



Designed by Pavel Bošak, this two meter powered glider makes an ideal way to get started. Designed for three function radio with a .10-.15 size glow for power. Could be set up for electric also.

It is my belief that a powered glider type is an excellent choice for a "Sunday Flier" sport type model. Its principal advantage is that the larger space required for a conventional glider, with the necessary towline, winch, or high start launch system, is not needed. Simply fuel up the Skybooster, check your radio system, and fly! In fact, if a diesel engine is used to power the Skybooster, the only necessary accessory is your fuel bottle.

I decided to design or build such a model for sport flying, and also as a training aircraft for my son (who is beginning to take his first steps into the wonderful world of R/C flying). I did not want to build a plain "boxy" type model, but wanted to create something that would resemble a full size powered aircraft. The result was the Skybooster; a model that flies as you would hope or expect — slowly, quietly, and without any bad habits or tendencies.

CONSTRUCTION

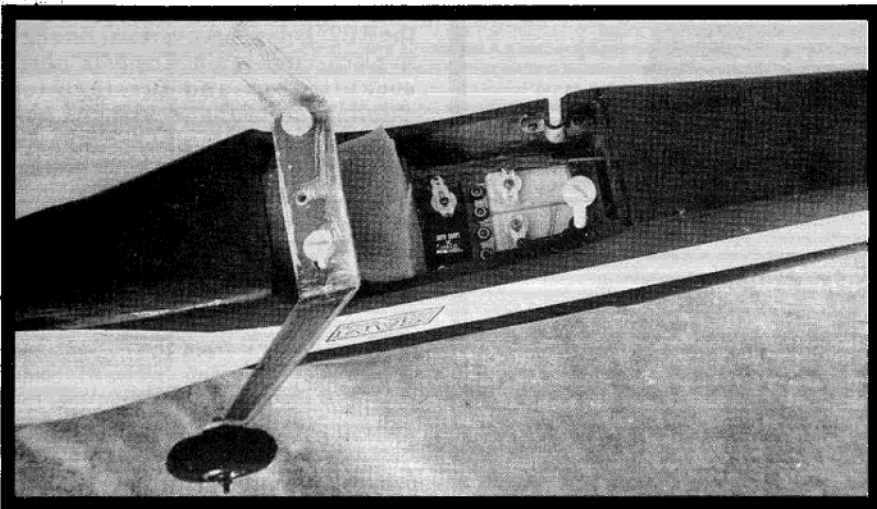
It is recommended that all parts be fabricated prior to assembly. By first doing this, a "kit" is created and the construction phase seems to proceed more rapidly. The construction of the Skybooster is quite simple and well within the capability range of all RC'ers except for an absolute beginner. Any modeler who has constructed a kit or two should not have any difficulty in building a Skybooster.

Wing:

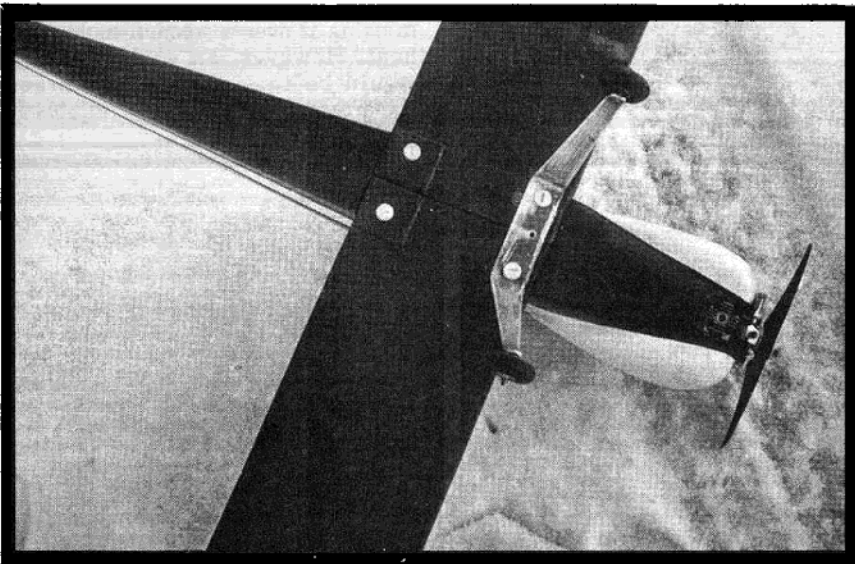
The wing is constructed directly over the plan sheet, as is the stabilator. There are five different types of wing ribs, with the locations clearly indicated on the plan sheet. When fabricating the wing ribs, it is recommended that the W4 ribs, of which 44 are required, be cut by first making two 3/32" plywood or 1/16" aluminum rib templates. Then sandwich ten or twelve 3/32" balsa sheet rib blanks between the

