

Views on the proposed WIC rule changes, as of 04 March 2012

I am in favour of one of the five WIC rule-change proposals and against the other four. The following guided my decisions:

Maximum performance limits for the Wayfarer were *de facto* established during the development of the MkIV because its performance was designed be equal to but not exceeding the performance of the best performing wooden boats (what I'll call the "reference boats").

I kept in mind that the performance of any boat emerges as a result of the collective effect all its design features. Although many dimensions, layout and features are different between the MkIV and the reference boats, the MkIV *as a whole* has been accepted by the class to have no better performance than the reference boats. A specific feature on one mark of boat might make a different contribution to overall performance as the same feature on another mark. It is the collective effect of all features, not individual features in isolation, which decides boat performance. It would be very misleading to draw overall performance conclusions from the comparison of for differences between specific design features, such as beam at deck level, on different marks.

Given this I did not try to foresee the effects of each proposed change on each mark of boat but simply considered its effect on the reference boats. If a proposed rule change appeared to offer the possibility of an increase in the performance of the reference boats, then I rejected it. To do otherwise would permit boats that made use of the rule change to be capable of exceeding the reference performance. This would introduce performance differences between those boats and the MkIV and other boats without the modification, whereas the objective should be to reduce performance differences.

Even if a proposed rule change appeared unlikely to increase performance, I still rejected it unless it clearly had neither potential adverse effect on crew or structural safety nor maintenance impact.

If a proposed rule change appeared to be motivated by the need to correct historic build or maintenance problems that apply only to individual or small groups of boats, then I rejected that, too, on the basis that it would be an isolated build and maintenance quality issue, not a whole fleet issue.

Rules 4 & 34 Buoyancy Tests – Accept the Proposal

Summary: Dispense with the requirement for an annual, formally witnessed buoyancy endorsement.

Rationale: Race committee frustration related to ensuring buoyancy endorsement compliance for no apparent practical safety benefit at events with safety cover.

Performance: There are no performance impacts.

Safety: When racing is managed and has safety cover, then the risk of a boat sinking before crew and boat are secured is low. Therefore, the proposer argues, there is unlikely to be a significant adverse safety impact.

Maintenance: No significant impact.

Conclusion: Permit the proposed change for those for class-managed events with safety cover. WIC should consider further whether inspection of a buoyancy endorsement has any value for class-managed events that do not have safety cover (e.g. class-managed cruising events, passage races, etc).

Comment: The purpose of buoyancy tanks is to prevent the boat sinking. The current one-result-fits-all-marks-of-boat buoyancy test is technically weak, as each mark of boat has different numbers of tanks, size of tanks, length of joints and seals and flotation foam. A pass result is much easier with some marks than others. The risk of damage following impact varies, too. Looked at from a safety risk mitigation perspective, the current test could be argued to be almost meaningless.

Rule 13 Gunwale Structure – Reject the Proposal

Summary: Permit widening of the beam of all boats at gunwale height to match that of the MkIV.

Rationale: [The proposer] “think[s] the rule 13 dispensation evens out the playing field among Wayfarers, and should become part of our Class Rules in time for 2013.”

Performance: The effect of the changes on the reference boats would be to increase righting lever applied by crew weight. Hull stiffness might also be increased. The volume of spray taken on board may reduce. Weight would increase. The net effect of the change is likely to be a performance improvement for the reference boats.

Conclusion: Reject the proposal as it is likely to increase the performance of the reference boats above the reference level, thereby providing an advantage over other boats. This the opposite to the desire of the proposer to “even out the playing field”.

Comment: If the proposal were nevertheless to be accepted, gunwale modifications should be made only by licensed builders to prevent the use of prohibited materials and methods. The changes could create dissent between owners of different marks.

Rule 23 Floorboards – Reject the Proposal

Summary: Permit alternate materials and dimensions for floorboards.

Rationale: To allow overweight boats to be lightened down to minimum weight.

Performance: The change could advantageously affect weight distribution. Moment of inertia could be reduced if weight reduction were to be focused at the fore and aft ends of the floorboards. Novel materials and method of fixing could affect the stiffness of boat.

Safety: The proposal requires modified floorboards to retain “adequate” strength but as crew and passenger complement and weight and floorboard wear may vary greatly over the life of the boat, under-design could result in breakage of floorboards, presenting a leg and foot injury hazard.

Conclusion: Reject the proposal on the grounds of performance and safety.

Comment: The proposed changes are un-testable – what does “adequate” mean? How would it be demonstrated? How would “adequacy” change with the number of passengers or on a change of ownership? The implication of the proposal seems to

be that some boats have been constructed or have gradually become overweight. If this is correct, then this is not a fleet-wide effect and is another reason to reject the proposed change - the solution lies in the original design and build and subsequent maintenance, not the rules.

G.6 Spinnaker Numbers – Reject the Proposal

Summary: Spinnakers must show the boat number.

Rationale: To assist race committees – but anecdotal evidence is that RCs don't actually have a problem

Performance: No effect.

Safety: No effect.

Maintenance: There will be inconvenience to owners with existing spinnakers without numbers if they were required to add them.

Conclusion: Reject the proposed change. Keep the rule as it is – no change.

Comment: Many other classes race without a boat number on the spinnaker.

35.3 Electrically operated instruments or mechanisms – Reject the Proposal

Summary: Make the rule on electrically-operated instruments and mechanisms less stringent.

Rationale: It is alleged that this would make the Wayfarer more appealing to younger people by allowing more electronic race equipment.

Performance: Any addition to the currently-permitted functions of instantaneous heading and time could improve crew decision-making performance and the boat's race performance.

Conclusion: Reject the proposed change. Keep the rule as it is, limiting instrumentation to instantaneous heading and time.

Comment: Where is the evidence that navigation gismos would make the boat more appealing? An expensive, annual electronic arms race would result. The W is not an Americas cup boat or a sportsboat. Keep it seat of the pants. Add a declaration of UKWA rule compliance to race entry forms. Write SIs to enable race committee to check instrument compliance during events as part of scrutineering.