

Interpretation 2003-IOM-4

INTERPRETATION ON THE INTERNATIONAL ONE METRE CLASS RULES

Interpretations requested by the MYA, GBR as follows:

1. HULL D.2.1 MATERIALS: Is it permitted to use fillers that contain micro balloons?
2. HULL D.2.1 MATERIALS: Is it permitted to use fillers that contain bulking materials such as slate, talc etc?
3. HULL D.2.1(a) MATERIALS: Is it permitted to use standard servo casings to enclose/support remote control equipment as these 'containers' (as stated in the preamble D.2.1 (a)) are made with unknown fillers?
4. HULL D.2.1(b) (1), and (c) MATERIALS: Is it permitted to use epoxy gel coats that contain micro balloons?
5. HULL D.2.1(b) MATERIALS: Is workshop dust and other accidentally moulded in small bits like insects, air bubbles, bristles, hairs etc permitted in a moulded hull?
6. HULL D.2.1(a) (6) MATERIALS: The usual sticky cloth deck patch material is a dacron/terylene woven cloth coated with adhesive. Is this a film covering material?
Is Dacron/terylene a permitted fibre reinforcement for this special case?
If so, are other fibres such as carbon, kevlar, which like polyester fibre, are not permitted as part of a GRP plastic permitted as part of a film covering material?
7. HULL D.2.1(a) (7) MATERIALS: "Elastomeric" means "Returns to its original shape after elastic deformation". There are many materials that act in this way and could be used as a bumper. What range of elastomeric materials are permitted?
8. HULL D.2.1(a) (8) MATERIALS: "Thermoplastic" means "Softens when heated, re-hardens on cooling". It is assumed that the rule permits vacuum formed hulls made from ABS PVC etc. but does it permit more materials? Are "pellettised" thermoplastics with unknown additives (as in 1 and 2 above) permitted?
9. MAST FITTINGS: F.3.3(b)(9) A strut normally works in compression so is one that acts in tension compliant?
10. MAST FITTINGS: F.3.3(c)(1) Is the size of the bit that swings limited in any way?
11. STANDING RIGGING F.5.1 MATERIALS: The ERS defines **rigging** as "Any equipment attached at one or both ends to spars, sails or other **rigging** and capable of working in tension only." Where **rigging** is bent round a terminating hook and then round itself, this **rigging** is clearly not acting in tension only.
Is it permitted to use stainless steel **rigging** now that reference in the CR has been made to the ERS defined term **rigging** F.1.4?
12. STANDING RIGGING F.5.2 (b) (3) CONSTRUCTION:
A steel wire's stiffness provides extra stiffness to a luff tabling; ie by acting in bending, with a compressive as well as a tension side, it does not allow it to act in tension only. ie therefore it does not appear to be **rigging** in the defined sense.

Is it permitted to use a stainless steel mast **spar** jackstay now that it has been introduced to the rule [F.5.1 & F.5.2 (b) (3)] with reference to the ERS defined term **rigging** F.1.4?
13. RUNNING RIGGING F.6.2 (b): Is it permitted to fit a boat with 'a sheet control line' as it doesn't appear on the list of permitted optional running rigging parts in F.6.2 (b)?
14. RUNNING RIGGING F.6.2 (b): Is it permitted to fit a boat with more than one 'sheet control line'?
Now that specific permission has been stated for the use of lever arm winches, this question has been raised about the use of 2 sheet control lines. These are 2 lines, one from each end of the arm, each with its own control elastic, to which the mainsail sheet and headsail sheet are attached. See also 15 below.
15. RUNNING RIGGING C.7.7(a): Is it permitted to work the mainsail sheet and headsail sheet with more than one sheet control line?

16. MAINSAIL CONSTRUCTION:G.3.1(b)(2), (3) & (4) Cringles are limited to 4 in total, but **luff** openings for mast spar rings and/or loops for mast spar jackstay fittings are not limited. Is it permitted to use metal eyelets for some or all of these openings? Also is there a restriction on the location of any of these eyelets?

