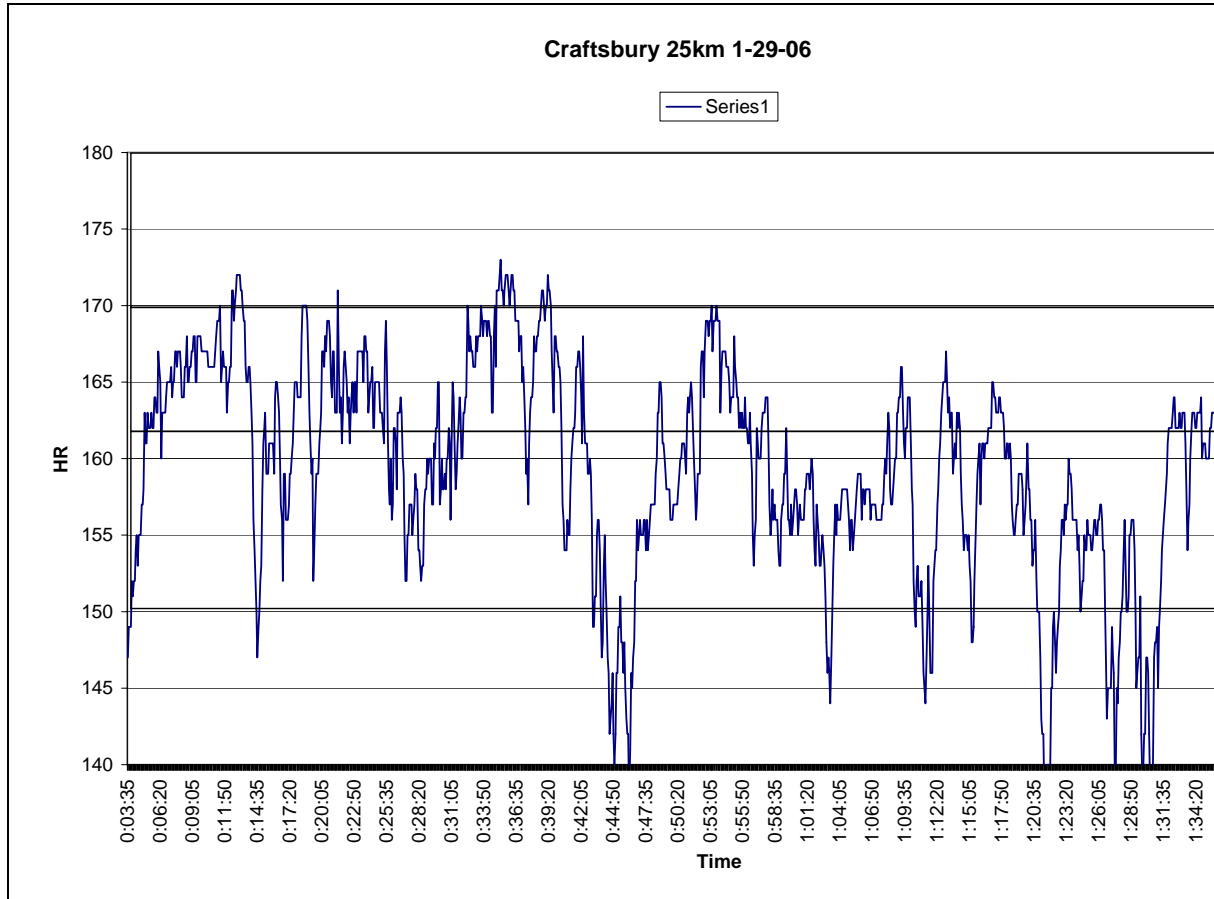
Dartmouth, on the first major, fast downhill. We took the corners wide and stayed balanced on both skis to avoid scraping the kick wax off in the first 5km of the 27km race.

In the first 15km I was skiing well and fast, ahead of many guys I like to beat when I have a great race. I had good kick and glide and was staying in my target HR zone, except for a few short forays into the low 170's. I felt like I was having a very good race.

We went through some low lying swampy areas, passed a few bird hunters carrying shotguns!, then in an instant, my kick wax locked up into the now fresh powdery snow!! I felt as if I were in a wrestling match with Tedi Bruschi, the Patriots linebacker. I fought to keep my balance and tried to ski off my iced kick zones, but it wouldn't come off! I continued to stumble and scrape one ski against the other for what seemed like 1 km or so, and finally the tracks returned to an icy glaze and I was skiing again without being iced up. I had lost many places and lots of energy, but I was determined to salvage what I could of what had been a very good race for me.

I finished with good determination, good kick and a very tired body. I had a solid race considering my icing episode, but still saw significant weakness in the last third of the race. I was reminded again of my relatively fast twitch physiology, and difficulty in the later stages of races longer than 15km.

## Heart Rate Profile:



With a max HR of about 180, the red area is my redline. This is an area I can visit briefly up to a handful of times during a race and still finish strong.

You can see that in the first 2/3rds of the race I was mostly in the yellow zone, slightly exceeding my target of 160-165. After an hour or so, and after the icing episode, I tired and had trouble mustering HR's up to 165.

It was during this section that I was passed by many of the people I can beat if I have a very good race.

### Analysis:

1. I over waxed for kick in reaction to my previous classic race where I ran out of kick at the halfway point.
2. I added too many cover layers over the klister to rid myself of the icing I had experienced in the warm-up.
3. I could have gone with the purple special (colder) klister as the underlayer; this, along with going thinner with the klister layer might have avoided the ice-up and given me faster glide.

4. Either I restrict myself to 15km races or put in at least 1, 3-hour training session per week in the off-season.
5. Compared to previous years I can hold pretty high heart rates for a long time with less fatigue; my strength and intensity training during the off-season were good.

**Result:**

Overall a good hard effort, fairly well paced given my fast twitch nature. Will be more careful in the future with soft wax on a course that may contain some powdery snow so as to avoid icing the kick wax.

**Next weekend is a double header up in Vermont:**

**Feb. 4 & 5 TD Banknorth Eastern Cups Moved to Bolton Valley Resort**

The TD Banknorth Eastern Cups scheduled for February 4th at Vermont Academy and February 5th at Putney have been moved to Bolton Valley Resort in Bolton, Vermont. Each event will be managed by its original host club.

Saturday Classic Schedule:

J2 Boys 5K, 11AM, 1 lap, 15 sec. interval start  
J2 Girls 5K , 11:30AM , 1 lap, 15 sec. interval start  
Women 10K, Noon, 2 laps , 30 sec. interval start  
Men 15K, 1:30PM, 3 laps, 30 sec. interval start

Sunday Freestyle Schedule:

J2 Boys 5K , 10AM, 1 lap, 15 sec. interval start  
J2 Girls 5K , 10:30AM , 1 lap, 15 sec. interval start  
Women 10K, 11AM, 2 laps, 30 sec. interval start  
Men 10K, 12:30PM, 2 laps, 30 sec. interval start