



AMERICA'S CUP

REGATTA DIRECTOR NOTICE #53

Issued 12 July 2016

Re: AC Class Rule update regarding safety equipment

Attached is a draft amendment to the AC Class Rule that the Measurement Committee and I intend to sign this Friday.

The changes to the AC Class Rule cover the following:

1. Wing floatation system

Teams are required to install a flotation system in the top of the wing that will be primarily made up of EPS foam added to the top of the wing.

The Measurement Committee has suggested that a declaration could confirm compliance but as always, the Measurement Committee may require further checks and/or calculations to confirm the volumes and center of gravity.

2. Changes to sailing weight

Recent design and implementation developments require the sailing weight, wing measurement condition weight and associated centers of gravity to be updated in order to incorporate:

- Variation in ACC rule accumulator.
- Variation in media weight.
- ACEA mandated wing branding.

The original Rule Accumulator estimate was $7.2\text{kg} \times 3 = 21.6\text{kg}$. The New Accumulators are 10kg heavier, therefore the sailing weight will be increased by 10kg with no change to the CG range.

The preliminary estimate of the Media equipment for the match is 132 kg located 6.65m from the stern plane, therefore the sailing weight will be increased by 12kg with no change to the CG range.

The addition of ACEA branding to the Wing (flag and LV insignia) was originally considered, therefore the wing measurement condition weight remains as original.

The safety equipment preliminary estimate was 7 kg at 4.80m from the stern plane. New analysis after RDN #42 publication suggests and estimate of 17 kg at

3.13m from the stern plane, therefore the sailing weight will be increased by 10kg with no change to the CG range.

In summary, the ACEA equipment now includes:

HULLS AND CROSS STRUCTURE

- 132 kg of Media @ 6.650m forward of the stern plane.
- 17 kg of RDN #42 safety @ 3.550m forward of the stern plane.

WING

- 12 kg of media @ 17.700m above Wing Rotation Point.
- 6 kg of floatation device @ 20.500m above Wing Rotation Point.

3. Publishing the list of required safety equipment

Appendix G is to be amended to include a list of equipment that is required to be carried onboard. This is separate to any safety equipment that is carried by each crew member.

The final item of mandated safety equipment is an amount of up to 10kg that will cover safety equipment that a team may wish to carry that can be removed from the yacht when in measurement condition and is able to be identified by the measurement committee as safety equipment.

If any Competitor has any comments on this draft, please send the comments to both Ken McAlpine and me by Thursday, 14 July 2016.

Iain Murray
Regatta Director

AMENDMENT 05
OF THE AMERICA'S CUP CLASS RULE
FOR THE 35TH AMERICA'S CUP

In accordance with AC Class Rule 4.1(a) the following amendment to the AC Class Rule V1.4 is made:

AGREED AMENDMENTS as follows

1 AC Class Rule 6.11

Existing Language

“The **Sailing Weight** shall be between 2300 kg and 2400 kg. The **Sailing Weight** includes 127 kg of **ACEA** equipment in the **measurement weight** and 18 kg of **ACEA** equipment in the **wing measurement condition** weight.”

Amended Language

“The **Sailing Weight** shall be between 2332 kg and 2432 kg. The **Sailing Weight** includes 149 kg of **ACEA** equipment in the **measurement weight** and 18 kg of **ACEA** equipment in the **wing measurement condition** weight.”

2 AC Class Rule 12.16

Existing Language

“The **wing** shall be fitted with a **wing** flotation system that will be specified by the **Measurement Committee** in consultation with the **Regatta Director** and **Competitors**.”

Amended Language

“Teams are required to install a flotation system in the top of the **wing** that provides 415 kg of buoyancy when fully immersed and centered 20.500 m above the **wing rotation point**. A minimum of 300 kg of buoyancy shall be provided by solid EPS (expanded polystyrene) foam with an approximate density of 12 kg/m³. The remainder of the buoyancy may be provided by an air bag inside the **Wing spar**. The installed flotation system weight shall be a minimum weight of 6.0 kg centered a minimum of 20.500 m above the **wing rotation point**.”

