

Ruling 040401 - UNDERWEIGHT MYLAR JIBS April 10, 2004

The class was recently made aware that some "underweight" Mylar jibs have been produced for Buccaneer 18's. These jibs were made with Mylar laminate weighing less than 3.8 oz /square yd. The class adopted a minimum 3.8 oz/sq yd cloth weight specification in 1996 when Mylar was approved as a material.

After the issue was raised, sailmakers were contacted for information regarding the sailcloth used in their Buccaneer 18 Mylar jibs. Several sailmakers confirmed that they were using a 3.8 oz actual cloth weight. The cloth manufacturer's specification may be lower than 3.8 oz/sq yd in some cases, but sailmakers use the actual weight of the cloth which is provided with every lot.

North Sails confirmed that their Mylar jibs produced in 2003 up through Dec 2004 used a fabric with an actual weight closer to 3.4 oz/sq yd.

An investigation was undertaken to determine:

- How the situation came about
- The implications for competition
- A recommendation for how to treat Mylar jibs under the class weight

How We Got Here

North Sails indicated that the copy of the class rules they were working from did not indicate a 3.8 oz minimum spec for the Mylar jib. This raised questions given that the ballot to allow Mylar jibs had been voted on and passed in 1996. At that time, there was a clear understanding that the Mylar jibs would have a 3.8 oz/sq yd minimum spec. This matched the pre-existing Dacron spec.

Investigation found three versions of the class rules in "recent" past,

- 1994
- 2000(draft)
- 2004

The August 1994 specification does not have any mention of the Mylar jib. It calls out 3.8 oz/sq yd. for Dacron. The ballot initiative was passed in 1996. The draft copy of the 2000 class rules reflected the 1996 ballot and allows for Mylar jibs with a minimum of 3.8 oz/sq yd. The current September 2004 revision also reflects the 3.8 oz/sq yd minimum cloth weight

It seems, however, a disconnect occurred between the specifications as adopted in 1996 and the class rules that were provided to the membership after that time. The hardcopy constitution and rules sent out as recently as 2003 were the August 1994 revision. Some members received 1994 versions of the class rules with addendums dated 2000 but the addendums did not reflect the Mylar specification.

The electronic draft revision of the 2000 class rules was made available in electronic format for the BNAC website in 2004, but many members and vendors may not have been aware of this.

In September of 2004, the class rules were revised to incorporate the sail plan height changes and any other previous changes. The current published document reflects the specifications as we know them today including a 3.8 oz/sq yd minimum weight for Mylar jibs. This revision has been posted to <http://www.buccaneer18.org/BucconstSept2004Rev2.pdf>.

There appears to have been no formal system for ensuring that sailmakers were working from the current revision. It is probable that, until very recently, the majority of the class, and any sailmaker that asked for a copy of the constitution, would have received an August 1994 revision. It is also probable that "institutional knowledge" of the Buccaneer Mylar specifications could be easily lost over time by a sailmaker. This is especially true in larger companies involving multiple lofts. Lacking definitive specs, sailmakers go to what they determine as "appropriate" construction given the loads involved. They also tend towards materials that are used across classes to simplify manufacturing.

Performance Implications

The 3.8 oz minimum specification for Mylar appears to have been created to match the Dacron specification. In theory for a given material strength lighter sails could have the following advantages:

- Better performance in very light air as the lighter fabric would not cause the jib to sag as much.
- Less weight aloft leading to reduced pitching moments

The tech group had some disagreement on the practical significance of cloth weight on performance. The general consensus, however, can be summed up as follows:

Cloth weight has some effect and we should continue to control it as a class. The extent of the performance difference is not so large that we should disallow existing jibs but large enough that an effort should be made to eliminate the difference to the extent possible

It was also noted that lower cloth weight sails were likely to lose racing shape faster. There are very few existing underweight jibs that have not seen service at this time.

Recommendations

If we could state with confidence that the membership and sailmakers had the correct specification the issue would be cut and dry. Underweight jibs would not be allowed. In this case however it seems that the class bears some level of responsibility.

The following played heavily in determining a path forward

- The lack of adequate revision control
- No intentional violation of the spirit of fair play
- Feedback from the tech group

The class leadership has decided on the following ruling:

1. Mylar jibs produced with a cloth weight of less than 3.8 oz/sq yd before the date of this announcement will be "grandfathered". They will be allowed in sanctioned competition subject to #3 below.

2. Mylar jibs produced after the date of this announcement must meet the 3.8 oz/sq yd minimum cloth weight specification in the current revision of the class rules unless the class rules are amended at a future date to reflect a different specification.
3. Sailors with underweight Mylar jibs are encouraged to obtain and race with jibs that meet the minimum weight specification. We understand that not everyone will be able to afford to do this.
4. Sailors who purchased underweight Mylar jibs in 2004 will be granted an exemption from the restriction of purchasing more than one set of new sails in a year as outlined in the class rules provided that:
 - a. The replacement Mylar jib meets #2 above
 - b. Sailors exercising this option cannot measure in or use the underweight jib in a sanctioned event from the date of this announcement on.

The intent of #4 is to allow sailors to become compliant by buying new replacement jibs while eliminating any advantage from having the jib being replaced available as a back-up.

5. The technical group will review the sail material specification and recommend clarifications as warranted.
6. The class leadership will work to ensure that class members and sailmakers are all working from the most current revision of the constitution now and into the future. Although we can expect improvement, it is the obligation of every person who buys sails to forward the most current copy of the constitution to their Sailmaker. Since there are a large number of sailmakers, it is impossible for the class to monitor whether every sailmaker is compliant with the rules. The responsibility clearly lies with the buyer. So it is Caveat Emptor (buyer beware) that will dictate further compliance. The class will monitor the competitors, the competitors must monitor the sailmakers to ensure their purchases comply with the rules.