SKYBOOSTER

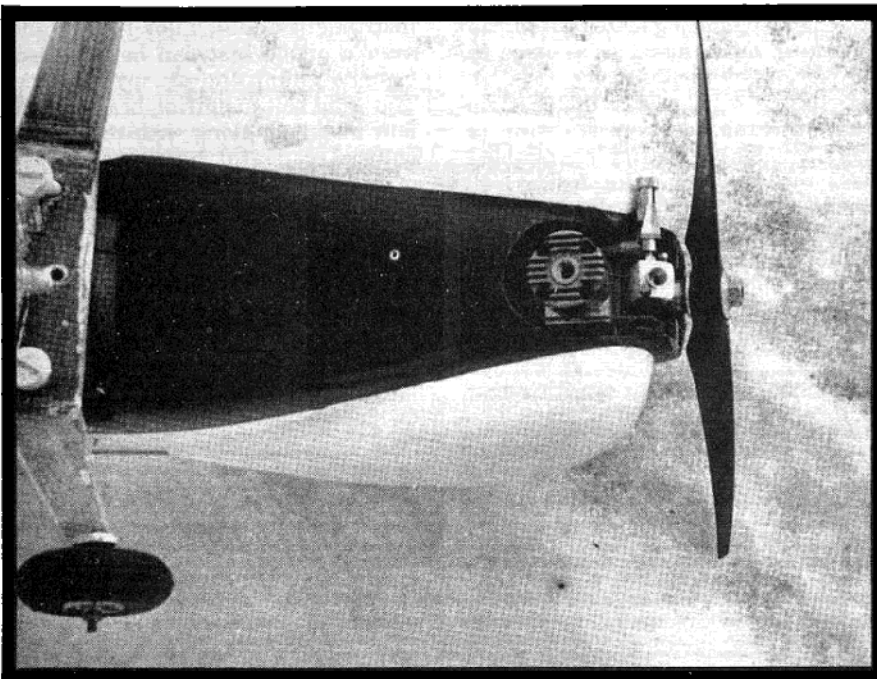
Pavel Bošak



Wing removed to show servo location. Nylon bolts in front hold wing and landing gear.



Wing bolted to fuselage shows landing gear mounting more clearly.



Underside of fuselage showing inverted engine. Makes a nice installation.

templates, bolt everything together, and cut, notch, and sand the ribs to shape. The wing panels are assembled by gluing the respective wing ribs to the spruce spars. The spruce spars should fit snugly into the wing rib notches. Cement the 3/16" square leading edge and 3/8" sheet trailing edge in place, along with the 3/32" sheet rib gussets. When dry, remove the wing panel structure from the building board and sand the leading and trailing edges to shape. See the typical wing cross section view to obtain the proper shape. Cement the 3/32" balsa bottom wing sheeting in place. The paper tubes that accept the

SKYBOOSTER

Designed By:
Pavel Bosak

TYPE AIRCRAFT

Powered Glider

WINGSPAN

78½ Inches

WING CHORD

7 Inches

TOTAL WING AREA

549 Sq. In.

WING LOCATION

Bottom of Fuselage

AIRFOIL

Flat

WING PLANFORM

Constant Chord

DIHEDRAL EACH TIP

2 Inches

OVERALL FUSELAGE LENGTH

40 Inches

RADIO COMPARTMENT SIZE

(L) 6⅝" x (W) 3" x (H) 2½"

STABILATOR SPAN

24 Inches

STABILATOR CHORD

4½ Inches

STABILATOR AREA

101 Sq. In.

STABILATOR AIRFOIL SECTION

Flat

STABILATOR LOCATION

Top of Vertical Fin

VERTICAL FIN HEIGHT

5¾ Inches

VERTICAL FIN WIDTH (incl. rud.)

6 Inches (Max.)

REC. ENGINE SIZE

10-15

FUEL TANK SIZE

2 Oz.

LANDING GEAR

Conventional

REC. NO. OF CHANNELS

3

CONTROL FUNCTIONS

Rud., Elev. (Stabilator), Throt.

BASIC MATERIALS USED IN CONSTRUCTION

Fuselage Balsa & Ply

Wing Balsa & Spruce

Empennage Balsa, Spruce & Ply

Wt. Ready To Fly 2 Lbs. 2 Oz. (34 Oz.)

Wing Loading 8.9 Oz./Sq. Ft.

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mounting bolts also hold the sheet aluminum landing gear in place. Install the radio system component and engine. Attach the stabilator and connect the control rods and throttle cable. With the Skybooster fully assembled and ready to fly (less fuel), balance the aircraft with weight or by relocating the radio battery pack, to obtain the Center of Gravity (C.G.) as indicated on the plan sheet. While my Skybooster was finished using the traditional tissue and dope method, most modelers will undoubtedly favor using one of the readily available heat shrinkable film type coverings. As mentioned, each of us has a favorite finishing method, and certainly a film type covering will provide a strong, lightweight, easily repaired finish that also looks good.

Flying:

Prior to the initial test flight of your Skybooster, be sure to recheck the aircraft to be sure that there are no twists or warps in the flying surfaces and that the rudder and stabilator are in the neutral position. After the customary radio system check and engine adjustment, you'll be ready to take to the air. Assuming that your Skybooster has been built according to the plan, is warp-free and balanced properly, there is no need to have any first flight fears or anxiety. You will quickly realize that the Skybooster is a docile, stable, easy to fly aircraft. Even relative beginners will have little trouble in mastering it. Take-offs will have to be via the hand launch method. While the .10 size engine produces ample power once the Skybooster is airborne, on the ground its power output is not sufficient to provide consistent rudder control response.

That's about all I can tell you about the Skybooster. I hope you will decide to build one and that it will provide many hours of enjoyable flying.

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