

**1. PERMITTED REPLACEMENTS, ADDITIONS, ALTERATIONS & REPAIRS**

- 1.1 The following parts or equipment may be replaced providing that the replacement is of a similar type and performs the same function. The replacement parts or equipment may be obtained from any supplier: -
  - 1.1.1 Blocks
  - 1.1.2 Cam cleats
  - 1.1.3 Rudder hangings and retaining device
  - 1.1.4 Shroud adjusters
  - 1.1.5 Sail batten
  - 1.1.6 Control lines
  
- 1.2 The following parts or equipment may be replaced providing that the replacement performs a similar function. The replacement parts or equipment may be obtained from any supplier: -
  - 1.2.1 Fastenings
  - 1.2.2 Shackles, swivels and pins
  - 1.2.3 Toe straps, lashings and tensioning elastics
  - 1.2.4 Running rigging, ropes and lashings
  - 1.2.5 Main Halyard and halyard securing device, maximum velocity ratio 2:1
  - 1.2.6 Tiller extension
  - 1.2.7 Batten tensioning devices
  - 1.2.8 Bungs
  - 1.2.9 Wire rigging, kicking strap and rig tension purchases with the following restrictions on construction and sizes:-
    - 1.2.9.1 Main shrouds - stainless steel wire comprising at least 7 strands which may be rounded or preformed and not less than 3mm dia.
    - 1.2.9.2 Lower shrouds - 1 x 19 construction stainless steel wire of not less than 2.5mm dia.
    - 1.2.9.3 Forestay – stainless steel wire comprising at least 7 strands which may be rounded or preformed and not less than 3mm dia.
    - 1.2.9.4 Kicking strap purchase – flexible stainless steel wire not less than 2.5mm dia. or synthetic fibre rope not less than 2.5mm dia.
  - 1.2.10 Spinnaker ratchet blocks
  - 1.2.11 Inspection hatches.
  - 1.2.12 Trapeze handles, rings and adjuster cleats
  - 1.2.13 Spinnaker halyard pump handles

- 1.3 The following additions and alterations are permitted. Parts may be obtained from any supplier: -
- 1.3.1 Non slip material of any kind (maximum thickness 2.5mm) may be added to the hull or decks
  - 1.3.2 The use of shackles, metal or plastic rings, flexible adhesive tape, thin line or shock cord, as long as this does not modify the effective sheeting of any sail nor the intended purpose or action of any equipment
  - 1.3.3 Packers may be fitted under cleats
  - 1.3.4 Any number and design of mechanical wind indication devices may be fitted
  - 1.3.5 Calibration marks of any kind are permitted
  - 1.3.6 Any compass, timing device or a combination of both may be fitted provided that it/they can only provide information relating to A) the boat's heading and B) current or elapsed time.
  - 1.3.7 GPS equipment may be fitted provided A) no information is displayed during racing by ensuring the display is obscured and B) that information recorded is only used for training purposes.
  - 1.3.8 Video recording equipment may be fitted.
  - 1.3.9 Any additional equipment required for safety purposes may be fitted
  - 1.3.10 Clips, ties or bags to secure safety or other equipment are permitted
  - 1.3.11 Additional drainage holes and inspection hatches may be fitted to the hull provided they do not compromise the watertight integrity of any hull compartments
  - 1.3.12 Drainage holes may be drilled in the mast heel plug and sprit
  - 1.3.13 Sail battens may be tapered or adjusted as required
  - 1.3.14 The head of the daggerboard or rudder may be packed or sanded to maintain a good fit
  - 1.3.15 A maximum of two foot straps may be fitted to the wings. When standing on the strap a sailor's foot shall not be extended more than 10mm from the wing bar.
  - 1.3.16 Any number of items may be fitted to the hull or spars provided their sole function is to stow food and/or drinks
  - 1.3.17 Maps, charts & means for recording compass headings may be carried or fixed to the hull
  - 1.3.18 The total velocity ratio in each of the control line systems shall not exceed:- kicking strap 24:1, cunningham 8:1
  - 1.3.19 Control line takeaway systems may be altered or improved in any way, so long as any extra fastenings are made only to the inside of the fore and aft wing bar tubes, and all lines/shockcord are maintained externally, alongside and close to any wing bar tube
  - 1.3.20 Protective chafe pads of any material are allowed under the wing u-bolts, so long as no fixings are added
  - 1.3.21 Aluminium intermediate wing bars, as supplied by the licensed builder, may be used in lieu of 3kg of the lead required in the Rack Setting Tables of Section 3 of the Class Rules. For example, a helmsman required to carry 9kg of lead may instead carry 6kg of lead and a set of intermediate wing bars.
  - 1.3.22 Turnbuckle or bottle-screw style adjusters may be fitted to the lower shrouds in place of the standard shroud-plate arrangement. Adjustment of lower shroud tension is not permitted while racing.
  - 1.3.23 The total velocity ratio of the rig tensioner must not exceed 12:1, and must fit to a standard length forestay and within the tensioner cover as supplied by the Licenced Builder.
  - 1.3.24 Following the technical vote to discontinue production of the original style RS700 daggerboard in 2018, it is permitted to expand the width of the daggerboard slot to fit the new style RS700 daggerboard (as supplied by the Licenced RS Dealer). An approved sanding template and instructions to assist owners achieve the revised daggerboard slot profile is available from the Licenced RS Dealer on request.

