



Wyboston

Race Officials Conference



2013



# Equipment Rules of Sailing

Bas Edmonds





## Equipment Rules of Sailing *RYA Race Officials Conference*

Bas Edmonds – RYA Technical Manager  
Saturday 9<sup>th</sup> February



# Bas Edmonds

RYA Technical Manager

ISAF International Measurer

RS:X Chief Measurer

Extreme 40 Chief Measurer

ISAF Committee Representative

Equipment Control

Windsurfing & Kiteboarding

Aspiring National Judge





# Equipment Rules of Sailing

How,  
why,  
when

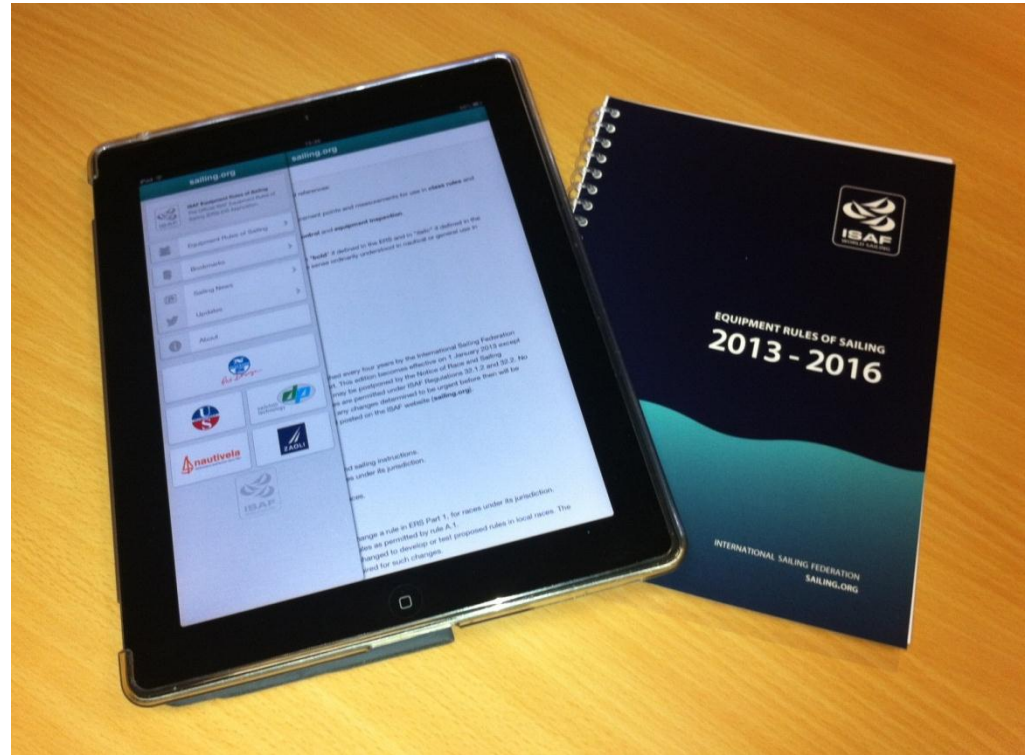
SCR and the  
ERS

Developments for  
2013 - 2016



# Equipment Rules of Sailing - ERS

How many of you have seen this book before?





## The need

- Class Rules had always had their own unique way of measuring their items of equipment.
- Metre classes who were one of the first to publish their own measurement instructions in 1908.
- Some consistency but as dinghies developed then rules became more diverse with how they dealt with measurement.
- IYRU in 1980's looked to create a standard template for all class rules
- ISAF Working Party quickly realised that to have standard rules, you needed standard measurements and definitions



# ISAF Working Party





## Sails – the consumable

- Decision made to start with sails
- Sails had the most common ground in existing measurement techniques
- 1987 – IYRU Sail Measurement Instructions were published
- Looked at
  - Who could measure sails
  - What equipment they should use
  - Definitions of parts and areas of the sail





## Development

- ISAF then went on to develop measurement definitions for other parts of the boat as well as some rules around the administration
- Work was done in unison with the Standard Class Rules (SCR) working party
- The ERS and SCR designed to work together
  - Separating parts of the boat out into single items
  - Aiding manufacturers with concise rules on their interested part of equipment
  - Standard administration rules to aid MNA's
- Sails remain the most significant part of the ERS as they are still the consumable on a boat



## ERS and the SCR

- Designed to work together
- Rig definitions in the ERS are all in Section F
- Rig rules in the SCR are all in Section F
- A spar maker only has to look at Section F

In-House Certification was an end goal of the work

Where an item of equipment interacts with another part of the boat this is reference in Section C.



