BLUE

A

A

NOSE

BLACK

WHITE

ROCKET POD

1/8" SHEET
2 REQ'D

B

GLUE FILLETS

TYPICAL SECTION

FUEL TANK FIN

ALUMINUM
2 REQ'D

BLACK

RED

WHITE

OUTER LAMINATION OUTLINE

LIGHT BLUE

BLACK

RED

A

FA-059

FUSELAGE

1/8" SHEET

A

WEIGHT

BLACK LETTERING

BALANCE

B

AIR INTAKE

1/8" SHEET
2 REQ'D

B

RED

UPPER RIGHT
LOWER LEFT
WING

USAF

HOOK POSITION

TANK

BLACK

BOTTOM ONLY

WING

1/8" SHEET
2 REQ'D

POD

CONTROL LINE HOOK

BEND FROM PAPER CLIP

WING POSITION

SLOT FOR FIN

PAINT INNER SURFACES BLACK

FUEL TANK

1/8" SHEET
2 REQ'D

ELEVATOR

1/8" SHEET
2 REQ'D

BLACK

ENTIRE MODEL IS PAINTED ALUMINUM EXCEPT AS NOTED

STARFIRE

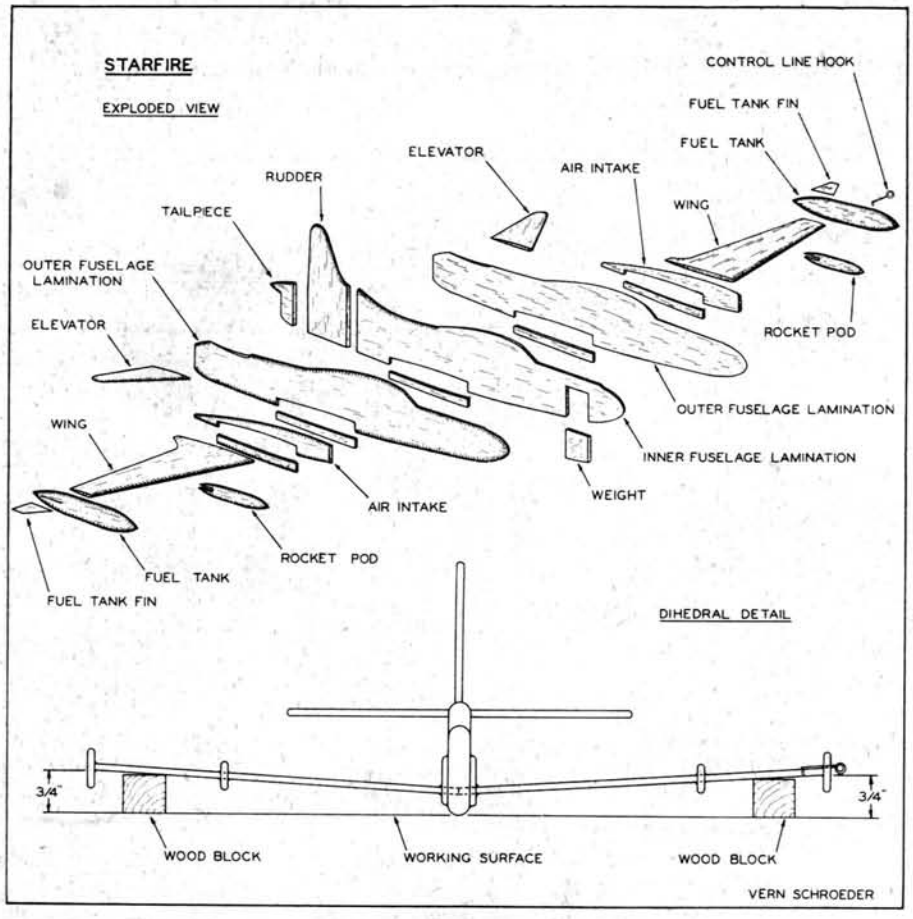
LOCKHEED F-94C

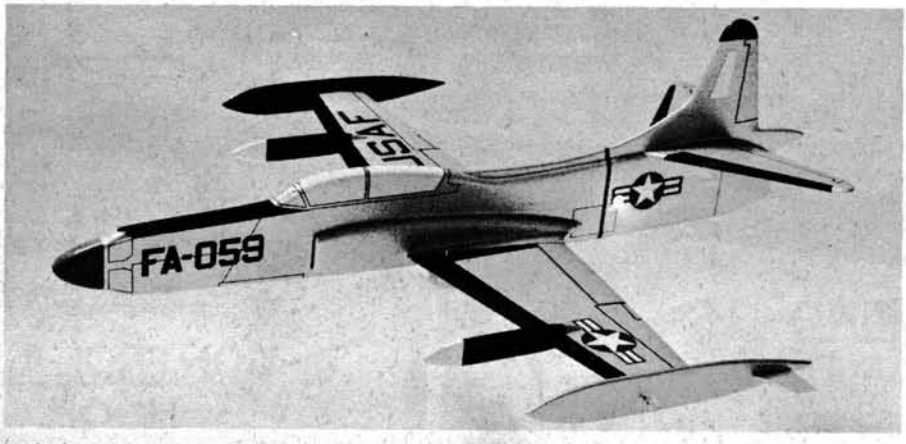
span 13"

