TANKS
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high enough to shut off the flow.
Fuel feed to this lower tank is strictly by gravity which means that you should always make sure to have the main tank higher than the valve. A float stop must be used to keep the float from falling too low and allowing the valve pin to fall out. This is simply done by soldering a pin, or piece of tubing, to the wall of the tank.

How long you can fly is strictly a matter of how long you can keep the engine running. Fuel consumption runs higher with heavy, draggy and logy models. Medium or lower pitch props are also and advantage.

There's little more to say. If you want to try endurance flying, this is one way to solve your fuel problems. Maybe you can be the one to push the Academy of Model Aeronautics non-refueling endurance record way up the line. As of now, the sky's the limit.

AEROSTREAK
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Observe that the ends are swept up from the bottom to form the tips. Sand the wing smooth, cut it in the center, and form the dihedral angle in the joint as shown. Apply several coats of cement to the joint allowing it to soak in-between coats. Apply a last coat and join the pieces. Carve a depression in the fuselage where the wing rests so the wing can set flush. Cement the wing to the fuselage and make the joint secure with a cement fillet. Align the wing carefully so that it sets at right angles to the fuselage. Cement the finger rest securely in position.

Sand a slight curve to the top of the stabilizer but leave the edges rather blunt instead of tapering them to a feather edge. Mounting the stabilizer should be done with precision or the glider may be ruined as far as good flights are concerned. Since the top of the fuselage is straight, the stab rest should now be exactly in line with the wing. Beginners should leave it that way.

However, for maximum altitude the stabilizer needs positive incidence. The rear of the fuselage is rounded so that the back of the stabilizer is lower than the front. Some modelers use as much as 3/8". However, this positive incidence makes a glider somewhat touchy to trim because if it stalls or otherwise goes into a dive it is not likely to recover. Also, it will be difficult or impossible to obtain a tight glide circle. Therefore it is well to learn the knack of glider adjustment with the zero-zero set-up and try positive incidence a little at a time.

Many modelers stick with the zero-zero set up and trade some altitude for the better glide stability. In either case, sand a slight angle to the stab rest so that the stabilizer is tilted 1/8" to the side. This may seem insignificant but in gliders a little stab tilt goes a long way. Cement the stab in place with a minimum of cement so that no fillets form. Mount the fin perpendicular to the fuselage and angled very slightly for a left turn.

The glider is ready for the finish—if one is to be applied. A calm air version can be left bare. For all-weather flying we recommend the weight and durability of a finish. It is important that the finish remain somewhat flexible and have a minimum of shrinkage. The following conglomeration works fairly well: one ounce dope (colored if desired), one ounce sanding sealer, three ounces thinner, fifteen drops castor oil. Apply only one or two coats to the rear halves of the stab and fin and as many as desired to the rest of the model.

Mold clay to the nose to balance the glider as indicated on the plan. Extend

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