



*World leader in rating technology*

Minutes of the **Measurement Committee** meeting held on November 6th, 2017 in Puerto Vallarta

Present:

Nicola Sironi (Chief Measurer), ITA  
Per Boeymo NOR  
Nathan Titcomb USA

Zoran Grubisa CRO  
Joakim Majander FIN

Observers:

Ab Pasman NED  
Mikael Quist DEN  
Thomas Nilsson NOR  
Agnes Lill EST  
Edoardo Recchi ITA  
Jason Smithwick GBR  
Dobbs Davis USA  
Eva Holmsten SWE

Ecky Von der Mosel GER  
Lance Burger RSA  
Peter Tjalma NED  
Alessandro Nazareth ITA  
Luc Gélusseau FRA  
Fabrizio Pirina ITA  
Jim Capron USA  
Hans Drakemberg SWE

## **1. 2017 Season report on ORC Championships**

The World Championship was held in Trieste, and a Technical Committee of 11 measurers was present, and was busy performing pre-race checks and post race measurements for the first-placed boats, made possible due to the calm weather.

A similar program was followed at the Europeans in Gdansk, and the operations were more difficult due to persistent rain.

Both Technical Committees were chaired by Zoran Grubisa, and the web-based systems introduced last year were successfully used for reservations of measurement check slots, and to complete sail inventories.

In the post-race checks performed on several leaders none were found outside the tolerance, but 3 at the Worlds and one at the Europeans had their certificates recalculated and found to be in the 0.1-0.25% tolerance range.

## **2. HULL MEASUREMENT: 3D SCAN VS MANUAL TS**

The use of 3d scanners has expanded, with improvements in tools to improve the quality of OFF files extracted from clouds, and the ORC Staff is developing methods to simplify the process so that the requirement of having clouds processed by the ORC remains.

The use of the Total Station remains unchanged, and a boat has been measured in Poland using the Leica 3d Disto equipment.

## **3. BOOM INCLINING NEW SOFTWARE**

Joakim Majander has produced new software for his JM inclinometer dedicated for the boom inclining, which is very useful to avoid errors and misinterpretations. It was agreed to make it available from a dedicated section of the ORC website.

#### **4. SAIL STAMPS/INVENTORIES**

The Committee supports the idea of joining the World Sailing IHC system, with the perspective of setting up a database system and make easier to check sail inventories.

#### **5. SUBMISSIONS**

##### **GER 1 Hull measurement costs**

The Submission was noted and discussed. The best recommendation is to try to persuade the builders to have the boat measured, instead of charging an individual owner of a cost whose benefits will go to other owners.

##### **GER 4 Freeboard measurement on wide boats**

The proposed solution is to establish on new wide boats the freeboard points in the centreline, so avoiding any rolling effect, as it is done on an increasing number of new boats.

##### **NED 3 Validity of flotation measurement**

The Submission is not supported. In recent Championship no boat had a flotation date of more than 5 years.

##### **RUS 1 Station spacing**

The Committee supports the Submission, see also ITC Minutes.

##### **RUS 2 Symmetry of appendages**

The Submission is not supported, see also ITC Minutes.

##### **RUS 3 Top points**

The Submission has no measurement implication, see ITC Minutes.

##### **SUI 1 Determination of weight of sportboats**

The weighing of boats is already included in the Sportboat Rule. It is however a double check, because the weight only is not sufficient to determine the correct trim, therefore length etc.

#### **6. OUTBOARD ENGINE STOWAGE**

The Committee discussed this item at length, concluding that the outboard engine can be stowed while racing, properly secured, on the cabin floor, even in the absence of a dedicated compartment. Its weight and position are to be recorded in the Measurement Inventory, but cannot be placed forward of the mast.

#### **7. TRIM CHANGE CHECKS**

The Committee recommends the implementation of a comparison between boats using the same freeboard points in the OFF file, or of the same boat as a consequence of modifications, calculating the net difference of weight, VCG and LCG, to validate measurements.

The meeting adjourned at 13:27.