

## **SJRYC Windward Sheet volume 2016, number 8 July 2016**

Welcome to the 2016 Summer Series. It was an evening of light-air, flat water racing on Wednesday night. Because Ken Z was under the weather, Mike Kinney and Andy Grootendorst from Cynthia graciously worked with our regular RC boat crew of Bill Womer and Kathy Grootendorst to run the race. Many thanks to all on the RC boat for running a terrific race under tough conditions. We saw 22 boats on the starting line which is a new modern record. It is wonderful to see all the hard work of so many people enable our Club to have such a vibrant race program.

JaM went first on a short course with 1/2 mile legs perfectly suited to the light conditions. Once all the boats were away, it appeared that the Northerly side of the course was favored, with Silver Arrow and Carrera ahead as their ratings would predict. But half way up the first beat, the wind clocked, moving West, bestowing a huge advantage on those boats who started on the Southerly edge of the starting line.

In JaM, Fuzzy Logic, which rates right in between Carrera and Silver Arrow, moved out to a commanding lead. We might add that they were not the only boat on the right side of the big shift (which had been predicted), but they sailed very, very fast and kept pushing hard for the entire race. They did not just get a lucky start, but did a great job of extending that lead and staying ahead.

Rounding the first mark showed Fuzzy with a huge lead, and Distraction, Welly, and Zot in hot pursuit. The second leg was also a beat leg, with a heavily favored Starboard tack. Distraction held her lead but sailed way wide when rounding the second mark to avoid the current and getting tangled up with Welly and Carrera which were sailing in close quarters near the mark. Welly got by Silver Arrow, and just ahead of the rounding of the second mark, by Carrera as well. But by then, Distraction was long gone.

Welly took off on the final downwind leg and with their masthead assy spinnaker, was one of the few boats with wind in their sails. But Distraction was too far ahead to be caught, and was first to finish, first in section, and first in fleet. Fuzzy finished next, to easily win JaM. Next over the line was Welly, who corrected out to second in Spinn, then Carrera and Silver Arrow, correcting out fourth and third respectively, with White Knuckles saving her time on these faster rated boats to correct out to finish second in JaM. Zot finished right with Carrera and corrected out to third in Spinn, followed by Dirk on Sea Raider and Gint on Imagine. Fourth and fifth in JaM were won by Little Beauty and Infinity.

The leaders of the race, as is often the case in super light air, won by big margins. But there were some close contests further back in both sections, with Silver Arrow beating Carrera by just 31 seconds, and a three way race for fifth in Spinn with Imagine edging Attitude by 13 seconds and Attitude besting Captain Blood by just 21 seconds.

**Time-on Time Scoring.** What it is, why it works, and why we use it. The obvious way to score races is by using the race course distance to compute your handicap. So if you

have a handicap of 100 and the race is three miles, you will get 300 seconds as your time allowance. This works well in distance racing, but every rating scheme has a built-in bias when scoring at low or high wind speeds. We see this when looking at fleet results for Port-to-Port races where in light winds, the big boats always correct out in the fleet results, while in heavy air the smaller boats are on top.

To combat this, PHRF allows for a correction based on how fast the boats actually sail. It is called Time-on-Time and that means handicaps are not calculated by the distance of the race, but by how long boats took to sail the course. The longer the time on the water, the higher the handicap allowance, and the shorter the race, the lower change in handicap. This acts to give slower rated boats a much fairer chance to win light air races, if they sail fast, because the handicap is calculated as if the boats went at average speeds over the elapsed time of the race. It all sounds good, but do we have any evidence T-o-T actually works?

Right here in St Joe, we have a dozen years of PHRF T-o-T races run in Spinnaker, with a rating spread from the fastest to slowest BotY winners of 63 seconds a mile (Wellenreiter at 30; Zot at 93, Quicksilver at 63). In those twelve years, and over the span of about 160 races, the outcome is Zot won 6 times, Welly won 5 times, and QS won once. Amid what seems to be a giant rating spread, these well-sailed boats were entirely competitive with each other. How can that be?

One reason is that over many races, all conditions of wind and water are encountered, leveling out the differences between boats. In addition, T-o-T scoring allows the much slower-rated Zot, when well sailed, to compete right with Welly. This offers evidence that T-o-T allows for fair racing even with big rating spreads in short-course racing over an entire season.

But the same is not true in a Port-to-Port race. Distance races require sections with smaller handicap spreads, mostly because big spreads in a long distance race means that faster rated boats will eventually, in a Mac race or even a Tri-State, sail in different winds. At that point, the rating can't compensate, and the boat with the better winds has a big advantage. Contrast this with our short-course racing in St Joe, where wind variations are still possible, but over the many races of a season, tend to balance out.

T-o-T corrections are most notable in extreme situations—such as this week--when a 225 rated boat sails quite well, and is competitive when the rating is adjusted for the wide rating spread. In this week's race, a 225 rater, White Knuckles, sailed well and ended up in second place. Under T-o-D, she would have been second to last. This is how T-o-T scoring works well for short course racing in fleets with big rating spreads.

**Single-handed Mac.** Congrats to Dirk Kruger for 1) Finishing another Single Handed Mac race; and 2) For grabbing second place. For those of us who have raced Macs, doing one single handed is hard to even imagine. But Dirk has done this for years. He reported big winds, 25 knots and up, and breaking his boat speed record in the process of doing so well. All the best to the solo sailor in our fleet.

**Winners at the QC:** Congratulations to our SJRYC Flag Winners in the Queen's Cup. Eight boats from our regular race fleet entered. And as usual, our boats made a strong showing, with Second in Section honors won by Andy Grootendorst on Cynthia, Tom Jacobs on Dandelion, Gint Karaitis on Imagine, and Dr. Stuart on Attitude. Other SJRYC boats in the race included Elixir, Silk, Jabberwok, Captain Blood, and Chateau Michelle. Andy reported for his section it was lots of jib-reaching, in modest winds and some left-over slop, which required patience, keeping an eye on the ship's clock to make sure they could make the cut-off time. Our best wishes for all those who raced, and to everyone who assisted in making this a special event.

**2016 Rhumbline Article in LMSuRF Newsletter**

An article about the Rhumbline Regatta appears in this month's sailing newsletter, starting on page 24, with some great photos courtesy of Ken Zimmerman:

<http://files.ctctcdn.com/d77aa772101/7cb6e1c1-3652-4268-8391-98ce8d65b8fc.pdf>

Next week is Race 2 in the 2016 Summer Series, then we are off for two weeks for our annual break for the Mac race--so we'll see you on the water, Ken Z. and Jim S.

*The Windward Sheet follows the SJRYC racing fleet and is published at irregular intervals throughout the sailing season.*