RS AERO

CLASS RULES

2015 V.1.3

Closed class rules for a “Manufacturer controlled” class.

Date of this version – 2015-03-20

The RS Aero was designed in 2013 by Jo Richards and RS Sailing

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INTRODUCTION

The RS Aero is a one-design racing boat, suitable for adult and youth sailors for both training and racing. The RS Aero features 3 different rigs to allow competition for all levels of ability, age and size. These are the RS Aero 5, RS Aero 7 and RS Aero 9.
The class has been designed around the principle that the racing results should depend solely on the attributes and skills of the crew. The fundamental objective of these class rules is to ensure that this concept is maintained.

RS Aero hulls, hull appendages, rigs and sails shall only be manufactured by licensed manufacturers. Equipment is required to comply with the RS Aero Building Specification and is subject to an approved manufacturing control system.

RS Aero hulls, hull appendages, rigs and sails, after having left the manufacturer, shall only be altered to the extent permitted in Section C of the class rules.

Rules regulating the use of equipment during a race are contained in Section C of these class rules, in ERS Part I and in the Racing Rules of Sailing.
This introduction only provides an informal background and the RS Aero Class Rules proper begin on the next page.

PLEASE REMEMBER:

THESE RULES ARE **CLOSED CLASS RULES:**
ANY CHANGE NOT SPECIFICALLY PERMITTED BY THESE CLASS RULES IS PROHIBITED.

COMPLIANCE WITH THESE CLASS RULES IS DEMONSTRATED THROUGH **MANUFACTURING CONTROL:**

THUS CONTROL OF COMPONENT AND EQUIPMENT SPECIFICATION IS UNDERTAKEN BY THE LICENSED MANUFACTURER.

PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE

A.1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.

A.1.2 The word “shall” is mandatory and the word “may” is permissive.

A.2 ABBREVIATIONS

A.2.1

ISAF	International Sailing Federation
MNA	ISAF Member National Authority
ICA	RS Aero International Class Association
NCA	National RS Aero Class Association
ERS	Equipment Rules of Sailing
RRS	Racing Rules of Sailing
LIC	Licensors - Copyright Holder and RS Racing

A.3 AUTHORITIES

A.3.1 The international authority of the class is the ICA which shall co-operate with the LIC in all matters concerning these **class rules**.

A.3.2 The ICA, an NCA, an MNA or LIC are under no legal responsibility in respect of these **class rules**.

A.4 ADMINISTRATION OF THE CLASS

A.4.1 The class is administered by the ICA which shall co-operate with the LIC. The ICA may delegate part or all of its administrative functions to an NCA.

A.4.2 In countries where there is no NCA, or the NCA does not wish to administrate the class, its administrative functions shall be carried out by the ICA in co-operation with the NMA, or by the NMA in co-operation with the ICA.

A.5 ISAF RULES

A.5.1 These **class rules** shall be read in conjunction with the ERS.

A.5.2 Except where used in headings, when a term is printed in “**bold**” the definition in the ERS applies and when a term is printed in “*italics”* the definition in the RRS applies.

A.6 CLASS RULES VARIATIONS

A.6.1 At Class Events – see RRS 87– ISAF Regulation 26.5(f) applies. At all other events RRS 86 applies.

A.7 CLASS RULES AMENDMENTS

A.7.1 Amendments to these **class rules** are subject to the approval of the ICA and LIC in accordance with the ICA regulations from the 1st Jan 2016. Until then the LIC in consultation with the ICA representative may change these rules. The class rules are subject to automatic re-evaluation and amendment on 1st January 2016, and at 24 month intervals thereafter.

A.8 CLASS RULES INTERPRETATION

A.8.1 Interpretations of **class rules** shall be made by the ICA and LIC in accordance with the ICA Regulations.

A.8.2 Interpretations of **class rules** that are required during an event shall be made in accordance with the ISAF Regulations and the race organising authority shall, as soon as practical after the event, inform the ICA and LIC of the event ruling.

