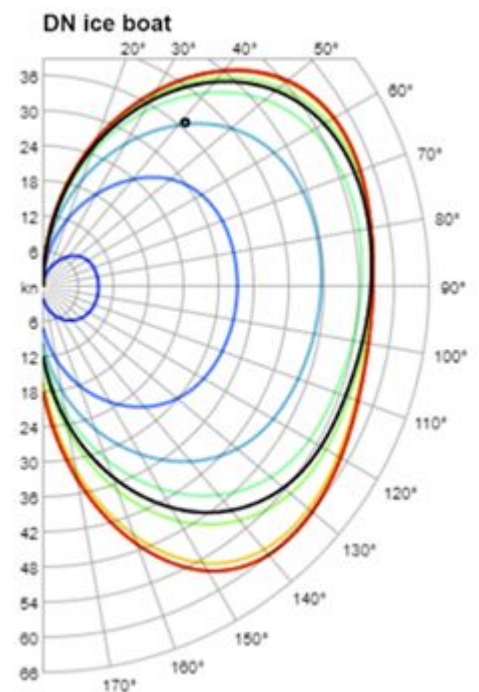


One thing I like about Sailonline is that there's quite the variety of boats that we can take sailing. Some with smooth polars and various speeds. Some which have bumps here and there. Others which have a sizable amount of TWA that results in negative boat speed. Even specialized boats like the SOL Balloon and DN Iceboat are included!

For nearly every wind condition, the DN Iceboat is currently the fastest boat in Sailonline's Boathouse. With a top speed of 60 knots, it can literally exceed the highway speed limits in Singapore (90 km/h or ~49 knots). There are a couple of exceptions to it being the fastest:

Wind less than ~2 knots: Many boats become faster than the DN Iceboat. Special mention goes to the [Longship Drake](#); since that boat has a rowing component in its polar at low wind speed, it is able to maintain a constant speed of 2.5 knots in nearly any direction even if the wind drops to zero.

Wind 49+ knots and TWA 179.9-180°: The [SOL Balloon](#) has a very slightly faster downwind VMG compared to the DN Iceboat. Note that the SOL Balloon loses speed rapidly at other TWAs, and its max upwind VMG is ~0.1 knots (bad for a boat, but actually quite good for a balloon!)



[Tender boats](#) aren't officially in Sailonline's Boathouse (these appear to be exclusive to the unranked practice marks), but they can go at 40 knots in nearly any combination of wind speed and TWA.

One more thing about the DN Iceboat is its polar. While it appears to be a smooth polar, there is a rather large depression TWA-wise around its beam reach if the winds get too strong. Thankfully, the actual speed loss by sailing in the depression is rather small compared to the boat speed.

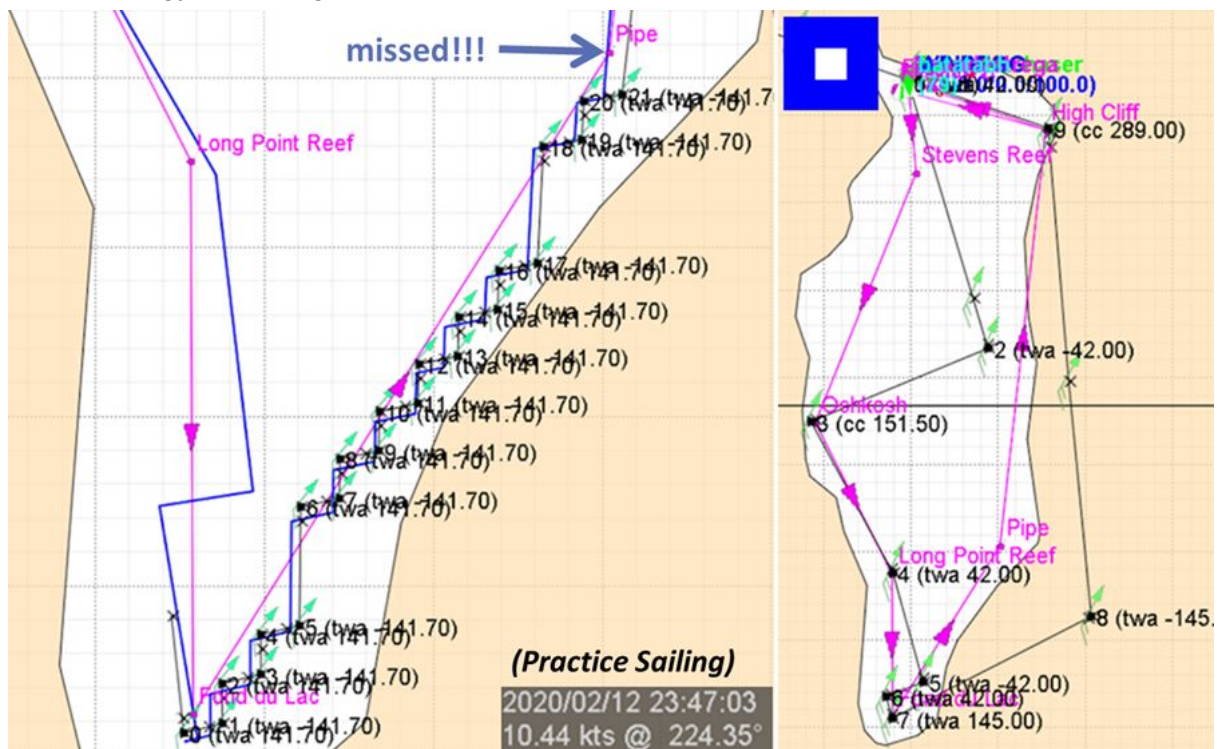
Although this race took place over 102nm or so, it behaved much like a sprint. As a gentle breeze was enough to get the DN Iceboat to 40+ knots on much of its polar, the race could be finished in 150 minutes or less. I understand that [in some years](#), the wind did indeed drop below 2 knots for hours at a time, which made it that much more tedious to finish. Thankfully, we were spared the agony this year. (Note that the DN Iceboat is still faster overall, as the winds would probably return before the other boats had enough time to cover the 102nm needed to finish.)

