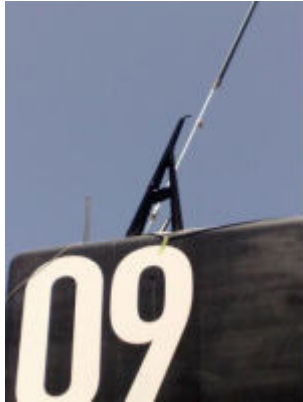


Chairman's Report – Yacht Design Developments

The aim of this paper is to emphasize some yacht design developments that have been highlighted during the past two years and to discuss how the committee wishes to address the issues raised.

Stanchion / Pulpit



The box rule classes seem to be producing boats with undesirable trends in pulpit design. Team New Zealand's latest TP 52 had what was effectively a stanchion as its pulpit. And a number of boats are now fitted with glass fibre stanchions, pulpit and pushpits which to all effects have the inherent problems of the prohibited carbon fibre stanchions.

Watertight Bulkheads

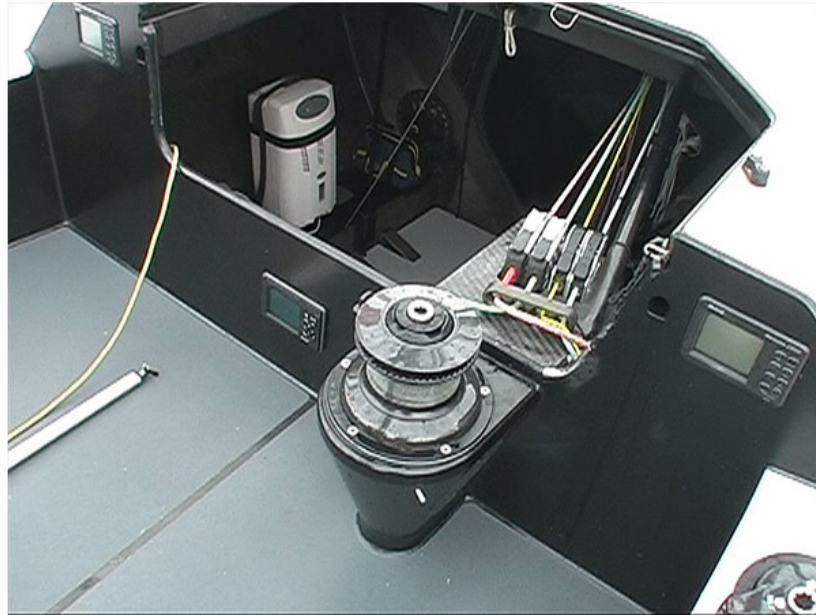
Fundamentally a yacht should be able to survive the loss of its rudder and stock without sinking. However recent examples such as 'Georgia' the Farr 53 indicate that this is not the case. The problems extend from the fact that modern racing yachts tend to have little in the way of watertight sub-division. A bulkhead positioned forwards of the rudder stock would in most cases prevent sinking from the loss of the rudder stock. Modern yacht designers tend to cut lightning holes in bulkheads placed far aft and therefore any watertight integrity is lost. While this issue is indirectly addressed in Category 0 perhaps consideration of this issue should be taken at least down to Category 2.

Liferaft Stowage

An ongoing area to note is the large number of yachts launched post the OSR requirement regarding liferaft stowage that do not have adequate storage arrangements included at the design stage.

Companionway - Excessive Size

The latest trend in raceboat design is to run all the halyards and control lines through the interior of the boat. The reasons include simplification of deck layout, reduction of structural loads on the coachroof and windage. However the solutions both lead to compromised interiors, overly large companionways and issues related to the use of the onboard systems while the boat is in a watertight configuration with the washboards and hatches shut. This may present issues with stability when a large cockpit is flooded. Below are two pictures of 2009 generation TP52 showing the arrangement.



Twin Companionways

Twin companionways are becoming an increasingly common design trend, particularly amongst the offshore short handed classes like the Class 40 and Open 60. The obvious issue is that this arrangement pushes the companionway out towards the sheerline, decreasing downflooding angle and increasing potential water ingress in a knockdown situation.



While these arrangements in the open classes with such significant beam may not be so critical, as the static waterline is still likely to be well below the companionway openings, even at ninety degrees knockdown. Below is a picture of a Volvo 60 suffering a knockdown.



It has started to appear on other boats namely SEB Volvo 60 and the Bull 7000 Sportsboat. The reality of a knockdown is that in a dynamic situation, particularly on narrower beam boats, substantial water ingress is likely.

A centre companionway is almost always achievable and it appears this trend has been led by the simplification in deck design layout. The question for the committee is should the OSR remain non-typeforming unless it specifically affects safety? Is this development something the committee want to get involved in before it becomes a common arrangement?

Reefing Points

A number of mainsails have been noticed that have the OSR required reefing points, however the effectiveness of those reefing points are questionable. The reef points have very little primary and secondary reinforcement, small width and length of webbing strap which in reality will not be able to transmit the loads through to the sails. This is actually more an equipment inspection role, but it is also at present quite a subjective item to quantify.