

# INTERNATIONAL 505 CLASS YACHT RACING ASSOCIATION

40 Arden Close, Bradley Stoke, BRISTOL BS32 8AX, U.K.

# **Rules Questionnaire: November 2004**

#### Introduction.

At the 2004 AGM a number of proposals were put forward for changing the class rules. Rather than debate everyone of these in detail it was agreed that the IEC would undertake a general review of the rules, but before doing so would consult the membership before spending a great deal of time and effort on considering any detailed proposals to put into a formal ballot.

The IEC wishes to obtain the views of as many members in different National Associations as possible. Where it appears that there may be general support for the principle of changing a specific rule, the IRC will then be asked to develop a detailed proposal that can then be put to a formal ballot. However, if there is clearly widespread opposition to the principle of a particular suggestion, there is clearly no point the class officers wasting time in further investigation, or the class using resources in holding a ballot.

In this 50<sup>th</sup> year of the class, it is worth reminding people of a few general principles:

- The class is a self-governing International Class. ISAF has to approve any rule changes only to ensure that they are made in accordance with our own constitution an important safeguard to ensure that a small pressure group cannot change the class rules against the wishes of the majority. It helps to protect the integrity of the International Class.
- Our class rules are "open", ie anything is permitted unless it is specifically banned by a
  Class Rule or the ISAF Rules. There are strict rules on hull shape and sail plan, but
  very few restrictions on rig, internal layout or ancillary equipment. Also there is no
  restriction on materials or methods of construction, except that spars may be made only
  of wood or aluminium. This was not an original restriction it was introduced in 1982.
- Changes to the measurement rules can only be made if approved a ballot of all members who are either boat owners or part boat owners. Only one vote per boat is allowed.

Please complete the response from on Page 7 and either return it via your National Association or direct to me by fax +44 117 969 8772, or by email (scanned forms only) to secretary@int505.org.

Please return response forms (page 7) by 31 January 2005

Chris Thorne International Secretary

## 1 CLASS MEASUREMENT PHILOSPHY

#### Alternative views:

- There is nothing fundamentally wrong with the class rules and there is no need for change.
- b) The class should carefully consider developments in sailing technology and adopt them if it is satisfied that it will improve the boat and its appeal to potential new members.
- c) The class rules are too restrictive and prevent new ideas and innovations that would keep the class up to date and more appealing to top level sailors in the future.
- d) That the class rules are too open and if restrictions were introduced it would make the boat cheaper and more appealing to younger sailors

Please indicate the statement with which you agree most.

## 2 MODERNISATION OF CLASS RULES

In 1999 we altered the sail measurement rules to bring our methods of measurement and the definitions used into line with the ISAF Equipment Rules of Sailing (ERS). No material alterations were made to the shape or area of the sails, but it meant that we now measure our sails in the same way as most other International Classes, which is of considerable benefit to measurers and sail makers alike.

ERS also cover measurement of spars and hulls. Our existing rules for hull and spar measurement were not modernised in 1999 and therefore do not use always follow ISAF methodology and definitions. This could cause difficulties in interpreting the correct approach to use, for example in the case of a measurement protest at a major championship. Bringing our rules into line with ERS would also make it quicker for approved national measurers from other classes to measure our boats, an important benefit given the shortage if experienced measurers. The IEC therefore wishes to revise the wording of the existing rules to bring them into line with ERS 2005.

Apart from the specific changes in part 3 of this questionnaire, we would endeavour to ensure that the alterations did not materially alter any existing rule.

Do you agree that this is a worthwhile project?

## 3 SPECIFIC RULE CHANGES SUGGESTED.

**3.1 Carbon Spars:** Although a ballot was held on removing the current ban on carbon spars in 2003 and was defeated by a ratio of 2 votes to 1, under our rules there can be a further ballot on this in 2006, and a motion can be discussed at the 2005 AGM. Since our ballot other classes, including the Flying Dutchman have started to use carbon spars.

