F2D News - April 2011

Mark Rudner rudner@mit.edu

At last, after a long winter, I can finally report that I just came back in from flying. Conditions were far from pleasant (around 45 degrees Fahrenheit, and very windy), but tolerable enough to put up a few flights. Actually, this was our second flying session of the year. Last weekend, we were blessed with a truly beautiful day (one of New England's 10 randomly distributed days of Spring), which gave me and Greg our first chance to dust off the handles and make a trip out to the soccer dump.

At the start of the season, there are always some cobwebs to dust off. This time, I had the "opportunity" to relearn an old lesson (i.e. I had an "I should've known better" moment)... What happened, and what can you do to prevent wasting time repeating the scenario?

After a long winter in storage, under who knows what kind of climate conditions, there is a good chance that your models may be sagging a bit in the covering. Loose covering is a deceptively malicious malady for a combat model. From a distance, everything on the model may look great. There are no holes, the structure is sound, the controls are working; everything seems to be in order. However, with loose covering, your model will be slow, and will not turn properly. Furthermore, loose covering may increase the risk of of more serious covering-related problems such as loss of panel and separated trailing edge.

Being aware of this issue, and remembering from the end of last season that the covering was starting to separate from the trailing edge on my favorite test model, before loading the car I reinforced the trailing edge seams with overlapping 1/2 inch Fascal strips, and whipped out the heat gun to shrink up the covering. However, I was so focused on the trailing edge that I forgot to do a thorough inspection of the covering across the entire model. While the trailing edge is indeed perhaps the most common site of covering detachment, the area around the motor mounts (especially the sharp corners near the spars) is a prime location for initiating very serious covering tears.

Unfortunately I neglected to inspect the area around the mounts, and 30 seconds into my first flight a rip propagated out from the motor mount and took the whole first panel on the bottom of the outboard wing with it. When this happens, it usually happens suddenly, and is accompanied by a rapid drop in altitude. Luckily, I had just completed a maneuver and was able to keep the model out of the ground. Just as likely, a fraction of a second before, it could have embarassingly caused the model to pancake into the ground. Actually, though, I should be just as embarassed for flying a model with covering that would fall off as if I had gone into the ground as a result of it. The point is that this is simple and standard aircraft maintenance that we should all be responsible for throughout the season, and especially now at the beginning of the season as we bring our equipment out of the mothballs.

My purpose in sharing this tale of embarassment with the world is to remind everyone to throughly inspect your equipment before going out to fly. Check the covering. Check the controls. Check the connector between the pushrod and control horn (it is particularly annoying if this part gives out mid-flight). Check your lines. Balance your props. Look for cracks. It only takes a couple of minutes, and can keep you from becoming the butt of all of your friends' jokes.

The good news that I have to report from this outting is that during the 30 seconds of flying that I got in before losing my covering, the model and engine were working great, even with the new 6 mm outlet muffler. In more good news, we have two new contest dates to advertise. First, we are planning an F2D (single airplane) season opener for the weekend of May 29. Then, we are planning to run the 2nd annual New England Cup on the weekend of Aug.6-7. It should be a beautiful contest and a perfect final tuneup for the Team Trials. These dates are still tentative, awaiting final approval and sanctions, but I suggest penciling them in your calendar now so that you won't miss out. Stay tuned for confirmation and more details!