## 2. SAILING REQUIREMENTS

- 2.1 The RS700 shall be raced with one person on board. A trapeze may be used by the helm to help balance the boat, this changes RRS 49.1
- 2.2 The Class insignia and sail numbers shall be displayed on the upper half of the mainsail. The upper half of the sail shall be defined as above a line drawn parallel with the foot of the sail passing through a point on the luff half way from the tack to the head. Sail Numbers shall be below the Class insignia and displayed on each side of the sail, with the upper numbers on the starboard side.
- 2.3 There is no requirement to carry sail numbers and national letters on the spinnaker
- 2.4 The sprit shall be retracted so that its forward end is within 400mm of the forward most point of the hull at all times other than when the spinnaker is set or in the act of being set or recovered
- 2.5 The forestay, main shrouds and lower shrouds shall not be adjusted while the boat is racing
- 2.6 The RS700 may only be raced if the wings are on the designated settings and the required corrector weights fitted relevant to the weight of the helmsman and crew in accordance with clause 3.

## 3. PERFORMANCE COMPENSATION

The RS700 International Committee has agreed following membership vote that the 2021 Performance Compensation Trial settings are to be used for the full 2021 RS700 International and UK Class Association calendar.

### 3.1 Correction for Righting Movement

A combination of the helm's weight and righting moment will be used to calculate the setting of the racks and the amount of corrector weights that will be carried in the boat.

### 3.2 Measurement Beam and Scales

The righting moment of the helm will be measured using a Class Association approved measurement beam. The beam will be 2m long and will be used in conjunction with Class Association approved scales.

### 3.3 Measurement Method

**3.3.1 Righting moment** -The "head end" of the beam is placed on the scales taking care that the bearing surface of the beam sits on the middle of the scales (which are reset to zero once the beam has been placed upon them) to ensure an accurate reading. Once this is done, the helm, wearing a minimum of shorts and a t-shirt, must lie flat, facing upwards, upon the beam with arms folded such that hands touch elbows. The heels of the feet must be touching the end of the plank and the legs must be as straight as possible. The reading from the scales is read by a third party and is then multiplied by 2 to give the righting moment.

**3.3.2 Rounding up or down** - the helm's calculated righting moment and crew weight will rounded either up or down to the nearest whole number. This mean that if the first decimal point is above 0.0 and below 0.5 it will rounded down and if it is 0.5 and above it will be rounded up.

**3.3.3 Helm weight** –the helm will be weighed using Class Association approved scales that have been reset to zero, the helm has his weight read off by a third party.

### 3.4 Determining Performance Compensation Settings

#### 3.4.1 Calculating the Rack Setting

The maximum rack setting is read from the 'RS700 Rack Position – 2021 Trial Settings' table below applying the helm's weight to the vertical scale and the righting moment to the horizontal scale. Rack setting 1 is the innermost hole and each hole is counted outwards from there. The original Table 2 remains below for reference.

#### 3.4.2 Maximum rack setting

A helm may sail a narrower boat utilizing a rack setting less than determined in 3.4.1. but must declare this when registering for an event. This setting must then remain the same for the entire event. Please note that the weight to be carried as set out in table 1 must remain the same.

**3.4.3 Corrector Weights:** As part of the 2021 modified performance compensation trial corrector weights do not need to be carried. The original Table 1 remains below for reference.

Table 1 determines number of corrector weights to be carried in the boat.

Sailor's weight	Correctors required
Less than 75kg	12kg or intermediate bars and 9kg
75kg to less than 79kg	9 kg or intermediate bars and 6kg
79kg to less than 84kg	6 kg or intermediate bars and 3kg
84kg to less than 88kg	3kg
88kg and above	0kg

Table 1

The weights can only be fitted to the boat using the builder supplied fixing in the position as determined by the builder. Two intermediate bars may be used in place of 3kg of weight as described in clause 1.3.19.

#### 3.4.4 Displaying the Rack Setting/Weight

Both the rack setting and corrector weight to be used in an event must be displayed on the rear of the hull or racks. It is the helm's responsibility to ensure that this information is clearly visible at all times throughout an event.

# RS700 Rack Position - 2021 Trial Settings

Helm Righting Moment kg = Weight recorded by scales at head end x Gauge Length

Helm Weight kg

	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	###	01	02	03	04	05	06	07	08	09	10	11	12
70	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3
71	-	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	3
72	-	-	-	-	-	-	-	-	-	-	8	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	6	5	5	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	3	3
73	-	-	-	-	-	-	-	-	8	8	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	6	5	5	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	3	3	2
74	-	-	-	-	-	-	-	8	8	8	8	8	8	7	7	7	7	7	7	7	6	6	6	6	6	6	5	5	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	3	3	2	2
75	-	-	-	-	-	8	8	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	6	5	5	5	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	3	3	2	2	2
76	-	-	-	-	8	8	8	8	8	8	7	7	7	7	7	7	7	6	6	6	6	6	6	5	5	5	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	3	2	2	2	2	
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91	6	6	6	6	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	-				
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			Righting moment Kg/m																																											
		66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110
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	79	8	8	8	8	7	7	7	7	7	6	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	2	2																	
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	89	6	6	6	5	5	5	5	5	4	4	4	4	4	4	3	3	3	2	2																										
	90	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	2	2																											

1.2 Table 2 - RS700 Rack Position Chart																												
		2	2	2	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	92	5	5	5	5	5	5	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	2	2	2	2	2	2
	93	5	5	5	5	5	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	2	2	2	2	2	1	1

