

# CHALLENGER OF RECORD & DEFENDER

## AMERICA'S CUP 36

### Interpretation 065

of

### AC75 Class Rule Version 1.16 issued 30<sup>th</sup> September 2020

#### Rule References:

- 11.16 The enclosed volume of the **hull surface**, including the volumes required by Rule 11.8 must be watertight except for penetrations:
- (b) inside regions defined by cylinders of length 1.600 m and diameter 1.250 m centred on each **foil cant reference point** and whose axes are aligned with the **foil cant** axes, in order to permit **foil cant**, providing that the volumes inside the **hull surface** exposed by these penetrations shall:
    - (i) be entirely above **MWP**;
    - (ii) be entirely within the cylinder described;
    - (iii) be separated from the remainder of the enclosed volume by a watertight boundary which need not satisfy Rule 11.19;
    - (iv) have a total combined volume of no more than 450 litres; and
    - (v) be self draining, and have drain area of at least  $0.100 \text{ m}^2$  per  $1.000 \text{ m}^3$  of floodable volume;
- 11.14 Water shall not be retained anywhere in the **yacht**. Any deck recess, cockpit, or other surface that could retain water must be self-draining with the following criteria:
- (a) **Competitors** must provide calculations to the **Measurement Committee** demonstrating that any water temporarily retained, at any water level, will drain at least 90% of its volume within 30 seconds.
  - (b) For any distinct retained water volume, the drainage requirement of Rule 11.14 (a) will be deemed to be met if at any water level, for every  $1.000 \text{ m}^3$  of retained volume, an area open to drainage and free from obstructions of at least  $0.050 \text{ m}^2$  is present below that water level.
  - (c) In these calculations, water volumes resulting from a sheet of water of more than 100 mm depth being uniformly deposited over the entire **yacht** need not be considered.
  - (d) These drainage requirements must be satisfied for the case when **MWP** is horizontal, and for a range of orientations bounded by:
    - (i) a rotation of the **yacht** by up to  $\pm 10^\circ$  about a **longitudinal** axis; followed by
    - (ii) a rotation of the **yacht** by up to  $\pm 2^\circ$  about a (rotated) **transverse** axis.
  - (e) These requirements shall be satisfied accounting for the presence of any fairing flaps permitted by Rule 11.17.
  - (f) The **Measurement Committee** may specify an alternative calculation method or drainage requirement if they believe that the above criteria are insufficient to ensure that water is not retained.
- 11.8 The **hull surface** shall enclose a volume of at least  $70 \text{ m}^3$ , which must include:
- (a) an enclosed watertight volume of at least  $40 \text{ m}^3$ , situated entirely forward of plane that is 9.500 m forward of **TRP**, which may be subdivided; and
  - (b) a watertight bulkhead situated between 17.000 m and 19.000 m forward of **TRP**.

# CHALLENGER OF RECORD & DEFENDER

## AMERICA'S CUP 36

### Questions:

With regard to the drainage of the **foil** cant wet-box volumes as allowed by 11.16(b).

1. Does rule 11.14 apply to this volume?
2. Is there any rule requirement regarding positioning of the drainage area stipulated in 11.16(b)(v)?

With regard to the watertight interior volumes (subdivided as per rule 11.8) of the **hull surface**.

3. Is there any requirement to have bilge pumps in any or all of these volumes?

### Answers:

1. Yes. Only the first sentence of 11.14 applies. The remaining clauses do not apply, since the foil cant wet-box volumes are not deemed to be a deck recess, cockpit or other surface.
2. The drain area must be in a position such that it acts as a drain area in the range of normal sailing conditions when racing, when the entire wet-box is above the water.
3. No. It is not required to have bilge pumps in watertight volumes. There shall be no water in these volumes.

END