# ERS and the SCR – Working together

## Section F – Rigs

*Something for the spar makers...*

MAST LENGTH

UPPER POINT HEIGHT

SPINNAKER HOIST HEIGHT

## Section C – Conditions for Racing

*Something for the sailors...*

Mast Datum Point above sheerline



## Sections of the ERS

**A and B** – Use of Equipment both during an event and whilst *Racing*

**C** – **General Definitions** dealing with overall boat definitions as well as looking at measurers and certification administration

**D** – **Hulls**

**E** – **Appendages**

**F** – **Rigs**

**G** - **Sails**



# To where we are today...





# More of a focus on the ERS

## In 3 Parts

- Part I - Use of Equipment
- Part II - Definitions
- Part III - Rules Governing Equipment Control and Inspection
- Terminology – **BOLD = Equipment Rules of Sailing (ERS) definition**  
*italic = Racing Rules of Sailing (RRS) definition*

Revised every 4 years

***Sound familiar?***



## More of a focus on the ERS

Unlike RRS, the ERS needs to be invoked by class rules.

- An excerpt from the National Solo Class rules:
- “A.5.2 Except where used in headings, when a term is printed in “**bold**” the definition in the ERS applies.”
- “(a) The ERS Part I – Use of Equipment shall apply.”



## More of a focus on the ERS

IF INVOKED BY CLASS RULES OR EVENT RULES

ERS Part 1 – Use of Equipment

Sails shall be set within their limit marks

Sounds obvious but the rules need to be there before there is a requirement to do so

Also deals with other requirements for positioning of equipment such as setting of bowsprits and staysails





## Using the ERS

**C.6.1 WEIGHT** The **boat** fully rigged for sailing and in dry condition, but excluding **sails**, towing rope, **personal** and **portable equipment** shall have a minimum weight of 100 kg. A compass with associated bracket, if present, shall be included in the **boat weight**. **Corrector weights**, including any required by D.6, shall have a maximum weight of 2 kg.

**Boat weight** is measured in the following measurement condition;  
Fully rigged with all **spars, standing rigging** and **halyards**;  
Main engine installed, or outboard engine aboard in stowed position;  
Batteries and berth cushions onboard in their normal positions if carried whilst racing.  
Standard fit out if rated to class standard data.



# Using the ERS





## Using the ERS

Definitions may contain other definitions...

### BOAT WEIGHT

The weight of the **boat**

But what is the definition of a **boat**?



# Using the ERS

## Boat

The equipment used by the **crew** to take part in a race.

It includes;

**Hull(s)**, structure(s) connecting **hulls**, **hull appendage(s)**, **ballast**, **rig**, **sail(s)**, fittings, boat **corrector weights** and all other items of equipment used

But excludes

Consumables, **personal equipment** and **portable equipment**



## Using the ERS

### Hull

The shell including any transom, the deck including any superstructure, the internal structure including any cockpit, the fittings associated with these parts and any **corrector weights**.

**But where else do we see the term “boat” and “hull” used??**

**RRS – possible use of ERS definitions in the RRS?**



## **Integration of ERS and RRS??**

**RRS 50.1 – Changing Sails**

**RRS 50.2 – Spinnaker poles and whisker poles**

**RRS 50.3 – Outriggers**

**RRS 50.4 – Headsail – RYA Prescription already uses ERS definitions**

**RRS 51 - Moveable ballast**

**RRS 54 – Forestay and headsail tacks**

**RRS – possible use of ERS definitions in the RRS?**

Food for thought.....



## Changes for 2013 - 2016

New definition – Portable Equipment

Equipment permitted by **class rules** excluding:

The **boat, personal equipment** and consumables. Typical examples of portable equipment would include, mooring lines, paddles and bailers.

New definition – Trapeze

**Rigging** attached to a **mast spar** used to support a single **crew** member.

New definition – Mast Centre of Gravity Height

The distance from the **mast datum point** to centre of gravity of **mast**.



## Changes for 2013 - 2016

Additional mast types – **Mast** spar now excludes **running rigging** and non-essential fittings

*Possible effect on tip weight as it uses the definition of mast.*

Certification – may now be attached or applied

*Correcting an error*

Double Luff Sail – Correcting an issue with stays which created double luff sails inadvertently.





**RYA**

*That's all Folks!*



**That's all folks!**

So those are the changes in the book.

But what changes should the RYA work on for the 2017-2020 edition?

Definition of a layer? Definition of a fitting?  
Fixed fitting? What is a repair?

Four cornered sails?



## Process for submission in the UK

Submissions to the ERS can be made by any MNA

ERS Working Party at ISAF

ERS Working Party at RYA

Identify concerns to RYA Technical Department who will review in line with RYA ERS WP



# Questions?

[technical@rya.org.uk](mailto:technical@rya.org.uk)