

CHALLENGER OF RECORD & DEFENDER AMERICA'S CUP 36

Interpretation 086 of AC75 Class Rule Version 1.27 issued 15th January 2021

Rule References:

19.10 No **control system** shall be attached to, or bear upon a **headsail** except:

- (a) sheets attached to a single piece of **sail hardware** within 400 mm of the **clew point**;
- (b) a halyard attached near the **head point**;
- (c) a cunningham system or tackline near the **tack point**;
- (d) the forestay;
- (e) **luff, leech, head** and **foot** lines no greater than 8 mm in diameter and their associated purchase systems; and
- (f) a furling system for the **code zero** only.

22.7 A **hydraulic actuator** within an **HCC** may only be **mechanically** connected to one **control surface**.

35.16 **Control surface**

One of the following:

- (a) The combination of a **mast** and a **mainsail** acting together;
- (b) A **foil flap**;
- (c) A **rudder**; or
- (d) A **headsail**.

Where position, orientation or movement of a **control surface** is mentioned herein, that position, orientation or movement is implied to be relative to the **yacht**, or in the case of a **foil flap**, relative to the **foil wing** to which it is attached.

35.55 **Hydraulic actuator**

A hydraulic ram, hydraulic motor or functionally equivalent device that converts hydraulic pressure and flow into force and translation, and/or torque and rotation.

35.82 **Mechanically**

Only through contact of components, without the use of hydraulic, pneumatic, magnetic or electrical components.

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Context:

The luff of a **headsail** is attached to the forestay of an AC75. The **headsail** is hoisted on a halyard attached near the head point that is locked in the one design fitting on the **mast** and **mainsail** acting together. A **headsail** cunningham system bears upon the **headsail**. The cunningham systems comprises of a strop attached near the tack of the **headsail** connected to a **hydraulic actuator** attached to the yacht.

Questions:

1. In the system described, is the **hydraulic actuator** in the cunningham system **mechanically** connected to the **headsail**?
2. In the system described, is the **headsail** **mechanically** connected to the **mast** and **mainsail** acting together?
3. In the system described, is the **hydraulic actuator** in the cunningham system **mechanically** connected to more than one **control surface**?

Interpretation:

With respect to Rule 22.7 a connection, made **mechanically**, starts at the **hydraulic actuator** and terminates at the **control surface**. Any connections, made **mechanically**, to other parts of the **yacht** beyond that chain are not counted under Rule 22.7.

Answers:

1. Yes. The **hydraulic actuator** in the cunningham system is directly connected to the **headsail**.
2. Yes. The **headsail** is **mechanically** connected to the **mast** through the jib halyard lock mechanism and through the forestay. This mechanical connection between these **control surfaces** is required by the Rig and Sailplan.
3. Yes. However, with respect to Rule 22.7, no.

END