

# CHALLENGER OF RECORD & DEFENDER

## AMERICA'S CUP 36

### Interpretation 072

of

### AC75 Class Rule Version 1.23 issued 29<sup>th</sup> December 2020

#### Rule References:

- 4.1 The **AC75 Class Yacht** shall have:  
...  
(f) one set of **supplied rigging**;  
...  
(j) other systems, hardware, fittings and rigging except where prohibited herein.
- 12.2 V1 cap shroud, D1 lower shroud and running backstay chainplates shall be positioned as shown in the rig plan (see Rule 20.1 (e)) and shall not be adjusted.
- 20.1 A drawing package for the **mast** will be issued according to Rule 34. This **mast** drawing package will include:  
(a) the **mast surface**;  
(b) the minimum required **mast tube** laminate and construction details;  
(c) details of the **supplied rigging**;  
(d) details of **mast** fittings and spreaders, some of which may be specified as supplied components which must be sourced from a nominated supplier; and  
(e) the rig plan, including required chainplate positions on the **hull**.
- 20.5 When stepped, the **mast** shall be positioned and tensioned on the **hull** as specified in the rig plan described in Rule 20.1 (e).
- 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**.
- 20.9 The **supplied rigging** shall not be modified other than the addition of fairings and vibration mitigation devices permitted in Rule 20.8. Shock cords or ropes may be attached to **supplied rigging** to manage slack and prevent sails being fouled.
- 20.19 After sailing, with the **mast** still stepped in the **yacht**, the **mainsail** shall be lowered completely below the top of the **mast lower zone** without assistance from anyone who is completely above that zone. This does not prevent crew going aloft to resolve occasional issues.
- 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. [...]

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### 35.99 Supplied rigging

The supplied forestay, V1 cap shrouds, D1 lower shrouds, and running backstays.

Drawing 031 750 101\_Rig and Sailplan: 10-08-18

\* The **supplied rigging** shall be connected to the one design mast fittings with continuous strops in basket configuration. No additional mechanisms, hardware or fairings are permitted except as allowed in rule 20.8. A fairing is allowed at the connection of the forestay and lower strop to allow sail hanks to pass over the jaw fitting.

### Questions:

1.
  - a. Does the process of lowering the mainsail described in Rule 20.19 have to be carried out with the mast still stepped in the yacht?
  - b. If the answer to 1a is "Yes", do the conditions in 20.5, of the mast being positioned and tensioned on the hull as specified in the rig plan, apply when lowering the mainsail?
  - c. Can Rule 20.19 be satisfied by first sending someone aloft and lowering the mainsail sufficiently to provide access to the running backstay fitting inside the **mast tube**, changing the running backstay configuration, and re-hoisting the mainsail, in order that later on, the mainsail can be lowered without assistance from crew above the **mast lower zone**?
2. Does the permission in 20.6 (b) that allows the **mast** to be adjusted with "control of the running backstay" extend to allowing the running backstay to be lowered, removed from the outside of the mast, re-threaded up inside the **mast tube** and connected to the other side of the one design **mast** fittings, with the running backstay located inside the **mast tube**?
3. Does 20.6 allow adjustment of fittings to which the running backstays connect to, such as:
  - a) altering, moving or changing strops;
  - b) moving a dog bone
  - c) changing how a strop loops around a dog bone
  - d) unscrewing the backstay ferule cap
  - e) adjusting a one-design fitting
4. If the answers to 2 and 3 are "Yes", is it permitted in general to 'stow' supplied rigging elements inside the mast, and replace them alternative non-supplied rigging?

### Answers:

1.
  - a. Yes.
  - b. Yes, as the mast is on the step during that process. However, the mast may be adjusted as permitted in 20.6.
  - c. No. Rule 20.19 mandates that after sailing "the **mainsail** shall be lowered completely below the top of the **mast lower zone** without assistance from anyone who is completely above that zone". Any actions by a person aloft that is required to lower the main is considered assistance.
2. No. Rule 20.6 makes clear how the **mast** can be adjusted relative to the position and configuration required by rule 20.5 (and hence the rig plan). This permission to control the running backstays does not

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conflict with requirement to comply with the layout mandated in the rig plan, so any control of the running backstays therefore is required to be consistent with this layout, as well as the configuration.

3.
  - a. Yes.
  - b. No. The backstay dogbone is part of a one-design **mast** fitting and Rule 20.7 requires such fittings to be build and installed according to the supplied **mast** drawings. The relevant drawings are 031 750 550\_Backstay Tang Assy, Drawing 1 of 5 and 3 of 5. The installation of the Backstay Dogbone (part number 422 750 552B) must be as per the drawings. Incidental movements of the Backstay Dogbone during sailing are permitted as long as the Backstay Dogbone is installed as per the drawings.
  - c. No. The strop must be connected to the **mast** one design fitting as mandated in the 031 750 101\_Rig and Sailplan notes.
  - d. No. The backstay ferule cap is part of a one-design **mast** fitting and Rule 20.7 requires such fittings to be build and installed according to the supplied **mast** drawings. The relevant drawings are 031 750 550\_Backstay Tang Assy, Drawing 1 of 5 and 5 of 5. The installation of the Backstay Ferule Cap (part number 422 750 554A) must be as per the drawings.
  - e. No. The running backstay fitting may not be adjusted.
4. No. Refer to answer 2.

END