A.9 SAIL NUMBERS

A.9.1 Sail numbers shall be issued by the LIC.

A.9.2 Sail numbers shall be issued in consecutive order starting at “1001”.

Section B – Boat Eligibility

For a **boat** to be eligible for *racing*, it shall comply with the rules in this section.

B.1 CLASS RULES COMPLIANCE

B.1.1 The boat shall be in compliance with the current **class rules** that apply at the time of build.

B.1.2 In the event of a dispute alleging non-compliance with these **class rules**, the following procedure shall be adopted:

a) A sample of the dimensions for the disputed item shall be obtained by taking the identical measurement from five boats or items of equipment from the same model year or build specification, which are not the subject of the dispute.

b) The dimension of the disputed boat or items of its equipment taken using the same technique as above shall be compared to the sample.

c) If any of the dimensions obtained from the disputed boat or item of equipment lie outside the corresponding range of dimensions found in the sample by more than 10% of that range the matter together with the details of the measurement methods and any other relevant information shall be referred to ICA, who shall, after consulting the LIC, make a final decision.

B.2 CLASS ASSOCIATION

B.2.1 A valid Class Association Sticker, when required by the NCA, shall be affixed to the hull in a conspicuous position.

PART II – REQUIREMENTS AND LIMITATIONS

The **crew** and the **boat** shall comply with the rules in Part II when *racing*. In case of conflict Section C shall prevail.

The rules in Part II are **closed class rules**. Any **equipment inspection** shall be carried out in accordance with the ERS except where varied in this Part.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 The RS Aero shall be raced with one person on board (the **crew**).

C.1.2 The RS Aero may be raced with either the RS Aero 5, RS Aero 7 or RS Aero 9 rigs.

C.1.3 In all racing governed by these class rules, where numbers permit the RS Aero will be raced as separate fleets according to rig size – the RS Aero 5, RS Aero 7 and RS Aero 9 fleets. “Where numbers permit” shall be determined by the organising committee of the race or series of races. In the event of one or more rig sizes racing together the results shall be determined based on the Portsmouth Yardstick system with ratings as follows -

RS Aero 9 – 1035

RS Aero 7 – 1065

RS Aero 5 – 1102

The Yardstick of each rig size for class racing will be reviewed annually, determined together by the ICA and LIC. (one digit on PY = 6 seconds per 100minutes)

C.1.4 A competitor shall always have the right to use a smaller sail during a handicap series without disqualification. Their Yardstick however shall be calculated at all times for that series as that for the rig size initially entered.

It is not permitted to use a larger sail during a regatta or series without automatically ranking as a new starter/entry for that regatta or series.

C.1.5 The mainsheet can be taken from any of the turning blocks in the mainsheet system, but the mainsheet system has to remain the same velocity ratio as supplied. And the mainsheet must remain uniform diameter throughout its length.

C.2 CREW ELIGIBILITY

C.2.1 To be eligible to compete in events run under the auspices of an NCA the **crew**, boat owner, or a nominated representative of an organisation owning the boat must be a member of the NCA

C.3 PERSONAL EQUIPMENT

C.3.1 The **boat** shall be equipped with **personal buoyancy** for the crew member to the minimum standard EN 393: 1995 (CE 50 Newtons), or USCG Type III, or AUS PFD 1.

C.4 ADVERTISING

C.4.1 LIMITATIONS

Advertising shall only be displayed in accordance with Category C of the ISAF Advertising Code.

C.5 PORTABLE EQUIPMENT

C.5.1 The following optional equipment may be used onboard and attached to the hull or rig providing that attachments do not puncture the hull skin:

(a) Compass, timing device or a combination of both provided that it/they can only provide information relating to the boat's heading and time (current or elapsed).

(b) Maps, charts and means for recording compass headings

(c) Bags, ties or tape to secure safety or other permitted equipment.

