

Introduction of a 'spreadsheet' method of rating boats to the International 'A' class

When the format of the Marblehead and 10 rater class rules was revised in 2002, there was also a modernisation of the method by which certificates could be produced. As both these classes involve calculation an EXCEL spreadsheet was introduced so that measurers, designers etc could input the relevant data on sail and rig measurements, waterline length etc on the measurement forms and the rating will be calculated automatically. Alternatively for those without a computer, the same forms could be completed and calculated manually. Once these measurement forms are completed satisfactorily and signed by the measurer and owner with their declarations, they are passed to the person responsible for issuing certificates. The certification authority checks the data, generates the certificate from the data input and validates the certificate by stamping and signing it.

In 2002 the 'A' class rule was not reviewed and so the same principles of achieving a certificate electronically were not applied. However the need to make measurers' tasks easier is much more important with this rule, in view of the greater complexity. As well as a few fixed maxima, a lot of data directly affects rating: quarter beam length, displacement, freeboard, draft etc. The RSD has now designed, developed and tested an EXCEL spreadsheet to achieve a result similar in principle to the Marblehead and 10 rater spreadsheets. A protected EXCEL file for electronic calculation and a PDF file for manual input or the 'A' class are now posted on the ISAF RSD website, www.rudiosailing.org and become effective from 5th May 2004. Certificates in EXCEL and PDF format have been sent to the Certification Authorities only.

The certificate has been updated in several ways, relating to the ERS with all defined terms in bold, the ISAF RSD logo and wording replacing IYRU MYRD, a single change of ownership box like the other classes where a new certificate is issued after every change of ownership etc. The existing Boat and Rig Measurement Forms still need to be completed manually to which the Input Data Form needs to be added for sending to the relevant Certification Authority for the issue of a certificate.

The electronic version of Input Data Form provides a very simple method for getting the rating correct. Any dimension that puts the rating above the 1000 limit is flagged up by warnings in red against that item. A specific warning is flagged up, as a check, if the measured waterline length, assumed measured between the LWL dry measurement points, does not relate exactly to the LOA minus overhang measurements. Where there is an input larger than the maximum rig heights a window appears to ensure correction. If not all the boxes are completed with the necessary data a warning is flagged up. In the case of a rig with just a mainsail, for example, instructions are given for the foretriangle data input. The Input Data Form provides all the information for the both parts of the certificate, which is similar to the existing in principle, with basic details on the first part and calculations on the second part.

The first or front page of the certificate shows the most change from the existing, apart from the obvious updates already mentioned. As well as the basic detail about owner, boat names etc there is a space for the builder's name(s) and both the first and latest fundamental measurement dates as the latter may be important in any grandfathering situations. There is also a box of useful notes for the crew/race committee and another concerning event measuring setting out dimensions sufficient to ensure compliance with the certificate. The second page, which is an integral part of the certificate is the Rating Calculation Form which sets out all the calculations.

This new RSD system will make the job of checking that a boat is in rating and producing a certificate very much easier. Thanks are due to the MYA and in particular the Poole Radio Yacht Club for their early work on this idea.

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