# INTERPRETATION ON THE INTERNATIONAL 10 RATER CLASS RULES

Interpretation requested by Graham Bantock, Sails Etc. as follows:-

(See attachment showing variations on the stern of a 10 rater)

Figures 1,2,3,4 and 5 show an opening in the stern overhang of a 10 rater hull. The width of this opening is shown as 50mm each side of the centreline, the depth is from the deck to the underside of the hull (except for fig. 5) and the length is from the aft face of the transom to a point just aft of the aft waterline limit mark. The entirety of the opening in the underside of the overhang is shown as within 40mm of the waterplane.

Rules applying ERS 2009-2012 D 1.1 International 10 rater class rules 2002 A.5.1, A5.2, D 2.4.(b)

2.4.(b) states:

with the following exceptions, hollows in the external surface of the hull are prohibited :

1) 40 mm or more above the datum waterplane

2) 15 mm or less from the centerplane

3) trunking for hull appendages

4) inset transom and upper surface of the deck

5) hollows which do not exceed 1 mm in depth when checked with a straight edge of length 300mm

## Question 1

Would a boat with an open central section of the aft overhang, extending from the transom forward to a short distance aft of the aft waterline ending, comply with the class rules?

Discussion:

Hollow is undefined in CR, ERS and RRS. The Oxford English Dictionary definition of the noun hollow is defined as: "a hole or depression in something"

The open section falls within the definition of a hollow both in the sense of resembling a hole (apparent in non longitudinal, near vertical planes) and in the sense of resembling a depression or concavity (apparent in near horizontal planes above the waterplane). Since hollows in the external surface of the hull are prohibited less than 40mm above the datum waterplane, the proposed feature clearly falls outside the rule D2.4(b).

Conclusion:-

The proposed feature does not comply with the class rules unless the entirety of the opening is within 15mm either side of the centreplane or not less than 40mm above the datum waterplane.

# Question 2

Does the presence of a lateral beam across the top of the twin overhangs (fig 2) make any difference?

## Discussion:

A lateral beam across the top of the opening does not qualify the hollows for an exception under D2.4(b).

Conclusion: No.

Question 3 Does the width of the open section (fig 3) make any difference?

### Discussion:

As noted above 2.4(b) 2) makes an exception for hollows within 15mm of the centreplane.

## Conclusion

Yes. However fig 3 details a width of 50mm each side of the centreplane, in which case the design would not conform to the class rule and since the proposed hollow falls within 40mm above the datum waterplane it does not qualify for an exception under D2.4 (b)

### Question 4

Does leaving the twin overhangs un-decked (i.e. each is no more than just the thin skin of the primary hull moulding) (fig 5) make any difference?

### Discussion:

In this arrangement the upper surface of the overhangs could be regarded as "upper surface of deck" and thereby, any concavity in that upper surface excepted from the prohibition on hollows facilitated by D2.4(b) 4). This exception would also cover any hollows arising exclusively from the transom being placed forward of the aftermost part of the hull (or being "inset").

Beyond this, the arrangement described in fig. 5 differs from those in figs 1-4 in its interaction with the rule, in that the height of the external surface of the hull at either side of the central opening is reduced to no more than the finite thickness of the shell moulding. The open section then still falls within the definition of a hollow in the sense of having the characteristics of a hole (apparent in non-longitudinal, near vertical planes) and, also in the sense of having the characteristics of a depression or concavity (apparent for example in planes which are nearly tangential to, but slightly higher than the lower surface of the overhang ). The latter could be revealed by application of a straight edge bridging a concavity in the edge of the moulding.

## Conclusion:

This design would therefore not conform to the class rule unless the opening was within 15mm of the centreplane or not less than 40mm above the datum waterplane.