



Request for Interpretation No. 79

of

AC Class Rule Version 1.8: November 18th 2016

Rule References:

- 6.18 **Hulls** and/or **cross structure** components shall be rigidly attached to each other. No part of the **cross structure** shall be laminated or bonded to the **hulls**. Small amounts of sealant may be used in **hull/cross structure** joints solely for waterproofing, provided this adds less than 1% to the strength of the joint.
- 7.2 The **hulls** outer surfaces shall be built from a **Measurement Committee** approved mold referenced in Rule 6.2 except for **hull** surface that is:
- (c) an area on the upper surface of the **hull** no larger than required, for permitted **rudder** and **daggerboard** movements and systems;
- 7.6 No part of a **hull** shall be adjusted or trimmed except for a flexible surface on the upper part of a **hull** that connects to:
- (a) the **daggerboard** case, permitting movement of the **daggerboard**; and
 - (b) the **rudder** stock, permitting movement of the **rudder**.
- These flexible surfaces shall be no larger than necessary to permit this movement, and need not comply with the limits on materials in Rules 18 and 19.
- 8.9 No part of **cross structure**, including fairings or other surfaces and excluding fittings and deck hardware, shall move (translate or rotate about any axis) or be adjusted relative to any other part of the **cross structure**, except for normal deflections caused by sailing loads.
-

OED Definition

Flexible: Capable of bending easily without breaking.

Background:

We wish to seek clarity on the legality of the arrangements we propose for the flexible surface permitted by Rule 7.6(a)

The upper part of the **hull** in the area of the **daggerboard** penetration does not have to comply with the **IGES** File as specifically permitted by Rule 7.2 provided that the modified area is no larger than required.

A flexible surface on the upper part of a **hull** is specifically permitted by Rule 7.6(a). The flexible surface is a permitted system.

The rules specifically prohibit any part of the **cross structure** from moving.

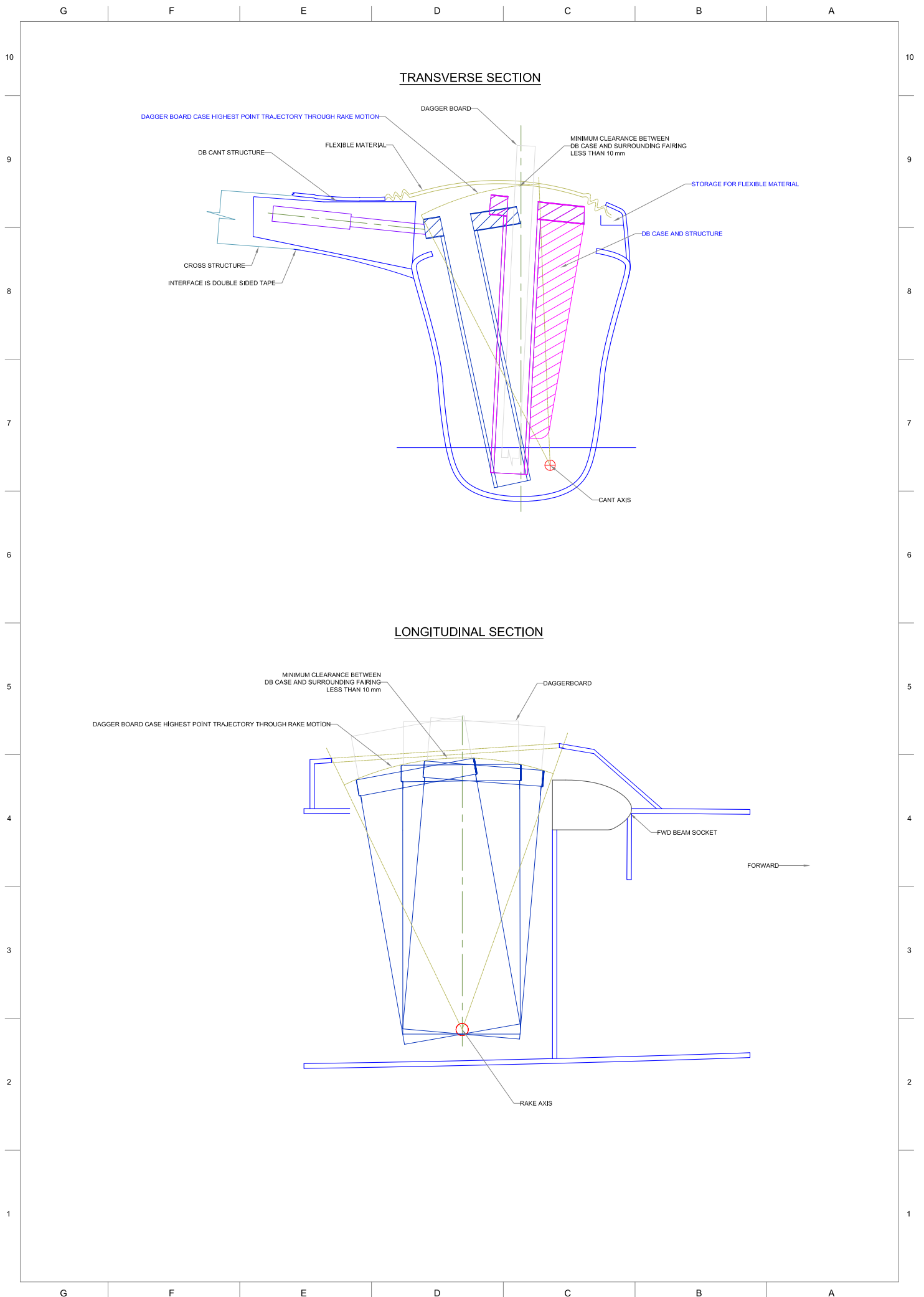
We intend to modify the upper part of the **hull** in the area of the **daggerboard** as permitted by Rule 7.2(c) in such a way that it supports the flexible surface as permitted by Rule 7.6(a).

The size of the modification is such that there is a maximum of 10mm clearance between the top of the **daggerboard** case and the underside of the flexible surface. The fixed part of the structure attached to the deck has minimal lateral and longitudinal clearance relative to the upper part of the **daggerboard** case (approximately 10mm depending on the exact set up of rake and cant extents).

The structure supporting the flexible surface is part of the **hull** and is not bonded or laminated to the **cross structure**. Any connection between the cross structure, associated fairings and **hull** components uses only mastic, double-sided foam tape and flexible adhesive tape.

The motion of the flexible surface is controlled entirely by the motion of the **daggerboard**. With the exception of small deflections occurring as the result of sailing loads, the flexible surface cannot move independently of the **daggerboard**.

More detail is shown in the sections below. All items shown in blue are part of the **hull** and are not bonded or laminated to the **cross structure**.



Questions:

1. Is the arrangement described above and shown in the diagram rule compliant?

If the answer to question 1 is no:

2. Is the Measurement Committee able to provide guidance as to what arrangements would be rule compliant?

In answering these questions it should be assumed that Rule 8.12 is complied with.

Interpretation:

1. No. The flexible surface is not connected to the **daggerboard** case as required by **AC Class Rule 7.6 a)**.
2. The described flexible surface must connect to the **daggerboard** case as required by **AC Class Rule 7.6 a)**.

END

Issued by the America's Cup Measurement Committee on March 9, 2017