The start - for a change I managed to turn up on time, although only just and didn't have time to route. I set out in the "obvious" direction and quickly made my way to the middle of the fleet. After switching to using the router I managed to get back to around position 30 to 50 after a day or so.

Speaking of routing... my setup:

- 1. Install AGL from here http://solfans.org/blog/weather/automatic-grib-downloader/ according to given instructions
- 2. Create a folder for the race, call it "1027" for the race ID
- 3. Run the batch file "ag.bat" which gets AGL going. AGL does a few things, like download the weather file for the router to use, generate GPS feed for your own and other boats and course waypoints to feed to the router, allow easy entry of course data to SOL server, and generate a picture of that course.
- 4. Choose the race and login details and make sure Start Data Server, Create Log File, Start NMEA all set to ON and NMEA Port set to 5027 (based on race ID, makes it easy to remember what to set Qtvlm port to. Qtvlm is the router program.)
- 5. Also turn on "Start Weather Server" and "Create Grib File?"
- 6. Under AIS boat list, select those other boats you want to see. Don't turn them all on, it'll be a mess.
- 7. Install Qtvlm and run it in "Real mode" as it doesn't speak directly to the SOL server so can't use virtual mode.
- 8. Set Qtvlm NMEA port to 5027, turn on NMEA and AIS
- 9. Open the latest grib from folder 1027\grib (AGL will put this there for you every 6 hours). Don't forget to do this after every WX update or you will make your way to the back of the fleet fairly quickly.
- 10. Use Brainaid's tools to download the Qtvlm boat polar and import into Qtvlm. Every time you switch Qtvlm to this race by adjusting the NMEA port and loading the correct grib, you must also remember to grab the correct boat. Or you will quickly make your way to the back of the fleet.
- 11. Create a routing "from boat" to the finish if it is in reach (7.5 days), or to an intermediate POI which you may have to create yourself. You might also need to create barriers to stop it routing the wrong side of course markers.
- 12. Allow it to simplify and optimise the route. This can be slow but I have a nice 6-core CPU which gets it done PDQ.
- 13. Edit the resulting route (after checking it for collisions with land etc) and plug in the first control by hand. If you try to get the first one done as a DC it will probably fail because by the time you get

that far it is in the past. Export the route to "myroute.csv". I use the same folder and file always as it's easier.

- 14. Edit then save the CSV which opens automatically to remove the first command (remove line two, first line is headers).
- 15. Go to Kroppyer's qtvlm2dc page (http://sol.kroppyer.nl/?qtvlm2dc) and open myroute.csv and convert to brainaid DC format, then copy the contents of the CC window. NB you don't generally need to paste more than 6 or 7 hours worth of DCs, which in this race was usually one or two and sometimes none. Also, note that you can also use 'TWA' control points and they will work nicely until there are lots of turns, at which point they become inaccurate as Qtvlm assumes that your boat travels 'CC' from point to point. That would be a nice feature for Qtvlm, to understand 'TWA' travel and generate routes that assume you are using TWA.
- 16. Go to the AGL program "DC Checker" tab and paste over any existing control points, then click the green right arrow on the left of the line of buttons.
- 17. After it's all entered, click the yellow triangle (fifth button) to generate a nice picture of your route. If it does something silly, delete it quickly (third button, red X) before the DCs start firing. It's at this point that you will notice that using a TWA course can drift way off and correcting it by hand will be a major undertaking. It's also the point at which you will notice that you have selected the wrong boat or an old grib in Qtvlm.
- 18. Repeat every six hours as soon after grib download as possible. In my time zone this is relatively convenient, ie 6:30 and 12:30 am and pm.
- 19. (Important) Examine every route and try to work out why it's better than what you would have done. After doing this long enough you might even be able to do away with the router. But that's hard if all you have is the slider on the SOL client to look at wind going forward.

That's the mechanics of it, and without that as a minimum you are never going to do well unless you can do better than the routing program on your own in which case you probably already know this stuff.

Going around the corner and up the coast of Australia was nice and uneventful, and allowed me to fine tune my routing procedure which was still a bit new to me. Days two through seven saw me creeping up to 10th spot by just before the Great Barrier Reef. I thought I was doing marvellously, but in retrospect I think the people who knew what they were doing had start drifting East already, conceding straight line position for the expected huge gains normally afforded this route.

