CHALLENGER OF RECORD & DEFENDER

AMERICA'S CUP 36

Interpretation 079

of

AC75 Class Rule Version 1.27 issued 15th January 2021

Rule References:

20.26 With the exception of **leech** lines of the **mainsail**, **control systems** of the **mainsail** shall only be attached to or bear upon **sail skins** of the **mainsail** in the **mast upper zone** or **mast lower zone**. For the purpose of this rule the **mast upper zone** and **mast lower zone** regions on the **sail skins** of the **mainsail** shall be identified in **Mast/mainsail** measurement condition and incidental movements of these regions outside of the **mast upper zone** and **mast lower zone** are permitted whilst sailing. **Control systems** may include structures and mechanisms that are hoisted with the **mainsail** and such **control systems** are not limited by Rule 20.16. This Rule does not prevent adjustment of the **mast tube** through means permitted in Rule 20.6 and the effect the **mast tube** has on **mainsail** shape.

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.

35.17 Control system

A system used for the adjustment of **control surfaces**, including all mechanical, hydraulic and electrical components involved in supplying or transmitting power or information used for such adjustment.

- 20.6 The **mast** shall not be adjusted with respect to Rule 20.5 except for:
 - (a) control of the forestay, which may be disconnected when the **code zero** is hoisted;
 - (b) control of the running backstay;
 - (c) adjustment of the lower shroud turnbuckle as specified in the supplied rigging drawings;
 - (d) control of mast rotation about MRP by action of a device attached to the mast within the mast lower zone; and
 - (e) movement of **control systems** within the **mast upper zone** and **mast lower zone** for the purpose of controlling the **mainsail**.
 - (f) incidental movement of fairings or mast components in the **mast lower zone** due to contact with the crew, **hull**, deck gear, rigging or other items attached to the **hull**.
- 20.11 The components that may make up a **mainsail** are limited to:

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- (a) a maximum of two sail skins;
- (b) battens as described in Rule 20.22 and their associated connections as described in Rule 20.23;
- (c) sail hardware;
- (d) a single **leech**, **head** and **foot** line per **sail skin** no greater than 8 mm in diameter;
- (e) **luff** attachment devices such as bolt ropes;
- (f) **control systems** and structures as permitted in Rule 20.26;
- (g) fairings as permitted in Rule 20.21;
- (h) components of an ILS and a CIS;
- (i) woollies;
- (j) buoyancy systems mandated by Rule 20.24; and
- (k) up to two safety handles as authorized in Rule 20.10 (e).

35.73 **Mast**

All components of the rig that are not hoisted with the **mainsail** or **headsails**. This includes **mainsail** support structures and **control systems** such as booms that are not part of the **mainsail** as well as halyards, rigging, spreaders, fittings, fairings, instrument displays, instrument sensors, cameras, cables, flotation systems and hydraulic rams that remain as part of the rig whilst sailing. Sheets shall be considered as part of the **mast** if they cannot be easily disconnected from **mast** structures and **control systems**.

Question:

1. Noting that Rule 35.17 defines **control systems** as systems used for the adjustment of **control surfaces**; and that Rule 35.16 does not include the **mainsail** (on its own) within the defined categories of **control surfaces**: what is the meaning of the phrase "**control systems** of the **mainsail**" as used in Rule 20.26?

Specifically, are running backstays within the categories of "control system of the mainsail" subject to the constraints set out in Rule 20.26?

Interpretation:

Running backstays are **supplied rigging** that form part of the **mast** per the definition in rule 35.73. They are not a **mainsail control system**, but per rule 20.26, this does not prevent the adjustment of the **mast tube** by the means permitted by rule 20.6, including control of the running backstays, from having an effect on **mainsail** shape.

Answer:

1. "Control systems of the **mainsail**" are interpreted to mean the subset of those above systems that act directly on the **mainsail**, rather than on the **mast**.

No, running backstays are not within the category of "control systems of the mainsail". As permitted by the last sentence in rule 20.26 (referring to rule 20.6), running backstays are considered control systems of the mast tube.

END