(d) Items to stow food and/or drinks.

(e) Any additional equipment required for safety purposes.

(f) GPS tracking and recording device provided that no input can be used whilst sailing and that any data can only be used onshore.

(g) Camera to record video and pictures provided that no input can be used whilst racing and that any produce can only be used onshore.

C.6 BOAT ALTERATIONS

C.6.1 Replacements for any boat equipment, including spars, sails, foils, rudder stock, tiller or fittings, shall be only those produced by a manufacturer licensed by LIC except where otherwise authorised by this section.

C.6.2 Repairs and maintenance may be carried out provided repairs are made in such a way that the essential shape, characteristics or function of the original are not affected. Maintenance shall include the replacement of fastenings with alternatives provided that the equipment is replaced in the original position.

C.7 HULL

C.7.1 HULL MAINTENANCE AND REPAIR
Polishing or burnishing of the hull is permitted.

C.7.2 REPLACEMENT OF HULL FITTINGS

The following parts or equipment may be replaced providing that the replacement is similar and performs the same function. The replacement parts or equipment may be obtained from any supplier:

(a) Blocks
(b) Bungs
(c) Toe straps, lashings and tensioning elastics
(d) Inspection hatches
(e) Cam and clam cleats
(f) Control lines
(g) Fastenings
(h) Shackles, swivels, pins

C.7.3 ADDITIONS AND ALTERATIONS TO HULL

The following additions and alterations are permitted. Parts may be obtained from any supplier:

(a) The use of flexible adhesive tape, shock cord, and ”velcro” type fastening as long as this does not modify the intended purpose or action of any equipment.
(b) Calibration marks of any kind.
(c) Clips, ties or bags to secure safety or other or other equipment.

(d) The daggerboard case may be packed provided it is with a soft compliant fibrous material, with either self-adhesive or glue on attachment.
(e) Additional drainage holes and inspection hatches provided they do not compromise the watertight integrity of any hull compartments.
(f) Packers may be fitted under cleats.
(g) 1 x Cam cleat screwed to each sidedeck for the mainsheet, only in desginated area

C.8 DAGGERBOARD AND RUDDER

C.8.1 MAINTENANCE AND REPAIR OF FOILS

(a) Polishing or burnishing of the daggerboard or rudder blade is permitted.
The head of the rudder may be packed or sanded to maintain a good fit in the rudderstock.
(b) The leading edge of each foil my be sanded filled and/or painted provided that such work shall never extend more than 20mm aft of the leading edge.
It is not permitted to deliberately vary the designed chord width of either foil.

C.8.2 TILLER EXTENSION

Tiller extension may be replaced, and is unrestricted in type and length.

C.9 RIG

C.9.1 MAINTENANCE OF RIG

The following rigging may be replaced. The replacement parts or equipment may be obtained from any supplier: -

(a) Running rigging, ropes and lashings.
(b) Main Halyard and halyard securing device, maximum velocity ratio 1:1
(c) Painter, safety lines, elastic and other supplied lines.

C.9.2 ADDITIONS AND ALTERATIONS TO RIG

The following additions and alterations to the rig are permitted. Parts may be obtained from any supplier:

(a) Any number and design of mechanical wind indication devices may be fitted
(b) The total velocity ratio in each of the control line systems may not exceed:- Kicker – as supplied, Cunningham – as supplied, Outhaul – as supplied.
(c) The type of block, ratchet or swivel base for the final turning block for the mainsheet is optional. Any of the mainsheet blocks may be replaced by a ratchet block.
(d) Hooks, hooked blocks, and snapshackles maybe utilised to facilitate rigging, so long as they do not modify the intended action or performance of equipment or sails.

(c) The vang cleat shall always be removable without the use of tools.

(d) It is permitted to "re-lead" the tails of the control lines provided that no further holes are drilled in the hull or rig. All additional blocks or rings shall be attached by line. The use of adhesive is not permitted.

