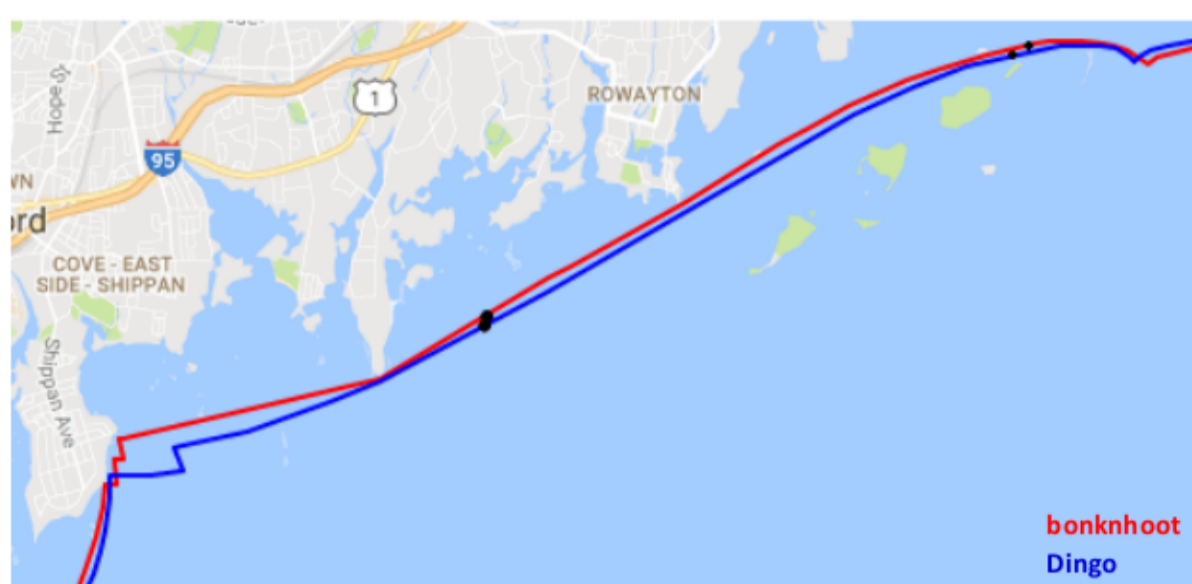


## Log Vineyard – 2016

My vocabulary of superlatives simply cannot do justice to this magnificent, fabulous, iconic SYC and SOL buddied race. Back in Cork in Ireland where I grew up, a very vocal yachting friend of mine who goes by the name of "Prof" would categorize it "mighty" and qualify it as "tremendous" (note the "i" and think lilting southern Irish accent), as in "We had a tremendous race last weekend on Long Island Sound in the mighty Vineyard Classic. Anyway, who knows, maybe someday I will yet race it in real life! Hint: I am a handy spinny/genny trimmer IRL (in real life) and know a bit about routing as well.

I have now raced the Vineyard online four times. I came in 41st in my first one in 2013, but since then have managed to make the podium each time: two, three, one! I love Long Island Sound. Mind you so does my great, nay mighty, rival Dingo, who in his report may fail to point out that his series for 2013 to 2016 goes: five, three, two, and now two again (by a hair's breadth or is it hare's breath). He clearly loves Long Island Sound too!

So, after opting to tack into the Connecticut shore after the Start and to stay inside Sheffield, Shea and Chimon for more pressure, and then head East out across the Sound to the Long Island shore on a long leg in a freeing breeze, I was encouraged to see Dingo had opted for a marginally different route and had lost a bit of ground.



But then at 2230z a new grib was loaded into the game. For new- or non-SOLers, a seven-day weather forecast in the form of a digital grib file is refreshed every six hours in our game. As of last year, for the Vineyard and for selected other, generally shorter races, these grib files are supplied to us by the US's National Center for Atmospheric Research (NCAR) operated by the University Corporation for Research (UCAR) using their Weather Research and Forecasting (WRF) Model.

WRF grib files are very different to the GFS (Global Forecast System) grib files obtained from the US's NOAA (National Oceanic and Atmospheric Administration) that SOL usually – and sites like Passage Weather and Windy – use(s).

GFS grib files hold wind data on a raster of highest density  $0.5^\circ \times 0.5^\circ$  lat and lon at 3 hour intervals, and this data is primarily based on large-scale atmospheric pressure variation. So for a racing area like Long Island Sound this means there are just  $3 \times 8$  points that hold all the data, and between these points and their 3 hour data intervals everything else is smoothly interpolated.

