

## F2D News - Special World Championships Edition 2006

Mark Rudner  
rudner@mit.edu

SPECIAL EDITION - World Championships 2006  
I've just returned from the World Championships, which were held in Valladolid, Spain this month. It was a good contest, and I felt like things ran pretty smoothly for the most part. The combat site was excellent, with one official circle and a run-off circle layed out on a beautiful soccer field at the sports complex of the local university. Three additional practice circles were set up in a grass field on the opposite side of the gymnasium. Although the combat site was separate from the other events, it was only a short walk/ride between venues so it wasn't unreasonable to pop on over to the main site to check out the F2C lap counters... oops, I mean check out some exciting F2C races.

A hard center made out of a fairly thick piece of wood was used for the pilot's circle. Because I did not have a chance to fly on this surface I can't comment on it too specifically, but the step up onto the wood center circle looked a bit high and potentially dangerous to me. Before the competition I heard a few complaints about this, but once things were underway I don't recall hearing about it again.

After the team manager's meeting, we were greeted with an interesting 3 page document full of new rules interpretations, clarifications, and modifications. Because of recent concerns about safety, this world championships was run with a clear emphasis on clean, safe flying. The jury's ammendment packet that we received made it clear that dirty or reckless flying would not be tolerated, and that disqualifications would be handed out liberally. Perhaps it was the deterrent effect, or maybe just a coincidence, but the flying did seem fairly clean for the most part and I didn't notice a huge increase in the number of disqualifications as compared with previous champs[1]. In a week of flying, though, I only saw 2 flyaways, neither of which went more than a few meters from the edge of the circle. This seems to have calmed the concern/panic over flyaways a bit, and will hopefully help give us some time to properly consider the flyaway issue in more detail and to develop the technology before any rules are set into place.

In addition to the safety-related changes, one ammendment that was put into place this time was a ban on withdrawing/servicing downed models before the pilots have finished clearing any line entanglement. A few years back, I was happy to see

the implementation of the rule prohibiting mechanics from entering the circle when one model is down but the other is still flying with lines tangled. This clearly presents an unsafe situation and puts the mechanic at great risk. However, when both models are on the ground, it is not clear what the problem is with removing a downed model if this action does not impede the pilots from clearing the line tangle. In an extreme example of this, the British team encountered the situation when Dave Riley's model's lines were cut and his model landed outside the flying circle. His mechanics were able to service the model outside the circle and transfer the streamer to the spare model while the pilots were still untangling the lines. This in no way hindered the pilots from clearing the tangle or posed a danger to anyone, yet the Brits were handed a 40 point penalty which cost them the match. In my opinion, this was an unreasonable penalty, and I hope that this newly added rule will be reviewed and reconsidered before future championships.

Although this new rule has little to do with safety, the jury meant well by it and possibly hoped that it would in some way lead to better "fair play," or eliminate some element of luck from the sport. I'm not sure that I agree with this opinion, however. In my view, the team that is able to get the model serviced quicker deserves an advantage. In the example mentioned above, although the Brits were able to transfer the streamer more quickly than their opponents, the fact that their primary model's lines had been cut meant that they were already at a severe disadvantage in the match. Some people feel that the mechanics should play a very minimal role in the bout and have as little an impact as possible on the outcome. Others, myself included, view F2D as more of a team sport in which the pilot plays the dominant role, but the mechanics may also share a significant responsibility for the success of the team. Which direction the sport takes as we head into the future will be a matter for the group to decide at large.

Okay, enough digression... back to the contest. For the most part, the equipment in use was what we've come to expect these days. Foras and AKMs were the dominant engines, with Zorros, a few Cyclons, Redkos, and other engines also dotting the field. The usual suspects Boris Faisov and Stas Chorny had a noticeable power edge over the com-

petition, but many other pilots had good speed as well.

The one piece of equipment that really stood out this time was Igor Trifonov's composite models. Ivan Mackenzie of Canada took a series of photos of these models, available via Preston Briggs' website <http://www.clcombat.info/>. These models had a carbon fiber reinforced center rib, carbon fiber spars and trailing edge, a molded carbon fiber leading edge, and kevlar wrapping around each rib. Each model had approximately 70 Euros worth of materials inside. Although the models didn't seem to have any particular performance edge over others, they demonstrated an uncanny degree of crash survivability. In one match, we witnessed a single one of these models survive 4 midair collisions and remain in flyable condition. The opposing model's propeller was completely shredded by the encounter.

Although these models are a very cool innovation, many fliers are worried about their potential for escalating the cost of staying competitive in F2D. If competitive models suddenly reach the \$100+ range, we will certainly see a drop in participation. Fortunately, I didn't feel that these models gave him such an advantage that conventional models are in any danger of becoming obsolete in the near future.

This year we had 9 juniors in attendance, which constituted a pretty good field. Of these juniors, Arten Markov (Russia) finished in second place, and Jussi Forss (Finland) finished fourth. Both were flying very well and must be very happy with their results.

In addition to Arten and Jussi, several of the other juniors were flying quite well. Though he did not get very far in the competition, I was particularly impressed with the flying of Sam Hobbins (GBR). Sam has only been flying F2D for 18 months, and was already flying with great composure and control. With a bit more practice and experience, I'm sure he'll be a threat to watch for on the radar in coming years.