Some things to take note of:

Due to the near-constant 100% performance of the DN Iceboat, you are free to tack and gybe as much as you please. Useful if you are trying to keep within a narrow band of optimal wind and need to tack/gybe repeatedly to do so. May be more relevant if we could use this boat in open water e.g. Hudson Bay, but does see use here.

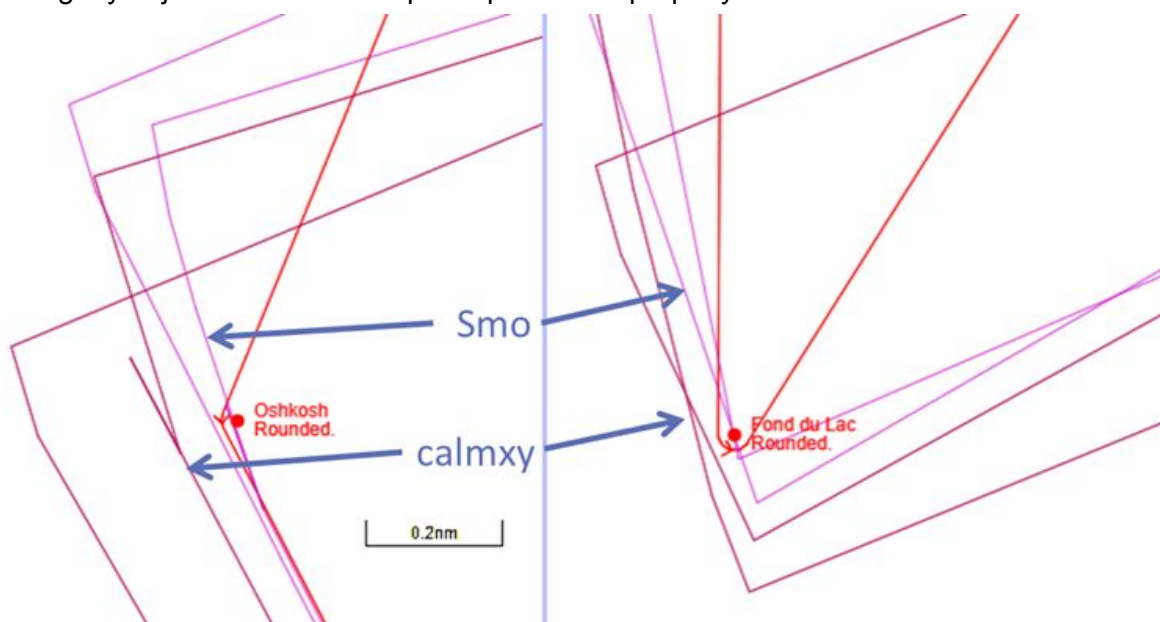
A BBQ [can](#) still drop the performance to 80% here, but it does recover back to 100% after one server jump. That being said, BBQs are to be avoided as that one server jump of lost performance is still wasted time.

It can be difficult to properly DC-set this race, especially if you tack/gybe repeatedly at very short intervals to enjoy better winds without performance loss. In fact, the only DC I actually sent in this race was the starting one. This is because the uncertainty from each command adds up quickly, not to mention that each server jump is already quite large due to the high boat speed. That being said, I did test DCs during Towback on a simplified basis that used fewer tacks/gybes and ignored land.



Probably more important than choosing whether to tack/gybe to port or starboard side first (or otherwise) is to round corners accurately without missing the mark. Overshooting a mark, especially hairpins, means that you will need to waste time to travel up to twice the distance overshot. But even that is better than turning too early and missing the mark. Part of this is luck-based, as it depends on where the server places your boat at each jump. But there's skill involved too, as there are two factors which you can control:

- Your approach to the mark, where possible, which may allow more flexibility in rounding the mark closely even if the server jump doesn't cooperate
- Quick reactions, sometimes this may be a partial turn to the next mark if the server jump brought you just short of the required position to properly round the mark



This is why Practice Races are useful to learn these skills. The first one included a hairpin turn at Fond du Lac, while the second one had many corners at different angles; both had long stretches between Start and the mark(s) which needed to be considered. Oh, and also reading the race course properly, as “passing M2 to port” wasn’t immediately obvious on that diagram’s long straight and this resulted in a DSQ... Still, I feel this is one aspect I can work on, as suboptimal corner rounding probably accounted for many of the 6 positions and 97 seconds that I fell behind Smo. Well done Smo on winning this race again!

With that said, here’s a timelapse of the 150 mins of racing, from 2.56pm to 5.26pm UTC, where the different strategies unfolded.

<https://youtu.be/pgl7kKbjGT8>

Hopefully, we could get more race courses that involve the use of the DN Iceboat 😊