

## Weighing the Santana 20

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**By Santana 20 Class Association President Derek Martin**

A long standing issue within our one design class has been how to best measure the weight of our boats. Our measuring rules have long called for the use of float tests (with float lines marked on the boat) but we know that this method can be difficult and inaccurate. The alternative is to use an accurate weigh scale however there are complications with that too – expense, access to hoists, setting a weight specification, etc.

The time is right to make a change but it must be done with great caution, patience, and support and participation of the membership.

To start the process, the Governing Board of the Santana 20 Class Association recently purchased an excellent quality 2000 lb digital weigh scale and has sent it to several fleets to collect data on the weights of our boats. After conferring with US Sailing and other Classes, the boats will be weighed with only hatches, floorboards, and spinnaker poles. As of this memorandum, 22 boats in Eugene and 10 in San Diego have been weighed with the new scale. The Oklahoma fleets will get the scale next, and this should be complete in the next two weeks.

Building a database is the first step in determining the minimum weight for a Santana 20 boat. Note that the boat is marketed as weighing 1350 lbs. The next step would be to develop weighing procedures (what gets weighed, etc.). The final step is to amend the Bylaws of our Association to make the weight and procedures cast in stone. This last step, of course, only happens with the consent of the membership – via a vote.

It should be noted that the weight of a boat does not seem to be a good indicator of how well the boat will perform; known heavy boats have performed very well while known light boats have performed worse. More weight data will help us understand if there is a correlation between the weights of our boats and how well they perform.

What follows are several questions (and our answers) that we imagine you might ask.

### **Why are we doing this? Has it been a problem in the past?**

There are two main reasons.

First, using float lines is an inherently inaccurate, time-consuming, and manpower-intensive task. It requires the water to be absolutely glass-smooth, the boat to be level and motionless, and if a boat is underweight – multiple trips to the weight locker as weight is incrementally added. Anyone who has ever gone through this will tell you what an absolute pain in the rear it is.

Though not a reason to change, it appears that our class is increasingly in the minority by continuing to use float tests – most are now using scales to weight their boats.

Second, weighing boats with a digital scale is easy, fast, and accurate. Pull the boat up to hoist, hook on, raise the boat just enough to get her off the trailer, take the reading, set her back down, and move on to the next boat. Since the boats will be weighed empty (with only hatch covers, spin poles and standing/running rigging on the boat), this can be done while the sails are being measured separately, thus improving the rate at which boats can be measured at an event. With the current procedures, the boats are floated with all of the above onboard, plus sails, life jackets, floatation devices, etc.

In the past, none of this has been a problem, mostly because float testing was not conducted. Though float lines were marked on the boat, they only served the purpose of being able to conduct a proper float test should the need arise (e.g. as a result of a protest). The last Class Measurer to actually go through the procedure as it is written was John Papadopoulos back in 2003. You can ask him (or anybody who went through that measuring process) how much fun that was. So we currently have a set of procedures that nobody really wants to use. That does not bode well for the long-term health of a one design class.

### **What will be the plan for determining the minimum weight of the boat?**

There are two obvious choices: leave the official weight at 1350 pounds, or specify a heavier weight. Of the 32 boats weighed so far (with only hatches, sheets, and a spin pole aboard), nobody came in under weight. So the first choice is easy, the second one more complicated.

First off, let me just say that I understand that anytime you start playing with the minimum weight of a boat, many boat owners will experience a certain level of anxiety. After spending thousands of dollars on a boat, keeping it in fine racing shape and legal, a boat owner will be rightly upset to find out that rules have changed in a way that may impact him/her.

If we choose to move to a higher weight, there will be several competing factors at play, including: preserving the weight of a new-build boat, ensuring the value of "heavier" boats, not penalizing those owners that have worked hard to keep their boats light.

After talking with one design experts at US Sailing Association, other class presidents, measurers, and Tom Schock (who wholeheartedly supports this effort), what we need to do is come up with is a weight that our class feels comfortable with.

Every one design class is different and has its own personality as to what level of sophistication they want to go with something like this. This requires discussion, and the more brains we have contributing to this effort, the better.

We will be publishing all the data after the weighing efforts are complete, so that everybody will have a look at it, and you can offer your own conclusions and recommendations. As it stands right now, we hope to have somewhere around 40 boats weighed, and with a current registry of around 90 boats, this is a very good sampling.

Only boats that have been dry-sailed (meaning they have not been sitting in the water when not in use) have been weighed for our purposes. Obviously we can't weigh every boat in every fleet, so we have been concentrating on the bigger fleets. Each fleet that has been weighed already knows what their group results have been.

Once we are complete with the Oklahoma boats, we will publish all of the data and let the discussion begin, using the forum on [www.wws20.org](http://www.wws20.org) as our primary venue. Hopefully responsible and mature discussion will ensue.

### **Does the Governing Board have a time-line for bringing this to conclusion?**

Yes and no. The general plan is to get a good database built up first, then start the discussion among the members. As the discussion continues, there will be probably be two or three competing plans that will emerge.

At some point, the Governing Board will determine that the discussion phase has run it's course and will come up with it feels is the best course of action, based on the wishes of the membership. Then, the Board will present a draft wording of the changes to the Bylaws, and will then let the Membership comment and suggest changes. The Board will then make changes as needed, and then present the final version to the Membership for a vote (probably electronically).

We really want to take our time on this and get it right, and there is absolutely no need to rush this process. The rules and procedures we have in place now will continue to work just fine, as they have for the last 33 years. I think an acceptable conclusion to this process would be to have it complete before the end of the calendar year (2010) and in place for the 2011 Nationals at Oklahoma City, but the Board is not wedded to it.

**Will this have any impact on the measuring-in process at the 2010 Nationals? Will my Measuring Certificate still be valid?**

Your current M/C will still be valid, and the existing procedures will be utilized at Huntington Lake. We are hoping to have the Membership engaged and educated in the process so that we can have a good discussion at the Annual Meeting.

**Are there any dangers in doing this?**

Yes, there are. Change is scary and uncomfortable. The old adage of "if it ain't broke don't fix it" may very well apply. If the official weight changes to something more than 1350 pounds, some owners will have to add some weight. If the weight isn't set higher, some of the owners of heavier boat may feel at a disadvantage and discouraged.

As our boats age, it will be increasingly common to rehabilitate them and that may provide an irresistible opportunity for some owners to seek out ways of saving weight that might not comply with the spirit or the wording of our class rules.

We have been a fairly laid back class and we do not get overly hung up on minutiae, so again let me restate the mission of our efforts: (1) develop scale-based weighing procedures, and (2) develop a weight that the Class is comfortable with.

On the opposing side of the question, a well thought out minimum weight can be a great asset to a one design class. This will be the first time in the 34-year history of our Class that the Membership has tackled this issue. It will be well worth it in the long run and I hope you will join us in the spirit of helping ensure a vibrant future for our great one design class.

**Hope you all are enjoying the water, warm weather, and our great boat!**

Derek Martin

President, S20 Class Association