

Braiding Rubber Motors

by Ralph Kuenz

From SAM 86 Speaks, Dan O'Grady, Editor

I'll try to give you a real short version of my Hi Gumbandery piece that appeared in both the Flying Aces & the Famous Cloudbusters newsletter called "Twice Twisting Tan II".

Once you've decided the cross section you need, make up a motor that is twice as long and has one half the section. If it's a small motor, 1 or 2 strands, tie a 1" loop at each end of the big loop. If it's a larger motor, serve a small loop at each end with a small rubber band wrapping. Then, lube it. Then secure one end and put in 4-5 turns per inch winding in the same, I repeat the same, direction you wind in when flying. Then, bring the two small loops together and serve them together with a small rubber band. Then, "milk" the doubled over rubber until it forms into a straight braided motor. The two smaller loops will be relaxed, not twisted and will be easy to work with.

On a smaller motor you can then insert a 1/2" piece of a large plastic straw into the doubled over end which would go into the rear of the model, the rear motor peg goes through the straw. On larger motors use a section from a ball point pen cap, it's stronger. You can use a motor 2 1/2 times the prop hook/rear motor peg distance with this method.

Stretch wind in your turns, then just hold the model and be amazed as the rubber motor unwinds and bunches up in a series of twisted knots. When all the torque turns are out of the model, when the prop stops turning, there will still be considerable tension on the motor. It will not shift around and mess up the CG. No fancy stops needed.

If you are free wheeling, you'll need a latch type free wheeler as the simple spiral catch won't work, there is too much tension for it.

After the motor has unwound, you can grab the nose block and pull it forward and the bunched up motor will release about 50 turns and the motor will again hang out past the front of the model.

Thank Andy MacIsaac and Don Srull for this great and simple method of braiding. If you know Herb Kothe, ask him about it. I showed it to him at a past FAC NATS, and he wrote me back saying it has never failed.

No more need to have a tight large section motor peg to peg. You can extend it way beyond the length of the fuselage, calm down the climb, and extend the motor run, especially on unlimiteds and old timers. Have fun.