

# Submission: USA 3

Reporting committee: ITC

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## APPENDAGES SHAPE ON HIGH PERFORMANCE BOATS

### PROPOSAL

Review rated performance effect of varied appendage shapes on high-performance boats.

### RATIONALE

There is a recent trend in TP 52 appendage designs towards favoring keel and rudder blades with more area than in previous generations. These new shapes are proving to have a significant and noticeable advantage in lower speed conditions on the race course, such as when hitting wave chop or through downspeed maneuvers. This design trend is also noticeable in the current 52SuperSeries fleet.

Since most TP 52's competing in ORC events are unmodified from their original designs of a few generations ago, those teams that can re-configure to the latest trend have a significant unrated advantage in performance, and this threatens to de-stabilize the fleet's current balance of fair and competitive racing. For example, the GL 52's in the US are considering imposing unilateral rating penalties to offset this problem.

We ask ITC to re-evaluate the formulations in appendix leeway, lift and drag to examine if this observed performance difference can be more accurately defined in the VPP.