The arguments for and against were all given at great length when the matter was debated in 2002. The ballot result suggested that most people voted on their perception of cost. With the exception of the UK, the European fleets that can still obtain aluminium masts more cheaply than carbon voted to maintain the ban.

#### Alternative views:

- a) That technology is moving forward and that already carbon spars are cheaper in some parts of the world where 505s are sailed. We should therefore have a further ballot on this as soon as possible.
- b) The class voted decisively against carbon spars less than two years ago and it is too early to be talking about this again in 2005 with a view to a ballot in 2006

Which of these statements most reflect your views?

**3.2 Carbon Booms and Poles:** If the ban on carbon masts is to remain, would you be in favour of allowing carbon to be used in spinnaker poles and booms?

## **Alternative views:**

- a) The are no real performance advantages to be gained from using carbon in these spars, but in parts of the world it will mean that the equipment is cheaper and more readily available.
- b) Allowing carbon poles and booms will be a "Trojan Horse" and once accepted it will be harder to resist carbon masts. Also there are problems with attaching the kicker (vang) and mainsheet to a carbon boom, which may mean that we have to allow loose footed mainsails.
- **3.3 Fully Battened Sails:** It has been suggested that the class should consider allowing fully battened mainsails. (The opportunity could also be taken to redesign the sail plan of the mainsail and jib, see 3.4)

- a) The competitive life of the sail would be much longer and this would significantly outweigh the additional initial cost.
- b) Making the sail fully battened would make it difficult to de-power the rig in stronger winds, making it difficult for lighter crews to sail the boat.

**Revised Sail Plan:** If switching to fully-battened sails, the opportunity could be taken to redesign the sail plan of the mainsail and jib. Suggestions include: **Jib:** lengthen the luff, raise the jib entry point in the mast and shorten the foot. **Mainsail:** reshape the mainsail by raising the gooseneck and clew, and redistributing the area as a bigger roach near the head. The sail area would remain unchanged. With some re-rigging, existing masts could be converted.

#### **Alternative views:**

- a) Modernising the sail plan would modernise the rig and make the boat more appealing. Existing rigs would remain competitive (same area). This new rig would be more able to withstand the stresses from the 6m spinnaker, and there would be more clearance under the boom for the crew.
- b) Redesigning the sail plan would force all sailors to change their rigs as the old style rig would not be seen as competitive.
- **3.5 Lifting Centreboards:** An increasing number of boats have lifting centreboard pins, and a few also have pins that are adjustable fore and aft as well. The range of vertical movement is currently limited by Rule 6.2 to 200mm.

#### **Alternative views:**

- a) Moveable centreboard pivots are yet another expense and complication and should be banned.
- b) Lifting pins have been used in the class for years and are cheaper than having two centreboards for different conditions or crew weights. The current rule 6.2 that the board can only be moved vertically by 200mm limits the degree of movement and should be retained
- c) As b) but the maximum vertical movement should be increased to 300mm
- 3.6 Centreboard Length: The new Pegasus boat has a centreboard case to the maximum dimensions allowed under class rules, which means that the forward edge is in front of the mast step. In order to allow the centreboard to be lifted, the mast is stepped on a bridge over the front of the case. The pivot point of the centreboard is also adjustable fore and aft as well as vertically. This arrangement allows a centreboard that can project almost 1.7 metres below the boat. This is about 200mm longer than is possible with the existing plate case designs of other builders.

The boat with this extra long centreboard finished in 74<sup>th</sup> place overall at the Santa Cruz Worlds, and had a best race finish of 44<sup>th</sup>.

- a) That such a long centreboard will force people into expensive modifications of their boat and a maximum length should introduced, and /or the existing dimensions of the centreboard case reduced.
- b) There is nothing wrong with developing new ideas within the existing rules. If it is proved that a long centreboard improves the performance of the boat in the long term, development should be encouraged. If it does not, there will be no pressure to copy the design.

