The Poorman's Slowflyer

Don Granlund's POORMAN'S Aerobatic Slo Flyer

While considering another indoor plane I was thinking of buying a small indoor aerobatic kit but after seeing what it would cost I decided to take another route. I took the general design and enlarged it buy ten percent so I could use cheaper servos and the Titanic drive.. As it worked out the plane turned out to be a good out door flyer. I flew it in winds last summer when other planes were left in cars.

Some of the changes I made besides enlarging were to add wing tips to add strength so the covering would not deform the tip rib. I added a rudder servo so I could fly with four channels. I webbed the wing with Spiderwire to add strength with no increase in weight. I also changed the landing gear mounting.

Construction

Wing-Cut the wing ribs from medium strength balsa. Use 1/8 sq. balsa spars. Web center section with 1/16 balsa. Web the rest of the wing with Spiderwire. Loop Spiderwire over spars and pull tight. Hit with thin ca. Sheet top of center section.

Fuselage- Use 1/4 " hollow carbon fiber tube for the fuselage. Glue blocks to the nose with ca to mount motor. Cut holes in the center section sheeting and slide the tube over the trailing edge and leading edge of wing. Bind with spiderwire and hit with thin ca. Glue balsa strips with ca to the rear of tube to mount tail.

Landing gear-Bind 1/8" brass tubing to mounting block and mount on the fuselage and wing. Use balsa to fill in behind block. Slide carbon rods into brass tube and spot glue with thick ca. If you break off a carbon rod you can drill it out and put in a new one. Bind axle wire to carbon rod with Spiderwire. Make wheels out of two 1/16" balsa disc's glued cross grain. Epoxy brass tube to wheel to slide over axle.

Covering-I used Model-Air Tech's Clear film for covering but any lightweight covering should work OK. I used covering material for all my hinges. Cut two 1/2" strips of covering. Turn one over and overlap the other one by 1/8" and iron down. Cut into 3/4" pieces and use for hinges.

Batteries-I have used both an 8-cell 270 ni-cad and an 8 cell 550 NIMH. The plane balances with these packs in the front wing bay. I have tried smaller packs but the ones shown have given the best results.

Drive unit- I use the Model-Air Tech's Titanic 4 to 1 drive unit on 8 cells. This unit comes with a 9 x 6 APC slow flight prop. I have tried other props but nothing works as good as the 9 x 6. I used a FMA 5 amp speed control.

Flying-The plane will take off in a few feet even in grass. It will loop, roll, fly inverted and if you use a rudder servo stall turn and sort of spin. It doesn't have much of a glide so it is best to land with power.

Build one, you will like it. Take a pocket of charged batteries and go to a park or small field and you will get in all the flying you will want in one day.

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