(e) A "J.C" strap may be fitted to pull the boom forward whilst sailing downwind. The maximum elastic thickness permitted is 8mm.

C.10 SAILS

C.10.1 SAIL MAINTENANCE AND REPAIR

(a) Routine maintenance and repairs are permitted as long as the same type of materials are used, there must not be any performance gain or deemed to have any advantage after the repair is fully finished over a original supplied sail.

C.10.2 MAINSAIL IDENTIFICATION

(a) The national letters and sail numbers shall comply with the RRS except where prescribed otherwise in these **class rules**. The sail number shall be displayed on each side of the mainsail between the 3rd and 4th batten down, with the upper numbers on the starboard side, according to the current position that is shown in the RS Aero class manual.

(b) All sail numbers need to be black and similar to what's supplied by the LIC. The RS Aero 7 & 9 to use 300mm high sail numbers and letters. The RS Aero 5 to use 230mm high sail numbers and letters. The national letters when used shall be displayed below the bottom

batten, with the upper letters on the starboard side according to ISAF regulations.

(c) The Class Insignia shall be the RS Aero class logo relevant to the rig size, and as prescribed by the LIC, and shall be displayed between the 2nd and 3rd batten down, on the top half of the mainsail, in compliance with the RRS.

Section D – Hull

D.1 HULL SPECIFICATION

D.1.1 The hull shall comply with the Building Specification in force at the time of manufacture, but maybe altered, if relevant or required, to match the current build specification.

D.2 HULL MANUFACTURER

D.2.1 The hull shall be built by a manufacturer licensed by the LIC to produce hulls.

D.2.2 All production moulds used for hull manufacture shall be approved by the LIC.

D.3 HULL IDENTIFICATION

D.3.1 Each hull shall carry a moulded-in hull number.

D.3.2 Each hull shall have it's sail number displayed on the transom face, between the rudder fittings.

D.4 HULL ALTERATIONS

D.4.1 The hull shall not be altered in any way except as permitted by Section C of these **class rules**.

D.5 HULL FITTINGS

D.5.1 Hull fittings shall comply with the Building Specification in force at the time of manufacture except when altered, added or replaced as permitted by Section C of these **class rules**.

Section E – Daggerboard and rudder

E.1 FOILS SPECIFICATIONS

E.1.1 The daggerboard, rudder blade and rudder stock/tiller assembly shall comply with the Building Specification in force at the time of

manufacture, but maybe altered, if relevant or required, to match the current build specification.

E.2 FOILS MANUFACTURER

E.2.1 The daggerboard, rudder blade and rudder stock/tiller shall be made only by a manufacturer licensed by the LIC to produce these.

E.3 FOILS ALTERATIONS

E.3.1 The daggerboard, rudder blade and rudder stock/tiller shall not be altered in any way except as permitted by Section C of these **class rules**.

Section F – Rig

F.1 SPARS

F.1.1 **Spars** and their fittings shall comply with the Building Specification in force at the time of manufacture of the **spar,** but maybe altered, if relevant or required, to match the current build specification.

F.2 SPAR MANUFACTURER

F.2.1 **Spars** and their fittings shall be made only by a manufacturer licensed by the LIC to produce spars.

F.3 SPAR ALTERATIONS

F.3.1 **Spars**, their fittings and rigging shall not be altered in any way except as permitted by Section C of these **class rules**.

Section G – Sails

G.1 SAIL SPECIFICATIONS

G.1.1 The **sails** shall comply with the Building Specification in force at the time of manufacture of the **sail** but maybe altered, if relevant or required, to match the current build specification.

G.2 SAIL MANUFACTURER

G.2.1 The **sails** shall be made only by a manufacturer licensed by the LIC to produce sails.

G.3 SAIL ALTERATIONS

G.3.1 The **sails** shall not be altered in any way except as permitted by Section C of these **class rules**.

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