WRF grib files superimpose other local effects on a GFS gradient wind forecast. I have no idea how it does that, or what effects are specifically considered, but what I do know is that a much denser grib file is required to capture these modelled local effects and shorter time frames, in other words a higher resolution, which in the case of The Vineyard was  $0.1^\circ$  lat  $\times$   $0.1^\circ$  lon  $\times$  1 hour. Racing in WRF online, some of the effects you notice are wind fanning out left and right down a corridor or converging, wind tending to want to cross boundaries at right angles, high rise conurbations (Vancouver springs to mind!) deflecting the wind, holes in the middle of bays, waxing and waning wind over a 24 hour cycle, and so on. Just like IRL.

And just like IRL, when the gradient wind is strong, you do not notice the local effects too much, but when the gradient wind is light, the effects are very noticeable, and can create dramatic variation including from one forecast to the next. Phew!

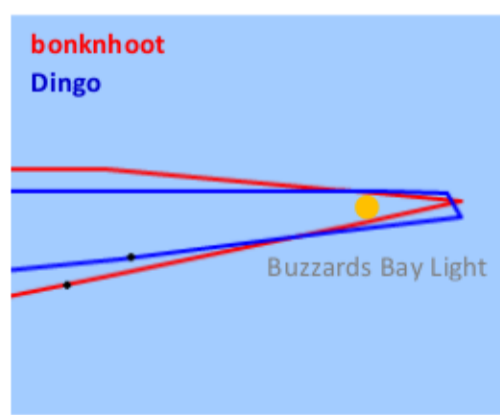
Back to the race and the 2230z weather update. There is a significant fraction of the SOL fleet that has a love of numbers. Nerds some might call them. I surely am one. We are handy(ish) with computers and we all have one or other piece of routing software that we can feed a grib (and a polar for the boat) into, and then ask the software to generate a best route from A to B starting at time T. The challenge for "routers" then is second guessing the software's solution, and if a race extends over a few days of forecast periods, second guessing the meteorology for those days further ahead. Are we smarter than the software, the models and the meteorologists? High hubris indeed!

Having second guessed and formed a view, there is a further challenge. Translating the chosen strategy into a series of instructions that actually will get you from A to B fastest. You can give these instructions to your boat in real time, or you can pre-program them. Given that everybody has to sleep sometime and that there is more to life than SOLing, some pre-programming can't be avoided. This is very tricky.

Back to the 2330z forecast again. Well, blast! In the lead and more than halfway across the Sound on a broad 130 TWA reach, my router said gybe onto 125 TWA port! Why? Ahah, there is a pocket of new wind developing under the Newhaven coast. Sailing online, always remember, what is forecast for the next six hour period WILL happen. So I gybed and so did peskasail and longreacher, who were hot on my heels at the time, and so did Dingo who had not come across as much as us three yet.

As we headed back to Connecticut on a course W of North, the wind started to pick up and clock from S of West to North and E of North. We tightened up and curved back on to a course East in the general direction of Buzzards Bay again. I decided it was best to get some sleep and set a long series of DCs that would keep me near close-hauled whilst skirting the coast for max pressure and then curve SE towards a tacking point somewhere near what must be Falkner Island Reef! Somehow I held onto my lead, but Dingo was back in the race, although of course he was never out of it in the first place.

It was the first and last time I slept, and a long beat to Buzzards now followed. Dingo and I were neck-and-neck. Rounding marks in the sea is not easy on SOL, and especially if you want to make a turn of close to  $180^\circ$  from close-hauled to a run on the other gybe. It's a bit like Schrodinger's cat. You could be here or you could be there when your instruction executes. If you play it safe, you will badly overshoot. But if you miss it, you'll have to go back. So, at Buzzards I was wide awake to hold onto those precious seconds of lead.



In many ways, after Buzzards, it was plain sailing. Dingo and I had good separation from the rest of the fleet and the overall wind strategy was clear, as were the tactics: cover Dingo. But you can't cover in your sleep and given the lead was no more than a minute you couldn't be sure a small variation or error in an uploaded route wouldn't cost you the lead. There was a fair bit of downwind soaking to be done, and the best VMG angle for our Santa Cruz was not at all constant over the prevailing wind range. And, just before the Finish, there was going to be another mark in the sea to negotiate: ETA 0430z.

So I stayed awake, but nevertheless gave myself quite a fright not hotting up immediately after passing Plum Island.



Commiserations Dingo and a big congrats to Mrbil from Canada for joining us on the podium to win the SMPF prize of an SYC membership for one year (face value: US\$ 35.-) sponsored by Italian SOLer SCARABOCCHIO.

Such a great race and such an honour that we can share it with its hosts and organizers, The Stamford Yacht Club. And thank you for the prizes! Hip hip? Hurrah, hurrah, hurrah!

bonknhoot, September 2016