**3.7 Championship weighing:** A proposal has been made that a boat that is wet when presented for weighing at a championship should have a 2kg penalty imposed on top of the minimum weight

## **Alternative views:**

- a) Such a change is unnecessary. A boat cannot be weighed in a wet condition under our rules, and any deliberate attempt to cheat at a regatta is subject to sanction under RRS 69. There would also be enforcement problems if it were raining during measurement. At the moment measurers can use their discretion if it is clearly impractical to completely dry out a boat. A rule like this could create more argument and protest and complicate the measurement process.
- b) This would ensure that competitors made sure their boats were dry before weighing, thus reducing the time taken up in measurement by boats being rejected because they are not presented dry.
- **Thwarts:** Rule 5.6.2 requires the boat to have a "thwart" connecting the top of the centreboard case with the side tanks, and the maximum width of that thwart may be 153mm. Problems have arisen in defining what is the thwart and what is part of the centreboard case top, and also whether the maximum width measurement has to made between planes at right angles to the base line or not. The ISAF equipment rules are of no assistance, as they do not define a thwart.

## **Alternative views:**

- a) The rule serves little useful purpose and can be abolished. It is illogical to stipulate that there must be a thwart and then stipulate a maximum rather than a minimum measurement. The main objective is to preserve the open layout of the boat and to prevent double floors. Rule 5.6.3 was revised last year to ban a double floor. Introducing a more complicated rule now would require any existing boat to be "grandfathered" as owners could not be expected to make structural alterations.
- b) Rule 5.6.2 should be revised to define exactly how the measurement should be taken. There should be another rule introduced limiting the maximum width of the centreboard case top and also there should be a rule stipulating the maximum radius allowed of the joint between the thwart and the centreboard case top.
- **3.10 Double Spreaders:** A few boats, including the World Champion in Santa Cruz, have masts rigged with double spreaders. At present there is no restriction on the standing rigging of a mast.

- a) There have always been experiments with different rigs. Although double spreaders may improve the control of mast bend, it is at the cost of extra weight high up and increased windage. Owners should be free to experiment and find a rig that best suits the mast section, sails and crew weight they have available. Extra support for the 6m spinnaker is considered desirable by some.
- b) Not having limits on the rigging encourages expensive and complicated experiments that are not good for the class.

**3.11 Limits on Sails:** Although only one suit can be carried in the boat at any time while racing, at present competitors can measure in two suits of sails at major championships, with replacements being allowed only in the case of damage. It has been suggested that this should be reduced to one.

# **Alternative views:**

- a) By only allowing one set of sails, competitors will be discouraged from having different sails for different conditions, thus simplifying the boat and reducing the cost of competing.
- b) Most people will have more than one suit of sails and may prefer to use an older suit when it is windy. If they can only use one suit of sails they will be more likely to use the newest suit in all conditions. This will increase the wear and tear on new sails and there will be no cost saving.
- **3.12 Limits on Foils:** A present competitors can measure in two rudders and two centreboards at major championships, with replacements being allowed only in the case of damage. It has been suggested that this should be reduced to one of each.

- a) By only allowing one set of foils, competitors will be discouraged from having different equipment for different conditions, thus simplifying the boat and reducing the cost of competing.
- b) Unless people wish to modify their boat by putting a lifting pivot on the centreboard, they will be unable to match the centreboard to the wind conditions, which could put light crews at a disadvantage.

# **Response Form**

Please circle your choice of answer

1 CLASS MEASUREMENT PHILOSOPHY

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2 MODERNISATION OF CLASS RULES TO COMPLY WITH ERS

Yes No

# 3 SPECIFIC RULE CHANGES SUGGESTED

Please circle which of the alternative statements in each case most reflect your views.

3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	3.10	3.11	3.12
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National Association:	Boat Number
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