

BUILDING THE MEGOW FOKKER TRIPANE

By Mike Nassise

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What has become almost a sacred cow in the FAC community is the belief that we should stay away from the Fokker Dr. 1 triplane if we want any hope of success in free flight scale competition. Having tried unsuccessfully to fly my own Dr. 1 model, I contacted New England FAC'er Tom Nallen II and sought out the secrets of his success with the old Megow version of this airplane, one that Tom says can consistently put in 50 second flights in light wind.

"Here is a little background on the 12" Megow Fokker Triplane that I'm currently flying. It does meet the new 12" Dime Scale rules, but to me it will always be a Peanut Scale model. My model has 50 square inches total wing area and weighs 8.6 grams all-up without rubber. The motor I use is made from one loop (15") of 1.5 mm Tan II plus one loop (15") of 1 mm Tan II braided together. Along with this motor I use a Stott rear peg ("de-knotter") and a 5.25" diameter carved balsa prop (unknown pitch but somewhat higher than the same diameter Peck plastic prop). Decalage (relative to thrust centerline): 0 degrees bottom wing, 0 degrees center wing, slightly positive top wing, stab positive on top rear fuselage **per plan**. The dihedral is 0.25" per panel on all three wings. Wing and tail trim: approximately 1/16" washin left top wing panel, other wings straight, stab straight, slight left rudder offset.

The model was constructed per plan with all structure of 1/20" square balsa strip wood. Outlines, ribs and formers were made from 1/20" and 1/32" sheet balsa. The balsa block cowl was hollowed and then mounted permanently to the fuselage front. A 1/2" diameter removable balsa noseplug with a 1/64" sheet plywood face and -3 degrees thrust offset built-in was fitted into the cowl front. The wing rib section (height) was thinned slightly to reduce drag and a top spar was added to all wings which were built one piece with center sections. The cabane and landing gear struts were made from 1/16" diameter reed with short monofilament pins embedded into the ends and fitted into sheet gussets in the fuselage box. A flat surfaced LG spreader "wing" was added to enhance realism. Lightweight tracing paper, tissue covered using 3M spray adhesive, was substituted for bond paper. The entire model was covered with lightweight pre-war Japanese tissue chalked red for the upper surfaces and light blue for the undersurfaces. White insignia fields were sprayed on using Rustoleum Painter's Touch sandable primer and black tissue crosses applied before covering. The tissue was applied with water thinned Elmer's white glue (30% glue to 70% water).

The assembled model was test glided without prop and with a small ball of clay assed to the nose for balance. The glide was smooth and straight from the beginning, building confidence. Initial flights were carried out indoors with much lower power than the final motor specified above. The model flew stably to the left, right off the board. The round nose plug was not keyed so it could be rotated to vary down and side thrust conveniently. I still have not keyed the noseplug because my Dr.1 can be made to fly different patterns (left circling vs straightaway climb-out) by offsetting the plug slightly. The little tripe definitely feels the drag of its three wings, and flies at higher power-to-weight ratios than other peanuts I have built and flown. At max winds, she powers out of the hand and banks hard with torque against the washed-in port panel. The burst bleeds off quickly and the model decelerates with drag into a level left turning pattern. With the noseplug rotated to give slight right-thrust she climbs away straighter, but is also more prone to upset in any amount of wind. The model requires a bit of clay on the prop hub to balance and, surprisingly, glides well when the power runs out. The Megow triplane is a ball to fly and will consistently do 50 second flights as long as the breeze is light, I highly recommend this classic design."

Below is a shot of the bare bones of Tom's DRI

