



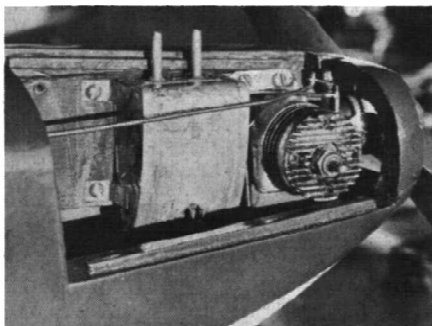


2412 to 2415 to permit slower flight and help carry the R/C load. The downthrust shown on the plan is identical with that of the real plane; only side thrust had to be added. Dihedral was increased only slightly. The force set-up evolved agrees closely with that of a high performance R/C airplane. To be certain of a good flying plane, the builder needs only to keep the weight down to a reasonable figure by careful selection of balsa, especially behind the wing. Like most scale models it is almost impossible to build one nose heavy, therefore use the lightest balsa available in the tail section and the heavy block construction in the nose.

The question of whether to apply a super-finish is the scale builder's dilemma. Of the two OE-2 planes built by the



Mrs. Bob (Dolly) Wischer and Army's TL-19D Cessna. Right: rcvr in foam; OS throttle escp; Bonner Varicomp (rear). Below: Fox with clapper throttle; tank, modified so all tubes are on same side, is fastened by brass angles.

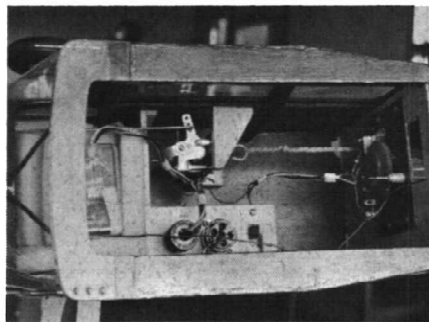
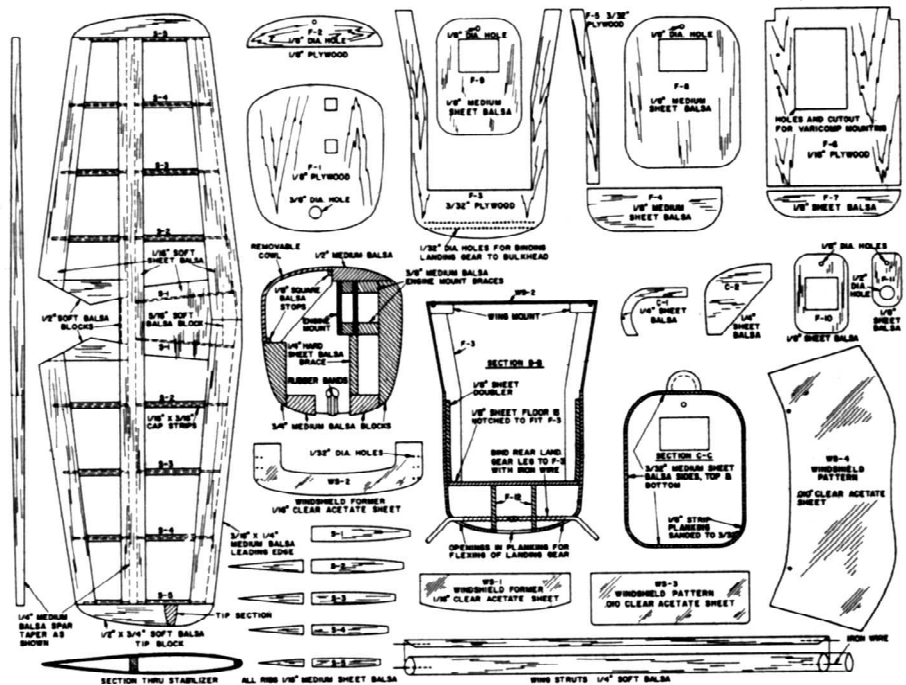


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wish to damage the product of many hours of labor and representing quite an outlay in cash. These models often weigh so much that a high speed is required to get them airborne and the end result is a mighty splat when they make contact with the unyielding earth. For more fun flying and less work patching, keep the weight down.

