This race's objective was quite simple: Round Visingsö Island to Port and cross (near) the starting point to finish. The marks in this race were there to make the leaderboard ranking more accurate and didn't materially affect this objective. This is in fact quite similar to the objective of the <u>first practice race</u> in SSANZ 2019 Lewmar 60 Baltic, where we had to round Rangitoto Island to Starboard and cross line to finish, except that Visingsö was larger.



Left: Rangitoto (blue) superimposed on Visingsö; Right: Visingsö superimposed on Singapore

Unfortunately, back during that PR, I had not set my commands accurately enough, so I had *almost* completely rounded it, but ended up missing the finish line somewhat to the north. Therefore, my result for that PR was "DNF". This is also true for many of my other PRs, especially those where all commands were set as DCs earlier in the night.

For these two races (Visingsö PR and actual race), I didn't make use of any DCs, opting to sail them live instead as it was the National Day weekend.

Before the race, there was a PR for Visingsö Runt. While this did not involve rounding an island, it did require us to be able to round marks closely (Start/M1 \rightarrow M2 \rightarrow M3), tackle shifting headwinds (M3 \rightarrow M4) and tailwinds (M4 \rightarrow M5) before making the optimal choice of angle to cross Start/M1. I had rounded Visingsö Island prior to the start of this PR, meaning that I had the



privilege of using the pink (leading) boat for parts of it. Usually, it's impossible to pull this off, as PRs take place around the race starting point; however, in this instance the race start and race finish are at the same place. This is what other boats would have seen mid-PR.



M1 to M3: Nothing in particular was exciting, apart from one boat initially heading to the Northeast. Care had to be taken to not miss M2 or M3.

M3 to M4: sassy63 headed the furthest south, Rod and I headed north while the other participants of the PR went in between these extremes. Those who went further north got stronger winds, which in theory would mean going faster. At the halfway mark between M3 and M4, it seemed like Rod and I would come out ahead; however, due to the changing wind direction, this gave sassy63 the advantage and they reached M4 a good 45 seconds ahead of the others. A reminder to myself that wind strength isn't the only factor to consider.

M4 to M5: sassy63 and I gybed to the north a bit, since going the straight line results in a TWA of ~144°, which is slightly more than the optimal downwind TWA at 3.6 knots. The others travel the straight line to M5 nevertheless, since the loss in downwind VMG is minimal given the boat polar.

M5 to Start: Everyone simply took the shortest route towards the line between Start and M1. However, due to various circumstances, the precious G-scow wasn't awarded despite the participation of 8 boats. I reached this line in 5th place, then slowly made my way back to the starting point. Kinda ironic that the "pink leading boat" didn't actually win this PR.



Given that the expected winds for the race were supposed to come from TWD 210-220°, everything that was in the PR, would also be tested in the actual race: round marks closely (Tranhalsudden $E \rightarrow$ Tranhalsudden N), tackle shifting headwinds (Tranhalsudden N \rightarrow SW tip of Visingsö) and tailwinds (Start \rightarrow Tranhalsudden E) before making the optimal choice of angle from the SW tip of Visingsö to finish the race.

Once the towback took place, I had an hour to prepare for this race. I used the DC checker as I would for any PR where I would be sailing entirely on DCs, to set DCs that would get me to the finish. I generated a number of iterations which involved changing the number and timing of tacks/gybes along the two long sides of Visingsö Island. At the end of this hour, it was clear to me that this would be a close race, given the many viable options. Luckily,

the wind wasn't strong enough to invoke the polar's hole around a TWA of 120°, making planning somewhat easier.

Heading up the east coast, a single gybe would be best. However, the exact TWA to set didn't seem to matter; anything within a range of 143° to 150° would get to Tranhalsudden E at around the same time, as the loss of downwind VMG is offset by stronger winds. This included strategies involving "straightening out" your path to gradually get faster TWA.

Likewise, whether one tacked closer to Nas repeatedly (to enjoy stronger wind) or went further out and did a single tack (to reduce performance loss and also slightly different TWD), it seemed that the finish would be reached at around the same time. There was also a small range of TWA from 40° to 44° where it didn't seem to matter, similar to the first part.

Only the part from Tranhalsudden E to Tranhalsudden N was pretty obvious: check the COG angles required beforehand and "send command" at precisely the correct time, as close to land as possible without BBQing.

