

The History of The Streaker Mast & Boom

By Alan Gillard

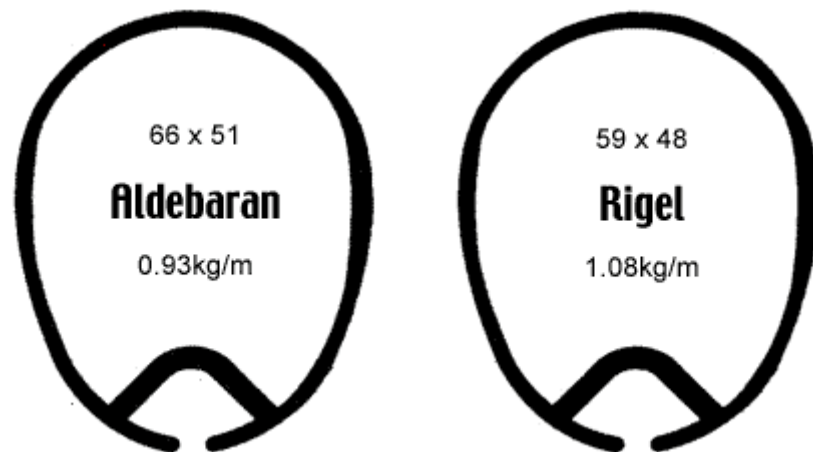
The original mast at the inception of the class was one of the spars manufactured by Holt Allen under the name of 'Cheetah' the S5116. These spars were a 51mm outside diameter round tube with a track pop-riveted on the back edge giving a fore and aft dimension of 66mm. Like a number of other classes designed by Jack Holt the Streaker mast was supplied un-tapered, mainly to reduce costs. The hounds were deliberately kept at a relatively low position so that the mast gave an even bend through-out its length. The sail track was only the length required to fit the sail.



These masts were supplied in 2 pieces so that they conveniently fitted inside the 'Kit Box'. The joint being 4120mm measured from the heel. An internal sleeve and 2 set screws holding the 2 spar sections together. Overall these were quite a decent mast which performed better than their DIY looks suggested. Total weight 5.5kg.

The boom was a round 45mm diameter tube (S4516) fitted to the mast using a gooseneck similar to that found on Mirror Dinghies. This rig was fairly bendy, the boom especially bending more than one would like in anything of a breeze, but because the rig did not allow the helm to over tension things, failures were not too common.

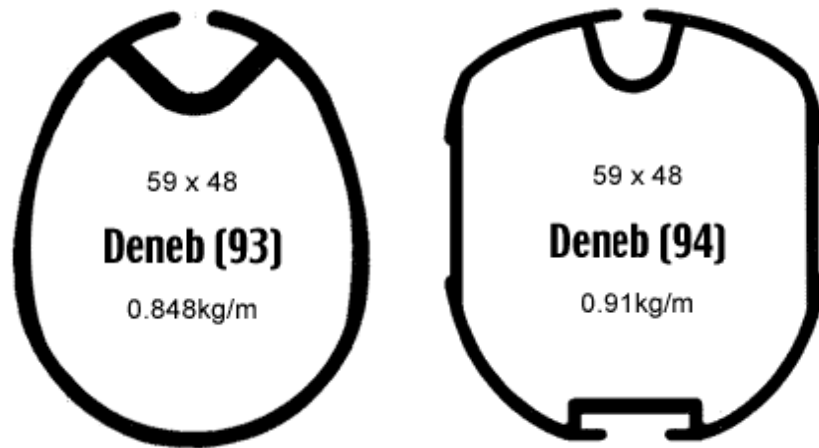
In 1993 Holt Allen basically stopped making the S5116; the class was given a new mast and boom section without any consultation with the association members. The new section was the 'Aldebaran', which at the time was received, certainly by the main class builder (Cory's) and a number of sailors thinking 'new would be faster' as a better section than the S5116. The main differences being that the 'Aldebaran' was a one piece mast (no joint), and it was a different shape, the section had an integral sail track. This led to another problem in that the rules limiting the size of the mast gate had to be changed to allow for the greater fore and aft dimensions of the Aldebaran mast. Sideways the mast was slightly narrower. The bend characteristics of the 'Aldebaran' were obviously going to be different. This proved to be the case. In service the Aldebaran bent uncontrollably in anything of a breeze, especially sideways.



Later that year at the Nationals at Lancing (during the first windy race) 9 masts either broke or bent permanently. The AGM followed this race, at which the Rigel section was proposed. Later that year the Rigel section was adopted by the class after discussions with Holt Allen, the Rigel being the same section, but with a thicker wall. Being the same section there is no easy way to tell the difference between Aldebaran and Rigel until you lift the spar into the boat. The Aldebaran weighed in at a very manageable 5kg. The Rigel though weighs 1.5kg more. This extra weight is not ideal as the pitching moments the mast creates increases significantly the more weight you put up there. The fact is though that the Rigel has proved to be a very good mast section for the class. 90% of the championship fleet is using this section.

In 1997 Dave Butler proposed that the Rigel mast should be allowed with internal sleeve. The proposal was passed at the AGM on a vote of 9 For, 2 Against and 7 Abstentions. The mast made by Holt Allen for Dave had a sleeve installed 2 metres long, 500mm up from the heel. Holt Allen in 1998 asked for clarification of the sleeved mast, it was agreed that if a sleeve was to be fitted it should be at the point of maximum bend. Holt Allen and the Class Association agreed on a mast sleeve of 1.5m long at a position 1.6m up from the heel. To show a sleeve was fitted inside the mast a pop-rivet was positioned at the top and bottom of the sleeve. As Dave would say 'these are masts for Fat Boys' the sleeved masts have been tried by a number of other sailors, with some success, but in general the masts are unforgiving in a blow and not responsive especially in light winds. That's apart from the extra weight involved.

When Holt Allen changed mast section to the Aldebaran, they also started to supply a new boom section the 'Deneb'. The new boom was just the 'Aldebaran' section fitted out as a Boom. This was a step in the right direction as the gooseneck was upgraded to a proper universal joint with pin that entered the boom end casting. I bought one and fitted the S5116 with the new gooseneck so I could use the better boom with the original mast.



In early 1994 Holt Allen had produced another boom section with integral service track for the mainsheet blocks and kicker attachments. The section was still called 'Deneb'. The overall dimensions of this new Deneb boom were the same but the section is stiffer if very slightly heavier.

The class racing we all enjoy, benefits because of the one design, single manufacturer spars we use. The continuity of supply of the Rigel mast and the Deneb boom are very important to the class, I would not like to see change in this. The design flexibility we have shown as a class though in allowing tapered booms and sealed masts has shown how we as a class are prepared to push the one-design to the limit, without giving any individual a performance benefit, but such modifications have made the boat easier to sail for all.