

# Time on Time (ToT) Scoring System

In our 2019 Annual Meeting held in February, a considerable amount of time was spent describing the advantages of Time on Time (ToT) scoring for PHRF races. We agreed to adopt ToT scoring as the FCSA recommended method for scoring of PHRF races. FCSA provides PHRF ratings in both seconds per nautical mile (ToD ratings) and time correction factor (TCF) so that clubs may use either ToT or ToD scoring. For many years, we have used the familiar Time on Distance (ToD) scoring method. Most of you are familiar with handicaps being expressed as seconds per nautical mile and the use of these handicaps to calculate corrected time based on the course length in nautical miles.

## Why Does FCSA Recommend ToT Scoring Instead of ToD?

Most of the world with exception of the U.S. has gone to ToT scoring instead of ToD. Now, the concept is catching on in the U.S. First Coast Sailing Association believes ToT scoring is better than ToD scoring for the following reasons:

1. With ToT scoring you don't need to know the precise course length. To most PHRF racers this doesn't sound like an important point. But it actually is a very important point and is one of the largest causes of unfairness in handicap racing. For example, only a small error in course length by the Race Committee can penalize or give boats many seconds per nautical mile. Have you thought about what 1% error could be? Dropping a mark 60 feet too far or 60 feet too short in setting up a one-mile course can cause 6-12 seconds per nautical mile in error. In offshore courses the errors are magnified. Think about how much 12 seconds per nautical mile means to you. Would you be happy giving away 12 seconds/mile simply because the race committee could not drop the marks in an exact location?
2. ToT scoring is much easier to manage from a Race Committee standpoint. Your only concern in setting up a course is making sure it is correct for wind and current. Exact course length is no longer a concern. Another big advantage is shortening course. There is no longer the need to figure out what the "new" course length is after a course is shortened.
3. ToT is a more fair system for races that have changing conditions during the race. This happens a lot in our region. If the handicap spread in a class is large, it will also tend to tighten up the results.
4. ToT scoring provides a first order correction for the speed of the race. ToT scoring tends to compensate for major racecourse phenomena that make individual races unequal. This is of particular importance for distance races where a balanced mix of upwind and offwind is not possible.

## How Are Corrected Times Calculated Using ToT?

Every boat is assigned a Time Correction Factor (TCF) as listed in the "2019 PHRF Ratings" on the FCSA website. This list is kept current and reflects the current ratings for each boat. When you look up your boat you will see the traditional PHRF Rating in seconds per nautical mile. You will also see a number under a column called "TCF". This is the Time Correction Factor. TCF is the spinnaker rating. TCF-N is the non-spinnaker rating. Without getting into a lot of detail, the TCF is calculated directly from the Adjusted Base Rating. Your boat's adjusted rating does not change as a result of using ToT.

Your corrected time in a given race is simply your elapsed time in seconds times the Time Correction Factor (TCF). That's all there is to it!

$$\text{Corrected Time} = \text{Elapsed Time} \times \text{TCF}$$

On the FCSA website is a scoring worksheet that is designed for the new ToT scoring system. You simply add the boat's information, the boat's TCF, and the boat's elapsed time. The spreadsheet will calculate the results using ToT.

If anyone has further questions on this scoring system, please contact Chief Rater, Mark Dixon or me.

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First Coast Sailing Association  
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