



Pac52 Class Press Release, May 31, 2017
FOR IMMEDIATE RELEASE:

With a unanimous vote, the Pac52 Class members have established the Box Rule governing the configuration parameters of the Yachts. The numbers can be found on Page 4 of the Class Rules which are now onto Version 6.0. Another minor change in the Class Rules is a provision for reduced membership fees for teams only competing in a few races of a season.

The Pac52 Box Rule was solidified after over 6 months of evaluation and discussion amongst the four founding teams of the Class. Each parameter was heavily scrutinized with the goal being to make the Yachts as fast as possible while still keeping the rule open enough to allow Transpac 52s to modify their boats to become eligible to join the Class.

Comparing the Pac52 to the Transpac 52, some key differences include:

- **Length:** The LOA for both the Pac52 and the TP52 is 15.85m.
- **Beam:** The Pac52 maximum beam is 4.5 meters, while the TP52 is limited to 4.420m
- **Draft:** The maximum draft for the Pac52 is 3.6 meters, the TP52 is limited to 3.5m
- **Bulb Weight:** Both the Pac52 and the TP52 have a 3800kg bulb weight limit
- **Displacement:** The Pac52 minimum displacement is 6900kgs, while the TP52 must weigh 6975kgs.
- **Freeboard Heights:** The height of the deck above water at the bow and stern, referred to as “FFM” and “FAM”, is very similar between the Pac52 and the TP52, with the Pac52 FFM of 1.45 and FAM of 1.11 being slightly lower than the TP52 FFM of 1.45 and FAM of 1.14.
- **Mast Weight:** The minimum mast weight for a Pac52 is 250kgs, while on a TP52 it's 235kgs. Keep in mind the Pac52 mast is taller, hence heavier.
- **Mast Center of Gravity:** The minimum VCG of a Pac52 mast is 8.00m, while on a TP52 it's higher up, at 9.350m
- **Bow Sprit Length:** Measured from the front of the mast to the tip of the sprit, the Pac52 allows 9.11m, while the TP52 is slightly shorter at 9.0m.
- **Mast Height:** There are various numbers controlling this for each of the sails. On the mainsail, the maximum “P” dimension, which is mainsail luff length, is set at 21.20m for the Pac52, while on a TP52 it's 20.40m. For the spinnaker, the maximum “ISP” dimension, which is spinnaker hoist height above deck, is 23.15m while on the TP52 it's 22.40m.
- **Mainsail Headboard:** The “HB Max”, which is the maximum width you can make the top of your mainsail, is limited to 2.00m on both the Pac52 and the TP52.
- **Mainsail Size:** The Mainsail Area Max is 101.0sqm for the Pac52, while on the TP52 it's 98.0sqm.
- **Jib Size:** The Jib Area Max is 70.0sqm for the Pac52, while on the TP52 it's 66.0sqm
- **Spinnaker Size:** The Asail Area Max on the Pac52 is 272sqm, while on the TP52 it's 270sqm.

ORR and Righting Moment Limits: The Pac52, in addition to having its Box Rule parameters, also incorporates the ORR rating system into the mix. Specifically, there is a maximum rating limit, using the ORR W/L 60/40 TCF number, with the limit set at 1.208 (if you rate less, no one gives you time, so it will be the goal of each team to get to the maximum number). The ORR system is widely used and has a very similar VPP as the ORC system. In fact, as a trial the Pac52's got ORC certificates and compared the deltas to what ORR was generating and found them to be almost identical. The ORR limit ensures that the boats are equal on speed, not just on Box Rule parameters. This also allows older or slower boats, such as TP52's, to modify themselves to join the class and become equal on speed. The Rating Limit is set such that it would be very hard for any boat to go to the maximum values on all of the Box Rule parameters without rating too fast, so some compromises must be made and each team can evaluate their strengths and weaknesses to set up their boat as best they can. The "Righting Moment Upwind Max" number calculates the boat's righting moment, adding in crew weight to the formula, to determine how stiff she is upwind. A very tender boat can therefore sail with a larger crew, while a stiffer boat will be more limited on crew weight. This aspect keeps any boat from moving themselves into a very stiff upwind mode, sacrificing downwind speed for trying to get to the top mark first.

The Box Rule sets the stage for fair competition and allows new teams to evaluate their interest in joining the class. While the goal is to have all the boats fit within the Box Rule (currently all of them do), there is a provision for the teams to vote and allow specific exceptions to parameters for a boat. This is intended to be used to help older or slower boats get up to speed if they are limited on how to get there and may be able to do so by going outside one or two parameters but still rate equally within the ORR limit.

For more information you can find the complete Pac52 Class Rules, as well as an informative guide to them called "Introduction to the new Pac52 Class" online at www.pac52class.com

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