Contest judges are not always in agreement on the matter of finish. Some will insist that a military plane like the OE-2 should have a dull finish same as the prototype and will penalize the builder who shows up with a gloss. Others are completely taken in by the glitter and will give the prize to a plane so heavy with finish that it will barely fly.

If the builder plans to enter his OE-2 in contests he will be obliged to furnish proof of authenticity. By far the best source in this case is his file of *American Modelers* where he will find the well



executed scale presentation by Walter Jefferies in the Feb. 1957 issue. This drawing was repeated in the 1957/1958 issue of *Air Progress*. A larger but less detailed drawing was obtained from Cessna Aircraft Co. of Wichita, Kansas. For photos of the real plane see the Winter 1960 edition of *Air Progress* or write to Aviation Photo Exchange, Box 75084, Los Angeles 5, Calif. The writer's OE-2 has been entered in a number of contests and has collected its share of prizes, including two first places.

Flying the OE-2 requires no special skill or experience as it is a very forgiving airplane if properly balanced. Since the batteries and receiver cannot be moved very far fore and aft, they are not much help as ballast. Very likely the model will be slightly tail heavy when balanced at the point shown on the plan, and some compensation will have to be made in the form of weights added in the nose. When the plane is viewed head-on a deep pocket will be seen just to the right of the engine crankcase and this is a handy place to add weights. About 2 ounces of solder is used in the writer's plane and this is held in place by surrounding it with modelling clay. Weight should be added

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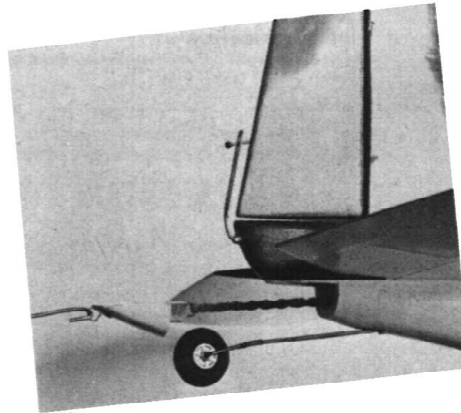
## Cessna

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to obtain a flat glide ending in a 2 wheel landing, not a 3 point landing. If the nose comes up in the glide or if the tail wheel touches in landing, add more weight to the nose.

With a .15 engine the OE-2 may be slightly over-powered, and first flights should be with a rich mixture to help slow it down. Rudder movement of 3/8" to 1/2" will produce turns that are not too steep. Due to the low dihedral in the wing there is a tendency for the OE-2 to continue turning after rudder is neutralized but this was considered acceptable in view of the improvement in scale appearance. Simply blip opposite rudder to stop the turn. Actually this type of flying results in smooth turns since there is no jerking as there would be in blipping around a turn. The receiver used is a Kraft operating a compound escapement and a two position throttle escapement. A clapper valve is employed over the venturi of the Fox .15 to give two speed control. A new engine may over-heat if run with the removable cowl in place. Most flying is done with the cowl and wing struts removed . . . however, in a contest they must remain in place or the flier risks disqualification.

Troublesome ground-looping tendencies are the main reason that some R/C models will not make those desirable, long, straight take-off runs. This



**Wischer's OE-2 Cessna: removable tail plug for winding escapement rubber; 1/16" music wire torque rod end.**

could be caused by misalignment of the wheels or binding between wheel and axle, but is more likely to result from the wheels being located too far forward relative to the plane's center of gravity. Should this occur with the OE-2, a small balsa block can be placed between the floor and the forward extension of the front landing gear leg to force the wheels toward the rear. Do not carry this too far as a nose-over could result, and also scale appearance will suffer.

Construction data appears on the full size Hobby Helpers' plans (Group #762).