I opted for the single gybe and the single tack (both at optimal TWAs); if all viable routes were indicating rounding Tranhalsudden E at 7.28pm UTC and finishing 9.20pm UTC, I may as well go for simplicity. For much of this race, I toggled most of the boats off, so that I would be able to see the command boat more clearly and hence send commands accurately. We would observe all these viable options (and then some) be tried in the race.



At the race start, the majority of boats went for a TWA of 148° and some gradually increased it to 150° as the increasing wind speed meant that optimal downwind VMG increased. However, Ricotina, Mouthansar and a few others went for a TWA of 144-146°. Noticing this, I changed the TWA accordingly to 146° for some time before reverting to 148°, as I tried to get stronger winds more quickly for a higher overall speed towards Tranhalsudden E.



Regardless of the chosen TWAs, nearly everyone gybed around 6.50pm UTC towards Tranhalsudden E. At this point, it appeared that those whose TWA was at 150° generally had an advantage over those who opted for TWA 143°. Ricotina in particular had gained a direct advantage over me, as my boat appeared directly (just) behind theirs after the gybe and stayed there all the way to Tranhalsudden E. The boats at TWA 143° caught up and, just as expected, reached Tranhalsudden E at around the same time as those who went at TWA 150°. I was in 7th at that point.



The next part from Tranhalsudden E to Tranhalsudden N took only about 5 mins, but they were highly crucial ones. Even though it's not strictly a narrow channel like those in Van Isle or Sail around Turkey races, there's still plenty to lose from not making these turns accurately. To avoid a highly costly BBQ, I entered each of the COG commands beforehand and sent those immediately after the command boat cleared that respective point of land. This was done instead of sending as DCs as the server mechanics may have made the boat turn too early to clear the turn. This, unfortunately, didn't go as smoothly as I had expected. I ended up further from the coast than desired and this took me down to 13th upon reaching Tranhalsudden N.

After that, we entered the "headwinds" part of the race. Many of the boats tacked early at different places to get stronger winds, the results of which would only really be known later. The few boats that travelled all the way to make a single tack included those of mine, Winston_4, Ricotina and Mouthansar. Even then, there were some differences in the choice of TWA angle: Mouthansar went at 43° (max VMG upwind - it was constant for this stretch) while Ricotina went at ~40° (stronger wind to offset loss in VMG) and Winston_4 went at ~44°. I went for a TWA of 42.5°; this let me catch up to Mouthansar by the time the tacking point was reached.

For us who kept further north, the timing of the single tack had to be precise. Any corrections thereafter would require sailing too close to the wind and/or additional tacking, which could outweigh any benefit received from taking this route. Having used the DC checker, I knew exactly when to perform this tack. Winston_4, Ricotina and Mouthansar all tacked a couple minutes later. In fact, if Ricotina had tacked where my boat crossed their path, they would have still come out ahead (taking performance loss into account).



I guess this is because they could straighten out and sail a single COG path to the finish, which could be faster than anything I had generated; I hadn't tested this route before race start. All I could do was pray that my decision was the correct one, since there was no room for me to change to a faster TWA and still clear the SW tip of Visingsö Island. And it did appear (thankfully) to be the correct one, as they were unable to catch up with me while boats that tacked closer to Nas rejoined behind me. This gave me the "pink leading boat" around 1.0nm from the finish.



It was around this point that I toggled to see all the boats, and that's when I found there was a Polish boat literally right on top of mine. At first, I thought it could be that of WRmirekd, as he is a renowned SOLer and consistent podium finisher; it's possible that I overlooked him at the starting lineup. But to my surprise, this boat was that of Quark's instead! This is the first time that I have seen this boat, and if it were really their first race, this would be an incredible achievement! This one would be a close call; there were other boats such as Windegg that were just right behind who could also get the win. In the end, however, the server deemed Quark to have eked ahead of me by the tiniest of margins, thus leaving me with second. Ironically, this would make me the only PR participant to achieve a better rank for the actual race than the PR itself.

There was a general trend that the more tacks one did between Tranhalsudden N and the finish, the lower the ranking they obtained. This was a really close race; if I were slower by the following amount of time, my rank would have dropped quite precipitously (the last figure is the best I've done in a PR run entirely on DCs relative to the leader, having successfully rounded all marks):

+30s	8th
+1min	15th
+2min	24th
+7min	35th

My wish of being able to sail that "pink leading boat" to the finish (made during the PR) did, in this case, actually come true, even if it then reverted to Quark thereafter. Congrats Quark for clinching the win, and thanks to everyone who participated in these races! My next objective should be to improve my DC-setting skills and try to earn the G-scow award in a future PR.

P.S. Happy 54th Birthday Singapore!