Among the seniors, no one pilot appeared to be head and shoulders above the rest from the get-go. In round one we witnessed *The Return of Slava* as Slava Beliaev returned to World Championships competition with a vengeance, delivering a crushing win over his opponent. This performance drew some concern that Slava would be back in top-shape for this contest, but he showed signs of rust in the next round by taking the whole streamer and receiving his first loss (he would eventually go out with a record of 2-2).

Slava was not the only pilot caught with a case

of the "kills." Throughout the contest it seemed that there was an epidemic of taking the whole streamer sweeping through the field. No one was safe from this disease, as almost every top name pilot was seen taking the lot at some point or another. Our U.S. Team was no exception, as we were hit hard by the affliction and forced to spend considerable time running defense. We had good equipment and all three of our pilots – Andrey Nadein, Chuck Rudner, and Mike Willcox – had trained intensely before the competition. They were all in excellent shape and flying well, but perhaps were a bit too hungry to prevail in this game of finesse and small cuts. Our junior pilot Holden Hill was also outfitted with excellent equipment, but unfortunately he too was not able to progress past the third round.

Some contestants raised concern about the quality of the streamer strings. The string appeared to be quite strong under smoothly applied loads, but was prone to snap when subjected to a hard jerk. On at least a few occasions it very much appeared that the string broke due to a hard slap near the middle of the paper streamer. While this should not happen, everyone was faced with the same situation so nobody was afforded an unfair advantage by this apparent problem.

Perhaps the best match of the contest came in round four, when Håkan Östman (SWE) and Boris Faisov (RUS) had an absolutely ripping match. Boris came out on top after several minutes of intense action, but then unfortunately both of these great pilots dropped out in the next round. In addition to these two, several other pre-contest favorites dropped out in the fifth and sixth rounds. Bryce Gibson of New Zealand suffered a heartbreaking loss in the fifth round due to a melt-down of ground support which forced him to watch the match slip away from his hands while sitting on the ground. Also gone in the fifth round were Alexander "The Robot" Shalaev (returning Junior W/Ch), Pavlo "Pinochet" Sodomov (Jun UKR), and Mike Willcox (USA).

Mike got off to a great start in his match against Igor Trifonov, with a nice small cut right off the bat. Just as he was dialing in for more, he had a relapse of the killing disease and took the rest of the streamer. One midair to the Trifonov carbon fiber wrecking ball later, Mike was flying along with half a propeller at about 50 mph and Trifonov was damaged but still on the prowl. Mike did an impressive job of defending his streamer in this battered state, allowing only one cut, but eventually his engine quit and we had to make a stop. Though we spent just over 10 seconds on the ground in the exchange, our fate was already sealed and Mike had to bow out of the contest.

Three more heavy hitters – Mike “Whacker” Whillance (GBR), Stas Chorny (UKR), and Chris Renton (NZL) went out in the sixth round. Whacker was the Brits’ last hope to score the coveted team points needed to at least bring their score above the Americans’. Trifonov’s models again appeared to be too much for even Whacker to take out, and the Brits had to settle for buying us a round of beers at the closing banquet[2].

By that point the field had been whittled down pretty heavily, and Trifonov began to emerge as the dominant pilot remaining in the field. Henning Forbech of Denmark was also looking quite good, especially as he delivered Boris Faisov’s death blow in the fifth round. Henning is another excellent pilot who has been around for ages, and it was great to see him flying well. Sadly, we all had to watch as he fell on his sword in the seventh round in a sudden collapse of Tacoma-Narrows proportions.

As the field continued to thin out, we saw Ivan Mackenzie of Canada proudly carry the torch of North America into the final three. Ivan had been flying solidly all week, and definitely earned his way to this spot. Along with Ivan in the final three were Igor Trifonov and Arten Markov. Because of the way the draw worked out, Ivan had to fly Markov to see who would get the chance to fly Trifonov in the finals. It looked like Ivan was off to a great start when Markov removed his whole streamer in the first minute. Unfortunately for Ivan, Markov had removed the ring along with the streamer and the match was terminated with a DQ.

The final match between Trifonov and Markov was a great match with cuts exploding all over the sky. I’m very glad that I didn’t have to judge that match, as it was very difficult to keep track of the score. Afterwards, spectators were quoting all sort of possible cut counts, some favoring Markov, but most favoring Trifonov. When the official results came in, it was 5-4 in favor of Trifonov and we crowned a double-world champion for only the second time in F2D history.

All-in-all, I think this was a great World Championships. Aside from the disappointment with our own results, I really enjoyed seeing all of our old friends and making a few new ones. It was particularly nice to learn how many people have been reading these F2DNews reports from all over the world. I hope all of you will continue to read it, and will offer comments or suggestions to me from time to time about things you might like to see. Congratulations to all of the winners, and good luck to everyone when we hopefully meet again in 2008!

- 
- [1] Note that there is little evidence to support a deterrent effect of the death penalty on murder rates in the U.S. Perhaps we may conclude from this that combat pilots are on average more forward-thinking than murderers
  - [2] It is a long standing tradition between our two teams that the team that finishes with the lower team placing has to buy a round of beer for the others at the banquet.