

Dear RS200 Sailors,

There has been a considerable amount of discussion on several Facebook pages over the weekend which is fantastic and only enriches the debate.

I am conscious that some questions have not been answered by the RS Association and there will be two communications this week:

1. The process of the sail development covered in this communication;
2. A sail performance communication with in depth assessments on each of the sails by the individuals who have sailed with them.

Rest assured that our sole purpose in this process is to increase longevity of the sails (maintain the longevity of the mainsails in a new cloth and increase the longevity of the jib and spinnaker), maintain performance and if at all possible reduce costs for you the members of the RS Association.

The Process

Why design and develop a new main, jib and spinnaker?

The process of developing new sails for the RS200 was driven by the lack of ability to continue to securely source the old mainsail material at an acceptable cost, resulting in the need to produce a new mainsail.

Alongside the development of a new mainsail your Committee decided it would be an appropriate time to look into the jib and spinnaker. Over the last 7 years I have sailed the boat, the feedback has always been the jib and spinnaker quickly loses shape and longevity due to the jib leach hitting the mast through tacks and the spinnakers being pulled through the narrow spinnaker chute.

A radial Jib and spinnaker would improve the longevity.

For the mainsail several different materials were reviewed by the technical committee at the start of the process. Within the selection evaluation we wanted to ensure the cloth would provide similar longevity to the original, provide the same performance and cost and modernise the appearance of the boat. Examples of some of the materials initially considered are pictured here:



Timeline

The duration of the process was always restricted at the start due to the availability of existing main sail cloth. In order to have sails readily available in quantity for April we need to go to a class association vote by the end of January. The process started in March 2014, it has taken this long

because of the time to build sails and test in all conditions. Your Committee, the testing team and RS have put a lot of time, effort and money into this as we are concerned about maintaining the unique selling point of the class: its race-ability.

The Sails

The development of the sails was always constrained by the success criteria below:

1. The new sails have like for like performance with existing sails
2. There is no change in weight bracket of the boat
3. Future proofing and modernising the boat
4. Reducing costs of sails and improving longevity

The Mainsail

With the material selected the mainsail would have to have a radial cut and no exact replica could be made of the original mainsail due to the way the modern fibres are laminated into the material.

Why did we develop a square top option alongside the more traditional shape?

This was presented by the manufacturers initially and taken on by the Committee. The idea was to present a range of options to the members with the following in mind:

- a) Given that we had to redesign the Main we felt that developing a couple of options would be of benefit and provide you with a choice as to which way you want the class to go. Which seemed to meet with your prior approval.
- b) The current sails have lasted 20 years in terms of design. Current trends for boats coming onto the market are to go for a square top mainsail. If the class wanted to eventually move to a square top then this would provide a single jump rather than multiple sail design changes. The worst case scenario would be to have a change from standard to new standard to square top say in the next six years. This would be the worst scenario where there would be three types of main in circulation in a single one design class.
- c) If a square top can attract more UK and international sailors to the fleet this has to be a good thing to enable UK and international growth, which in turn supports/increases the fleet size and a healthy market for new and second-hand boats, and hence maintains the value of your boat.

To be absolutely clear, although RS has supported the RS Association in market research the reality is that they have no agenda nor preference in which way the class decides. Maintaining the class one design status is theirs and the RS Association's single objective.

Jib and Spinnaker

As mentioned above a radial version was tested to improve the longevity of the sail. Throughout the testing period we have evaluated by comparing the longevity of legacy and development sails. The new radial cut designs and material are looking in better shape and condition compared to the originals. To my neighbours annoyance I have been rigging sails on my boat in the garden, letting them flog and comparing over a period of 4 months. Secondly, hopefully as the picture will show, from an appearance perspective the radial cut looks better when consistent across all sails. A mix and match just doesn't look quite right.



Will a set of sails be more expensive than the originals?

I can confirm a complete set of sails will be cheaper than the originals; in addition there will be an introductory discount for RS Association members for a period of three years for the first set of sails.

Who has tested the sails? And why these individuals?

The sails have been now tested by multiple sailors in multiple locations, with different abilities from our Gold, Silver, Bronze and club sailor communities. Where a sail has met the baseline success criteria the sails have actually been tested at circuit and well attended 200 events. For example the Spinnaker and Jibs have been used at the Inlands and Abersoch dinghy week. We had hoped that we would have had an acceptable main sail for the nationals at Hayling, but unfortunately we did not have a product that met the success criteria at that time.

In order to test the main sails we have used many of our more experienced gold fleet sailors; why? Firstly, many of them our former Olympic Development squad sailors who have trained together before and have had practical experience of sail development and testing. Secondly, it was important to get the same weight ranges to enable comparison. Thirdly, these sailors are very familiar with each other's speed on the circuit and in particular know how quick they are in different wind and wave conditions. There are so many variables in the design process that you need to reduce the number of variables where you can. We have also used a wide range of sailors focusing on durability and visibility. For example we were concerned that the radial spinnaker might introduce additional loading so we actually ensured it was tested with small children crews to ensure we did not break those parents and children combinations.

The next communication will cover the in depth analysis of the sails mentioned above by the testing team.