Decisions:

Items 1, 2 and 4:

Answers:

YES - in adhesives, NO - in glass reinforced plastic.

Discussion:

Fillers are permitted provided they are constituent parts of permitted materials listed in D.2.1. Fillers supplied as parts of a resin for laminating or/and gel coat are constituent parts of laminating resin and/or gel coat which are explicitly mentioned as parts of the glass fibre reinforced plastic. Another filler added by the builder to laminating resin and/or gel coat is not a constituent part of laminating resin and/or gel coat.

Fillers are a normal part of adhesives and therefore permitted.

Item 3:

Answer:

The materials used in remote control equipment are not restricted.

Discussion:

The casing is an integral part of the control unit.

Item 5:

Answer:

The presence of particles of foreign materials not permitted by the class rules but reported on a measurement form would not be a reason for the certification authority to decline to issue a certificate.

Discussion:

We may presume that it is normal to have some imperfections in mouldings and it is not necessary to explicitly mention this in the class rules. Their presence should be noted by a measurer if he feels it appropriate. However this would not normally prevent the CA from issuing a certificate.

Item 6:

Answers:

Sticky cloth deck patch material made of dacron/terylene woven cloth coated with adhesive is a fibre reinforced film covering material as permitted by CR D.2.1(a) (6).

Any fibre reinforcement is permitted providing the material is a film.

Carbon and Kevlar sheet mouldings, which do not behave as a film, are not permitted.

Item 7:

Answer:

Elastic, rubber-like substances are permitted.

Discussion:

The class rules do not set upper or lower limits on the elasticity of elastomeric materials. When a measurer is of the opinion that a hull contains materials that do not comply with this class rule, he should note it on the measurement form. The CA should not issue a certificate but should ask for a sample of the material.

Item 8:

Answer:

Pelletised thermoplastics are allowed for the construction of the hull if they are in the compliance with the class rule D.2.1(8).

Item 9:

Answer:
YES

Discussion:

A strut is not part of rigging. It is fitting so it is allowed to work in compression as well as in tension.

Item 10:

Answer:
YES

Discussion:

Class rules F.2.3 and F.2.4 (a) restricts the size of the fittings.

Items 11 and 12:

Answer:
YES

Discussion:

Parts of rigging can work in compression and bending (which is part in tension and part in compression) as well as in shear and torsion. The ERS definition of rigging is referred to the whole piece of rigging i.e. (shroud, forestay, backstay) which shall be capable of working in tension only.

It is obvious that the whole length of a shroud, backstay or forestay is not capable of working in compression and this fact is important regarding the ERS definition. The fact that a particular short part of the rigging may work under compression also is irrelevant for this purpose.

Item 13:

Answer:
YES

Discussion:

Rule C.7.7(a) allows the use of a sheet control unit. It is true that a sheet control line is not listed in class rule F.6.2 (b). The conformity with rules of Section C is not part of **fundamental measurement** so the presence of the sheet control line is not required to be checked during fundamental measurement.

Item 14 and 15:

Answer:
NO

Discussion:

In the class rule C.7.7 the term "sheet control line" is used in the singular. It is important to make a distinction between sheet control line, mainsail sheet and headsail sheet. It is permitted to attach the mainsail sheet and headsail sheet directly to the sheet control unit. The decision of the Interpretation 2003-IOM-3 deals with this topic.

Item 16:

Answers:

YES. It is permitted to use metal eyelets to form luff fittings for mast spar rings and/or loops and/or for a mast spar jackstay.

YES. Their position is restricted to the luff as defined in the ERS.

Interpretation decided by a Sub-Committee:

Robert Grubiša,	Technical Committee Chairman of the ISAF-RSD
Rick Martin,	Technical Committee Vice-Chairman of the ISAF-RSD
Charles Detriche,	Vice-chairman (Technical) of the IOM ICA.