



Information for World Sailing Committees

INTRODUCTION

The RS Aero achieved the highest score in the One-Person Olympic Equipment Evaluation Report. It will always be possible for detractors to question various details, but the fact remains that the RS Aero was unanimously considered the best option by the wide range of experts involved, which speaks loudly.

We realise that some World Sailing Board, Council and Committee members may not have seen detailed factors that make the RS Aero the best boat for not only Olympians but also to build the crucial youth pathway and women's participation. A summary follows.

DESIGN OVERVIEW

The RS Aero philosophy is to prioritise ultra-light weight, performance and practicality to produce a simple, refined and durable boat with rig sizes to suit sailors between 35 and 100kg.

The RS Aero weighs about the same as an Optimist. This gives exceptional levels of responsiveness and user friendliness - afloat and ashore – for youths, women and men. It brings dinghy sailing closer to the simplicity and excitement of board sailing.

The hull was designed to minimise the effect of different sailor weights. Topsides are relatively vertical and chines just touches the water with the lightest sailor aboard – with a heavier sailor the hull sits slightly lower in the water, while the waterplane shape remains about the same to minimise drag difference.

RS Aero – rig sizes: **RS Aero 5**
 RS Aero 6 (new rig developed and proposed for women's Olympic rig) - see Appendix 1 below
 RS Aero 7
 RS Aero 9

RS Sailing is exclusively licensed to manufacture and sell the RS Aero and is also the trademark holder, so there are no conflicts or complications due to multiple parties.

DURABILITY AND TRUE LOW COST

Low competition costs and true value are created through high quality components and long competitive life.

Hull

High tech materials and construction system create an ultra light boat:

Epoxy resin: Significantly higher strength and no water absorption.

Carbon fibre reinforcement in high load areas: Mast step area, daggerboard area, rudder area, hiking area, around the gunwales.

This web of carbon adds strength and stiffness – much of the stiffness, strength and longevity of a full carbon boat, without the high cost.

Spars

Carbon composite: Never permanently bend in use – minimal change through age - longer competitive life and (so far) NO breakages during racing - remarkable consistency (circa 0.1% tolerance as tested at Evaluation - equipment randomly taken from stock).

Foils

Epoxy resin: High strength and reduced degradation with age – long competitive life.

Summary

In every area (epoxy resins, use of carbon fibre in the hull and spars, high denier Dacron sail fabric, top quality hardware etc) the RS Aero uses high quality materials that cost more initially but lead to longer competitive life and lower overall campaign costs than low tech. alternatives.

FRAND BUILD PLAN

RS already has high volume manufacturing capability with established, high-level, quality control systems.

Production and distribution plans will allow any builder to apply and create a managed network of manufacturers across the world, covering key world regions. Application / assessment underway in:

Europe

North America

South America
Asia
Oceania

ONGOING PRICE CONTROL

We propose fair price control through an Open Book ongoing price formula, monitored by World Sailing. This would ensure that price always fairly relates to raw material and equipment costs. No opportunity for profiteering by in- fashion builders.

DISTRIBUTION

RS Dealers are currently active across the world. They add freight cost efficiency through combined shipment of multiple boat types and they stock spare parts.

RS Sailing offers a back-up spares service – direct from UK HQ to sailors worldwide. 60 – 100 packages shipped daily.

SUSTAINABILITY

RS Sailing has put sustainability at the heart of our organisation. We have improved many aspects and the job will never be done - we follow a process of continual improvement. See <https://www.rssailing.com/sustainability/>

Sustainability was a core consideration during the design development of the RS Aero:

Ultra light weight and long lasting materials mean:

Less consumption - through manufacture and required replacements (hull, spars, foils etc)

Less freight - through stacking design shape – less replacement required

- 30% more boats in a shipping container than possible with the Laser
- Four boats on a standard road trailer, with four sailors in the car, can travel together to regattas
- Two boats on a moderate size car roof-rack

Less waste through manufacturing processes developed:

Computer nested and cut glass and foam materials

Re-usable equipment and processes developed to reduce consumables and waste

Boat supplied in a re-usable fabric bag

Recycled or recyclable packaging materials are used in boat and parts supply

SUMMARY

The RS Aero was the best in the Olympic Evaluation and offers:

- **Youth pathway & sport growth** - the best option for the future – modern – exciting - cool
- **Women's participation growth** – the best suited equipment - best opportunity for growth
- **Better suited to heavier men** than the current Equipment – advantageous due to other Event changes
- **Most capable organisation** for production quality and volume – world's largest small boat manufacturer
- **Sustainability benefits** – by design, manufacture and supply logistics
- **Strong relationship between manufacturer and Class Association** – run by sailors for sailors
- **Lowest risk** for Sailors - Events - World Sailing. Stable, predictable and trustworthy future.