3 AC Class Rule 27.1

Existing Language

“The **AC Class Yacht** shall be brought to **measurement condition** to determine the **measurement weight** and center of gravity as referenced in Rules 6.11 and 6.13. The **measurement condition** includes everything aboard the **AC Class Yacht** during a race, in its racing position, or equivalent **longitudinal** position, and with the yacht level to the satisfaction of the **measurer**, except the following:

- (a) the **wing** as it was weighed in **wing measurement condition**;
- (b) crew;
- (c) crew clothing and equipment carried on the person while racing;
- (d) the **jib** (including **jib** bags, **luff** cables and hanks); and
- (e) food and drinks.”

Amended Language

“The **AC Class Yacht** shall be brought to **measurement condition** to determine the **measurement weight** and center of gravity as referenced in Rules 6.11 and 6.13. The **measurement condition** includes everything aboard the **AC Class Yacht** during a race, in its racing position, or equivalent **longitudinal** position, and with the yacht level to the satisfaction of the **measurer**, except the following:

- (a) the wing as it was weighed in wing measurement condition;
- (b) crew;
- (c) crew clothing and equipment carried on the person while racing;
- (d) the **jib** (including **jib** bags, **luff** cables and hanks);
- (e) food and drinks; and
- (f) “other safety equipment” as detailed in Rule Appendix G1(g)”

4 **AC Class Rule 27.3**

Existing Language

“The **wing** in **wing measurement condition** shall:

- (a) be capable of being weighed by horizontal suspension from two points, however the **measurer** may use alternative weighing arrangements if he believes they will yield more accurate results;
- (b) be oriented in **wing measurement position**;
- (c) include all equipment attached to or mounted on the **wing** and in its normal racing position; and
- (d) have all **rigging** in place and pulled down tight along the **wing**.”

Amended Language

“The **wing** in **wing measurement condition** shall:

- (a) be capable of being weighed by horizontal suspension from two points, however the **measurer** may use alternative weighing arrangements if he believes they will yield more accurate results;
- (b) be oriented in **wing measurement position**;
- (c) include all equipment attached to or mounted on the **wing** and in its normal racing position except for “other safety equipment” as detailed in Rule Appendix G1(g); and
- (d) have all **rigging** in place and pulled down tight along the **wing**.”

5 **AC Class Rule Appendix G1**

Existing Language

“A list of required safety equipment will be developed by the **Regatta Director** and **Measurement Committee** in consultation with **Competitors**, and the **AC Class Rule** will be amended as allowed by Rule 4 to include this safety equipment. The **Measurement Committee** may adjust the sailing weight as permitted by Rule 4(a).”

Amended Language

“Below is a list of required safety equipment that has been developed by the **Regatta Director** and **Measurement Committee** in consultation with **Competitors**. The **AC Class Rule** may be amended as allowed by Rule 4 to include any changes to this safety equipment. The **Measurement Committee** may also adjust the sailing weight as permitted by Rule 4(a).

- (a) A grab handle shall be fixed around the lower part of the wing to facilitate safe movement of crew around the front of the spar. The handle shall:
 - (i) be constructed of rigid or soft material
 - (ii) be a minimum of 12mm in diameter
 - (iii) be capable of taking a load of 300Kg applied in any direction at any point along its length

- (iv) extend from aft of the D-spar web on the port side, around the front of the spar to a point aft of the D-spar web on the starboard side
- (v) be no less than 150mm above the bottom of the spar at any point.
- (vi) be capable of passing a 0.069 m sphere (tennis ball) between the handle and the spar at any point forward of the D-spar web;
- (b) Handholds, restraints and tethers that the Competitor determines are needed;
- (c) Righting lines attached to the point(s) that are used to right the yacht and the righting lines accessible with the platform capsized at any orientation;
- (d) A knife securely mounted near each intersection of the forward and aft crossbeams with the hulls, in positions that are accessible with the yacht upright or inverted;
- (e) Four spare personal air supplies (two per side) of at least 80 liters each securely mounted in locations which would be accessible when the yacht is capsized;
- (f) The compartment aft of the cockpit shall contain buoyancy components of not less than 250 liters. This may be made of 8 x 43 liter partially inflated buoyancy bags (Optimist flotation bags) or other alternative arrangements as may be approved by the Measurement Committee. The buoyancy arrangements shall not weight less than 8 kg. and
- (g) other safety equipment carried at a Competitor's discretion that shall not exceed 10kg."

Dated on July 15, 2016

AGREED AND ACCEPTED:

MEASUREMENT COMMITTEE

Ken McAlpine, Chief Measurer

REGATTA DIRECTOR

Iain Murray