

MOCRA TCF to RYA National Handicap for Cruisers Conversion

Whilst MOCRA aims to promote racing for multihulls using its MOCRA Rating Time Correction Factor (TCF) we recognise that MOCRA members may wish to race in mixed fleets occasionally either with monohulls or dinghies. Unfortunately, there are no PYs or NHC TCFs established for MOCRA yacht designs. However, the MOCRA TCF has wide credibility, so we have attempted to determine a MOCRA TCF to PY and RYA NHC TCF conversion factor based on comparing the performance of multihulls against monohulls where they have been racing on the same course, and the monohulls have an established PY. The recommended conversion is that:

$$\text{PY} = 945 / \text{MOCRA TCF}$$

$$\text{RYA NHC TCF} = 0.91 * \text{MOCRA TCF}$$

It is further worth noting that an RYA NHC TCF approximates to an IRC TCF.

Notes for Race Officers

The conversion factor assumes that courses are windward/leeward or triangular, and that they are tidally neutral.

All boats have particular characteristics that means they perform better in certain conditions relative to their rating. As a general rule the characteristics of multihulls are that they perform better than monohulls, relative to their rating, off the wind, but worse when beating. In passage races this can have a significant impact on results.

Multihulls tend to be faster than monohulls and it is a general feature of faster boats that they gain an advantage when courses are cross tide or up tide, because they spend less time fighting against the tide, and so travel less distance through the water. Similarly, on passage races, a faster boat has an advantage when the course is predominantly up tide, and a disadvantage when the course is down tide.

Another feature of faster boats is that they generally take more skill to sail. Generally multihulls are easy to sail, because of their inherent stability, but difficult to sail well, with significant differences in performance between crews of different skill levels. Errors also have a larger negative effect, as does the impact of wind holes.

We would appreciate feedback on your experience in using this conversion so that we can refine our recommendation.