

George Hooper - Tuning and Sailing a 4.9 Cat

George is the 2009 4.9 Cat Rig Champion

Cat Rig Tips - George Hooper (AUS173)

There are a number of very good articles posted on the Taipan web site which cover a range of tuning, boat handling and setup ideas. I have used these articles as well as lots of advice from Greg Goodall, Glenn Ashby, Dennis Baker and Tim Kirkham. So I will try to cover newer ideas on the new big head as well as how we (PMYC) collectively worked together to improve our knowledge and speed. I strongly suggest reading the existing articles first. Lastly, my thoughts are based on the shape of the Ashby sail I use, which appears on the flat side. This is arguably a general trend at the moment for all bighead sails, from 18' skiffs to America's Cup, more efficient, less drag etc. I weigh about 84kg, so you will need to make allowances for weight differences.

Mast Rake

I have tried different rakes in different breezes and found it makes little difference. Mine is pretty much always between the front of the hatch cover and the rear of the beam. Maybe a hole down on the forestay in very light breeze, although every time I remember to do that, the breeze comes in and I end up hanging off the back.

Spreader Rake

Spreader Rake (700 mm max wire width) - based on the belief that I think bigheads work better with a stiffer more upright mast, I have moved my spreaders forward from positions stated in web site articles. Mine are set between 33 - 45mm. I also changed to the "finger adjustable" proctor spreaders. This means from 33mm to 45mm is 3 turns using your fingers. This made mucking about and testing alot easier. We could go out tuning, get one boat to make a change and test the difference immediately. This was a big help to all of us, especially with weight differences and the way we sailed individually. There is probably a little more propensity to get over powered with less prebend, so find "11" on the downhaul.

Spreader Tension

Spreader tension - mine is set at about 32 on the newer loos gauge. Again we buggerised around with different tensions, but due to alot of 3 boat testing we found that's where it was ok in most conditions. If someone invented a "finger adjustable" tensioner, then I guess we would have another tilt at it. I would set and forget around that mark, with any minor adjustment for weight. Looser if you are a little porky, and tighter if you are sleek.

Rig Tension

Again it does not seem to matter very much. We don't have a jib, so don't need to worry about forestay sag. I pull down on a trap wire firmly (60-70 kgs) to tighten the sidestays. However they always seem a bit looser than most. Just stick to the recommendations in the existing articles.

Platform, rudders etc

I use the published articles for the hull and foil setup. I don't think there is a significant difference between rudder shapes or materials. New carbon, anti cavitating rudders are nice to have, but plenty of boats go very fast with the standard ones. It is more important to ensure they are aligned and you have only a small amount of helm (if any).

Sailing

The existing articles are all still pretty accurate except for a minor change for the big heads. I think they need more sheet tension generally. I have 9:1 on my main, ratchet off the tramp, so you lose a little purchase due to flex. This also means that sometimes it feels like you are over sheeting, and I think you can (maybe not easy above 15kts). So you have to go for the downhaul a little earlier, and work the two in combination.

The rotation, I think is also in a little more and earlier than in the articles. But maybe that's because we had flat water at the Nationals and I have a slightly flatter sail. As soon as you have any waves it seems easier to stall the bigheads. So just use the advice in the existing articles. The upshot is the bigheads need to be sailed more attentively, there is less option for "set and forget". I guess that's the trade off between efficient, low drag sails being easier to stall, falling leach, not enough power etc, etc. That said, I think Greg sails with a slightly fuller sail which may have a bigger more forgiving wind band. He still seems to work it like nobody's business though. I have an extra set of light, top 4 battens. These seem to improve light wind downwind performance. And again, if the breeze comes in, it feels as though it stalls more quickly. (probably psychological). If you are light, and feel overpowered early, try an extra set of stiff top battens.

I had good all round speed at the Nationals mainly due to sailing with a large fleet of keen Taipan sailors at PMYC. We all worked together, shared ideas and gave it all when we had tuning sessions. Greg Goodall's advice on rigs, sails, setup, as well as 2 boat tuning was invaluable. The fact that he races at our club is a bonus. In fact, that is the best piece of advice I can offer - if you can work as a fleet and spend time on the water tuning as well as racing you will improve much faster than doing it on your own. Apart from improving faster, it's alot more fun.

Lastly, since we enjoy sailing a truly one design boat, the most effective way of improving in a regatta, is having a plan. How to approach the starts, where would you like to be on the course tactically, keep your head out of the boat etc, etc. As well as basics like don't get caught up in duals in a big fleet, don't end up in the "corners" of the track and overlay marks. Try reading Dave Dellenbaugh if you are interested in race tactics. It's also good to know the racing rules. Not because you want to look like a hero in the protest room, the knowledge helps avoid the protest room (and collisions).