

Log Stockholm to St Petersburg 2018

I remember years ago a race in March on the dare-not-mention-it-game from the it-must-have-been-Oslo-town round Iceland to a finish in Belfast. The craft of choice was a Mini 6.5 and there was 20 knots blowing out of the East. I remarked at the time you wouldn't want to be doing it IRL! Our race to St Petersburg surpassed that level of IRL challenge easily, since from Italy to Scandinavia, the 'beast from the east' kept us well indoors whilst we steered our virtual J130s (modelled on the one Kipper1258 navigates in warmer climes) into the teeth of this serious climatic event, ice on the sea and snow and sleet in the wind.

An excellent turn-out saw doughty competitors outlaw and kenza back on the water for the first time in a while, and after a long fetch to the first mark, they were back in the hunt, but so were the other usual suspects. The J130 has a very smooth and ovoid polar, so, supported by my router, I had decided on a straight line from our start at the Revengegrundet Lighthouse off Stockholm. At high latitudes, straight lines on globes of course distort into smooth curves on flat planes, and in this case this meant the shortest distance on our chart needed to bend smoothly over east. There are two ways of steering such a route; either draft a GC track on your SOL screen and steer down it by hand; or set the time interval for the route logbook to 5 minutes or so before you export it from your router, then import it into AGL for a closer inspection and then load it after fine-tunement into SOL. I did the latter.

However, at the mark off Saaremaa, a few people – including the aforementioned returnees, and also Patrick70119 who too had been missing for a while; great to see you all back, guys! – had obtained a tiny advantage, by curving that little bit further over east, allowing them to approach on a freer angle. A good rounding put bonk right back among them though, for a second long fetch to some headland (Dager Ort?) and then on to a tackpoint in the middle of the Gulf of Finland. For this second fetch, a little bit of deviating off the GC route looked like it would be advantageous as there was more wind the further out to sea you kept. Also, after passing the headland in our path, taking a bit of height before curving down on the header to the tackpoint was going to pay dividends. This all worked well for bonk, but also for outlaw and it was neck-n-neck as we hit the 60th parallel, along which the grib was obviously inviting us to beat, really all the way to St Petersburg, save for a diversion north to round Hoglandet, only to hare back down to the 60th for a further series of tacks and a finish at the southern end.

Why the 60th parallel? Well, grib files have data at specific points on the chart at specific points in time. For all of our races, apart from the long-distance ocean races, the points are spaced at half degree intervals on the whole and on the half degree. The time intervals are three hours for the first few days of the grib and then six hours thereafter, but that's not relevant to this diversion. All other wind in between the data points is interpolated: linearly. So, if the adjacent data points, in our case, half a degree to the south and half a degree to the north of 60 have less wind than what the points along the 60th have, the 60th is the only track to follow as long as the direction remains pretty constant, which in our case again, mostly it did.

The next question then is how often to tack. Every tack costs a bit of performance, so you don't want to tack too often, but the less frequent your tacks, the more you will wander out of the best wind, which will also cost you performance. In theory you can work it out mathematically exactly, but... a SOP rule might be: 5 mins if BS < 4kn, 15-20 mins if BS < 7kn, and at least 40 mins if BS > 14kn.

Anyway, this wasn't the issue that decided what turned out to be my battle with Outlaw. Two other things contributed to that: 1/ Outlaw got a great rounding in at Hoglandet, a pointy headland, so that there is clear water to land in, if you turn a half a jump too early. 2/ When the wind was bending, Outlaw sailed that bit further into the bend to sail free-and-fast for a longer period on the new tack. Congratulations, Outlaw and thank you, SOL. Great race!