CHALLENGER OF RECORD & DEFENDER

AMERICA'S CUP 36

Interpretation 074
of
AC75 Class Rule Version 1.23 issued 29th December 2020

Rule References:

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**.

11.20   When the forestay is loaded to 10,000 kg by tensioning either the port or starboard running backstay, neither the **deck** at **TRP** nor the **rudder** yaw axis shall rotate by more than 2.5° relative to a station on the **deck** 12 m forward of **TRP**. The procedure for measuring this will be issued according to Rule 34, but is anticipated to be as follows:
…

(e)   one running backstay is loaded until a forestay load of 10,000 kg is achieved;

17.7   The **bowsprit** shall be load tested to ensure it meets a minimum load rating. The procedure for measuring this will be issued according to Rule 34, but is anticipated to be as follows:
…

(d)   Cable(s) one of which may be the forestay, and/or strop(s) shall be connected between the tack load point on the bowsprit and one or several of the following points:

(i)   forestay tang; or
(ii)   code zero lock; or
(iii)   jib halyard lock;

(e)   either one or both running backstays shall be tensioned until a load of 8,000 kg is achieved in the strop connecting the **bowsprit** to the cable(s) and/or strops in (d).

Questions:

1. While racing, must an **AC75 Class Yacht** comply with Rule 20.5?

2. While racing, must an **AC75 Class Yacht** comply with Rule 20.6?

3. While racing, must an **AC75 Class Yacht** be in a condition to comply with the load tests of Rule 11.20 (e) which requires to load one running backstay until a forestay load of 10,000 kg is achieved?

4. While racing, must an **AC75 Class Yacht** be in a condition to comply with the load tests of Rule 17.7 (e) which requires to load one or both running backstays until a load of 8,000 kg is achieved in the strop connecting the **bowsprit** to the cable(s) and/or strops in Rule 17.7 (d)?

Interpretation:

A. Rule 17.7 describes an "at dock" test to assure the structural strength of the bowsprit. This test is not required to be carried out during racing; it describes a pre-test to make sure that the **bowsprit** meets the strength criteria as outlined. This required and proven strength of the **bowsprit** must apply when racing and may not be altered after the test. Any load application (by the rig) on the hull during racing may be different from the test load.

B. Rule 11.20 describes a limit to the structural response to a specified applied load (the torsional stiffness criteria is proven with a pre-test as described). The given <u>criteria</u> (the **Rules Committee** interprets this as "the condition" as per question 3.) must also be met when racing; i.e. <u>when</u> the forestay is loaded to 10,000 kg, the hull shall not rotate more than 2.5°, but it is not required to have the forestay be loaded to 10,000 kg when racing.

Answers:

1. Yes. Rule 20.1 makes the mast drawing package part of the **Class Rule**. Rule 20.5, referencing to Rule 20.1, introduces the condition, under which Rule 20.1 applies, i.e. the condition "*when stepped*". The **Rules Committee** concludes that the term "*when*" in "*when stepped*" does not describe the instant in time of the stepping, but instead is a conditional meaning to be understood as "whenever".

2. Yes.
3. The question is answered in Interpretation B.
4. The question is answered in Interpretation A

END