“There is no boat or organisation better placed to successfully deliver a new pathway and Olympic class”

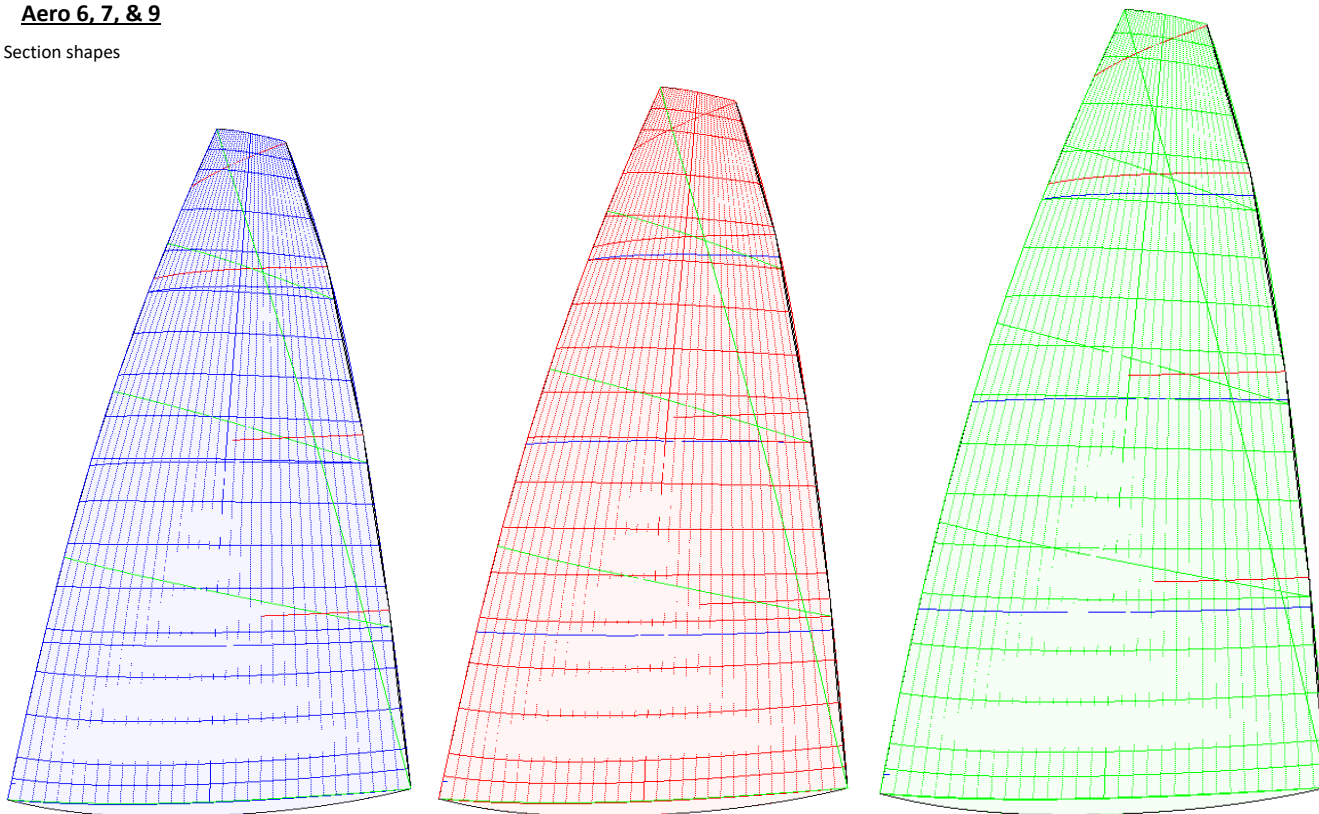
Appendix 1

RS Aero 6 sail – comparative size drawing

RS Aero 6 = Proposed new women's sail size
RS Aero 7 = size used by women at Evaluation
RS Aero 9 = size for men

Aero 6, 7, & 9

Section shapes



Aero 6, 7, & 9

Gaussian curvature

