

CHALLENGER OF RECORD & DEFENDER

AMERICA'S CUP 36

Interpretation 071

of

AC75 Class Rule Version 1.23 issued 29th December 2020

Rule References:

- 1.3 An **AC75 Class Yacht** shall comply with the **AC75 Class Rule** when racing, and at other times as required by the **AC75 Class Rule** and the **Protocol**.
- 13.1 Each **foil** must comprise:
- (a) a **foil arm** and a **foil wing**, which must form a single **linear component**;
 - (b) two **foil flaps**, each of which must be a **linear component**; and
 - (c) one or more **foil** systems.
- 13.2 For the purposes of Rules 5 and 10:
- (b) except for parts of **foil** systems, any material that does not move relative to a **foil flap** must be part of that **foil flap**; and
- 15.8 A **foil flap** may contact a **foil wing**, and in the absence of **external forces**, and at any cross-section and rotation angle, either may cause deformation in the other in a single zone covering not more than 20% of the local chord length. Outside this zone, neither shall cause deformation in the other.
- 15.9 Connections between sections of a **foil flap** are exempt from Rules 13.9, 15.4 and 15.5, providing such connections span a combined total of no more than 10% of the span of a **foil wing**, where the span is measured along the **rondure**.
- 35.1 **AC75 Class Rule**
The rule governing the yachts to be used in the America's Cup World Series, the Christmas Cup, the America's Cup Challenger Selection Series and the Match and/or in any other regattas sailed in AC75 Yachts (if any), including all amendments to, interpretations of and rulings regarding such class rule.

Interpretation 024:

Question 1:

Is it compliant with rule 15.2 to connect the two **foil flaps** (inboard and outboard) such that they form together a **linear component**? We assume that the single **linear component** counts as two **foil flaps** for the purpose of rule 5. We assume furthermore that the lateral movement of the **foil flaps** is within the typical range of play in the hinges (of the order of one millimetre).

Answer 1:

Yes, provided that the two **foil flaps** function together as a **linear component** solely as the result of being connected by a **foil** system.

By rule 15.2, neither **foil flap** shall ever touch or cross the **foil wing** symmetry plane, while respecting rule 3.11 (b). The hinge play allowed for in rule 15.4 does not provide an exception to this.

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Context:

The two **foil flaps** of a **foil** are connected by a piece of unspecified material to each other (see sketch below). In the following we refer to this piece as “connector”. The **foil flaps** can rotate as authorised in rules 13.9 and 15.4.

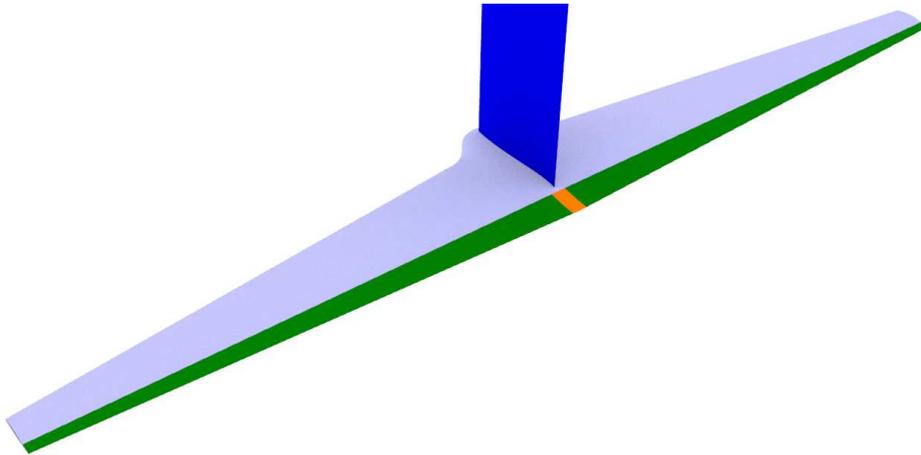


Figure 1: OD foil arm (dark blue), foil wing (light blue), foil flaps (green), and connector (orange)

Questions:

1. A component consists of two or more sub-components that do not touch each other and may rotate or move relative to each other.
Is it rule compliant to declare such an ensemble of sub-components as a single **linear component**? Can the **RC** advise and cite the relevant rules.
2. The connector described above is connected to the **foil wing** and to both **foil flaps**. It is declared to be part of the **foil wing**. The chord-wise length of the connector is less than 20% of the local chord length of the **foil wing**. If we assume the declared **foil wing** satisfies all conditions for a **linear component** is it rule compliant to declare the connector as part of the **foil wing**? Can the **RC** advise and cite the relevant rules.
3. If the answer to Q2 is yes, how can this answer be reconciled with answer 1 of Interpretation 024?

Answers:

1. For answering this question, not enough information is available.
2. Yes. See Rule 15.8.
3. Interpretation 24 describes a different system: one in which the part connecting the two **foil flaps** is not described as being attached to the **foil wing**. In the case of Interpretation 24, since the connecting part is not attached to the **foil wing**, it cannot be **foil wing**, so it can only be system. In the case of the present interpretation, the connecting part is connected to the **foil wing**, so can be **foil wing**.

END