VERN SCHROEDER

whip-control STARFIRE

Ready for launching, the author shows how the Starfire hangs on its line at the end of a pole. Though the elevator is not movable, ship can be maneuvered by lifting or lowering the pole.





With the help of the exploded drawing above, a nifty craft can be put together, provided you don't get impatient. Be sure to balance model as directed, do read directions before starting.

by VERN SCHROEDER

Real looking, it whistles as it flies. Besides the fun, it makes a wonderful preparation for U-control flying.

► Have you ever dreamed of flying one of those super-sleek scale jet jobs? Too much work, too much money, too noisy, you say. Here's one that can be built in a couple of evenings with a minimum of expense and effort. It looks amazingly realistic and sounds just like its big sister as it whistles past the spectators.

The secret of its simplicity is the fact that it is a "whip control" model. The idea is not new, being originated during the war (by Jim Walker) when no motors or rubber were to be had for powering of conventional models. Our model has a fixed elevator, rather than movable, as many whip models have. Though not as maneuverable, it is easier to build and to fly and makes an excellent model for a beginner who is just getting started in the control-line field.

The model presented here is the Lockheed F-94C Starfire, which I am sure needs no introduction, so let's get right down to the construction. The entire ship is built from one ⅛ x 6 x 36" sheet of medium or hard balsa. Trace all the parts onto the ⅛" sheet and cut them out with a sharp knife or razor blade. Note that the grain on the rudder runs opposite to that of the fuselage and there is a slot left in the center fuselage lamination for the addition of ballast. Cement the three fuselage laminations, engine air inlets, and rudder together and when dry, sand them to shape as shown in the fuselage cross section. Sand the wing and tail surfaces to airfoil shape and round off the edges of the fuel tanks and rocket pads. After giving all the (*Continued on page* 50)

FULL SIZE PLANS NEXT TWO PAGES

Whip-Control Starfire

(*Continued from page* 25)

parts of final sanding with fine sandpaper the model is now ready for assembly.

Insert the wings into the slot provided for them in the fuselage, block each tip up ¾" and cement them securely in place. Now attach the two elevator halves to the fuselage, making sure that they are properly aligned before the cement sets. Mount the rocket pads and fuel tanks and the assembly is now complete.

Wing and tail fillets are made by applying a large amount of cement to the junctions of the two surfaces and smoothing it off with the fingertip. Several coats may be necessary to build them up to the desired size. Bend the control line hook from a paper clip and attach it to the left wing tip as shown on the plan. After balancing the model at the point shown on the plans by adding weight in the hole provided beneath the nose, plug the hole with scrap balsa, sand it off smooth, and the model is now ready for finishing.

Give the entire model at least three coats of sanding sealer and, when dry, sand thoroughly with fine sandpaper. Now brush or spray on three coats of aluminum dope. The trim areas are masked off and painted the colors indicated on the plans. Finally, apply the star decals, the control surfaces and other markings, with india ink and ruling pen; give the model a coat of wax and she is ready to go.

For best results the model should be flown with a rod and reel type of fish pole, since the line can be let out in flight, thus simplifying launching. Dig that old rod and reel out of the attic or hall closet and you're ready for a flight. The length of the rod will determine the amount of control you will have over the model: the longer the better. About 25 feet of good nylon fishline should be enough. We use a small snap or control-line hook of some kind to fasten our line to the model.

For your first flights, select a calm day and a flying site covered with long grass to cushion any hard landings. With about two or three feet of line extended, and the plane held off the ground, begin to turn in a counter-clockwise direction. Centrifugal force will immediately bring the plane into an upright position. Now pay out about 10 or 15 feet of line slowly. Once you get the feel of it, try raising the tip of the rod to make the ship climb, lowering it will make the ship dive. By turning more slowly, the ship will slowly lose altitude and with a little practice you can slide the ship in for a belly landing if the field is smooth, or if you prefer, the line can be reeled in instead of making a landing.

Once you get the feel of the ship you can use more line but be careful not to let out too much or you may lose control of the plane. Once you've gained experience try balloon bursting or combat.

With no balky motors, no messy fuel, and no noise to bring the neighbors' complaints, you'll have plenty of good flying.