Over the next 12 hours every single boat in front of me obligingly "got out of the way" leaving me in first spot for my first time ever. Meanwhile I was deciding between going left or right of New Britain, not really considering any route further East. I went to the trouble of loading a 16-day grib from

Saildocs (Qtvlm Grib->Email Sailsdoc) just so that I could verify that my intermediate routing POI was in a sensible place, by not needing it. By this time I could route all the way to Osaka in 14 days. The one major decision I had to make (in my mind) was when I saw AL53_SSIta and a few others heading West around New Britain, I thought that was my opportunity to pick the "low probability win" over the "high probability middle of the road" finish. I chickened out and went for the "middle of the road" option (in my mind), and at 5am UTC I slipped into second spot for five and a half hours, cursing myself all the while. Then about 177nm from St Georges Channel, the passage between New Britain and New Ireland, I regained the lead for the last time. Over the next few days I got my own personal favourable wind zone that pushed me 130nm or around 13 hours, ahead of the fleet. Basically the wall of blue that assailed us had a green corner dipping down to St Georges Channel. This corner dipped down to envelop my boat but not the following few boats that chose the same course. My 'middle of the road' option had turned into the opposite.

A bit of tricky navigation through scenic Steffen Strait past WW2 wrecks only a few hundred meters to port, saw me well placed for the wall of blue that now arrived.

We all sat in the doldrums for a few days, as waves of blue rolled over us.

After the doldrums my lead was whittled away by the normal conditions that apply, ie "boats further East get a big advantage in the trades". During this time (quite a few days!) I was waiting for the "other shoe to drop". However the Easters turned out to have only enough advantage to get to level with me but with a significant displacement to the East. This displacement alternately favoured and disfavoured me as WX updates came and went, leaving the finish in doubt until several days out, but in the end left me with a comfortable unchallenged run-in in perfect cross-tail winds with an 80-minute lead.

Second place was a bit of a surprise as jovi had been firmly entrenched in third place behind Dingo, when he claims he missed a WX and ended up going West "by mistake" and getting the jump on Dingo. I prefer to believe that he saw the light and joined me (a bit late) on my Westerly course.

An excellent race, which taught me a number of things:

- 1. When you drop to position 130 in the fleet, all is not lost. In fact with 4500nm to go you can probably start an hour late and still win. Although I don't recommend this strategy.
- 2. You need "routing assistance" to give you an overall idea of what you should do (unless you are already a gun navigator), but routing won't win the race for you. Everyone always said this but I didn't know what it meant.

- At some point in any "interesting" race there will be a decision. There may even be more than 3. one such point. If you are going to win races, you need to learn how to identify these decision points and apply what I call the "Bridge strategy". In Bridge (the card game), playing Match Points (where you do well only if you do better than other pairs playing the same hand), you occasionally find yourself playing for example a slam hand. You work out that you are unlikely to make the hand. However there is a small chance you could make it. Your strategy is obvious: Assume the cards lie as you need them, and play accordingly. When you succeed, non-Bridge players gasp "how did he know", but it's routine for seasoned Bridge players. Likewise, when you're in the middle of the fleet, not much chance of winning, look for a set of conditions that will give you an advantage and assume they will happen. In short course sailing this nearly always means "pick the course the leader didn't pick" out of usually two options. In long races it can be a bit more subtle. Identifying these points and picking correctly is what makes great sailors. On this course I picked the right option largely because I was ignorant of the normal advantage the Easterly course confers. But there's a lesson in there too – I differentiated myself from the fleet, not by ignoring the router and doing something apparently sub-optimal, but by *not* ignoring the router, and doing the optimal. To my thinking, there has to be merit in that!
- 4. There are some people out there who seem to route a whole lot better than I do even over short distances. How they do it is still 'magic' to me. The router can't help me here. I assume they are seeing "decision points" that I'm not seeing. You'll see these people making their way steadily up the fleet with subtle turns here and there. But even they can't overcome a 13-hour lift from a lucky wind shift J

theonetruepath / April 2017