

May 7, 2003

PHRF E and PHRF F Racers - Time on Time Information for 2003

Ladies and Gentlemen (aka Guinea pigs) –

As you may know we are going to try some Time-On-Time (TOT) handicapping this year for some of the DRYA races for (only) the PHRF E and PHRF F Classes.

Which races? Specifically, for only those DRYA windward-leeward races when you compete on the C Course. Other DRYA races you may sail in will continue to be scored Time-On-Distance (TOD). The reasoning for this is that in the excluded races you may be racing for some overall award alongside other PHRF boats that do not use TOT handicapping; so everyone needs to be the same (TOD) for those races.

Info to date - TOT will be used in these races –

GLYC Regatta (May 17) - All races

DYC (May 24) – First race only. Second race will be a point-to-point race to finish at DYC.

GPSC (June 28) – All races

GPYC (August 9) – All races

What exactly is Time-On-Time handicapping? For a definitive explanation, please refer to the USSailing site on the subject: <http://www.ussailing.org/PHRF/TOT.htm>

In general terms, TOT handicapping uses a percentage of elapsed time (not the race distance) to calculate corrected time. This percentage is expressed as a decimal and it's called your Time Correction Factor (TCF). Your Corrected Time = Your TCF x Your Elapsed Time; My Corrected Time = My TCF x My Elapsed Time.

For our purposes, this year, we will use a scratch boat PHRF rating of 180, i.e. a boat that rates 180 will have a TCF of 1.000. Her elapsed time is the same as her corrected time. In the terminology we are used to, boats that rate faster than 180 will “give” that boat time, boats that rate slower than 180 will “get” time. We'll use 180 because it's about the mid-point of our PHRF E – PHRF F groups this year and that's what US Sailing recommends we do. If this system expands next year, there will likely be a different midpoint and a different scratch boat and (thus) different TCFs all around.

What's my TCF; better yet, what's everyone's TCF?

In 2003, we will calculate TCF as follows: $(730) / (550 + \text{PHRF rating})$

By my calculation, the table that follows lists this year's TCFs for boats rating between 144 and 240 (rounded to 3 decimals for illustration).

PHRF	TCF	PHRF	TCF
144	1.052	180	1.000
147	1.047	183	0.996
150	1.043	186	0.992
153	1.038	189	0.988
156	1.034	192	0.984
159	1.030	195	0.980
162	1.025	198	0.976
165	1.021	201	0.972
168	1.017	204	0.968
171	1.012	207	0.964
174	1.008	210	0.961
177	1.004	213	0.957
		216	0.953
		219	0.949
		222	0.946
		225	0.942
		228	0.938
		231	0.935
		234	0.931
		237	0.928
		240	0.924

Is this the magic bullet that will finally make PHRF "fair" for everyone, all the time? Not exactly. It's a step in the direction of recognizing that in (particularly) light air races and in (particularly) wide rating spreads, time-on-distance handicapping is not a really good idea. (In nearly every race, I think all of us would rather be the biggest, fastest boat in our PHRF class than the smallest, slowest boat. The dynamics of the interaction particularly in and near the starting area and turning marks can give big, fast boats a really big, fast advantage.)

Time-on-time will, in fact, tighten the corrected times up a bit, maybe change a few places in the middle of the fleet; and it's a step in the right direction. It's widely used in other parts of the world. We'll learn something about it this year and see where we go in 2004.

Good sailing!

Tim Rumpitz, C Course PRO