

# GERHARD FIESELER'S FLYING INSECT

By Michael D. Moses  
With an introduction by the Editor

## THE V/STOL STORCH

*Looking for something different but practical  
to build and fly? Why not try a long-legged  
bird called a Stork (in its English translation)?*

During the last two seasons, contest goers in the New England area have frequently been treated to some very impressive and scale-like VSTOL performances by a beautiful model of the Fieseler Fi 156 Storch as built and flown by Mike Moses, a university student from Wilmington, Delaware. Mike and his father Oliver are prolific scale builders and are well known and respected competitors in their area.

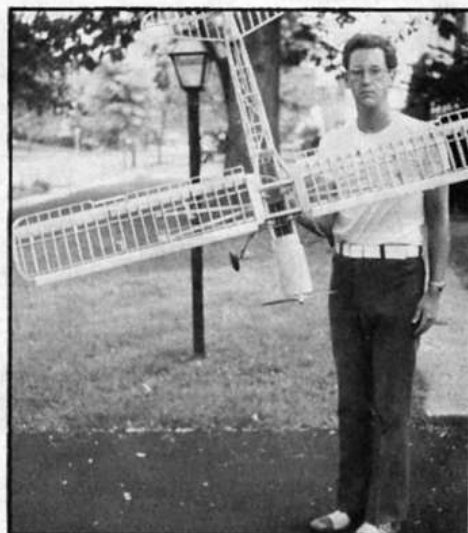
The Fieseler Storch (Stork) is one of those aircraft that is long overdue for attention by the modeling community. It was an amazing aircraft in real life and makes a splendid modeling subject as you will see from the following article. While Mike's Storch model is of conventional balsa construction, it certainly is not a project for the be-

ginner in radio control. Mike's article is straightforward and to the point as he has correctly assumed that those who might undertake this project should know what they are doing. The plans and photographs are what really tell the story.

As a scale oriented magazine, we feel that the manner in which a model relates to a prototype is an important concept. It should be almost as important to the scale enthusiast as how well the model flies. With this in mind, we would like to make a few recommendations for source material on the actual aircraft.

Probably one of the first things a scale model airplane builder thinks of when contemplating a subject is whether or not Profile Publications of En-

gland has published one of their famous "Aircraft Profiles" on the airplane. In this particular instance, the answer is a resounding "yes" with but one qualification. Profile Publications of England has recently been experiencing business difficulties and is currently in receivership. I understand from their United States representatives in New York that things are nearly straightened out across the Atlantic and Profile should be going back into production in the near future. In the meantime, the particular Profile that deals with the Storch is Aircraft Profile #228. It is one of their better efforts with eleven excellent color reproductions ideal for contest documentation. If you cannot find this Profile in your local hobby shop or bookstore,



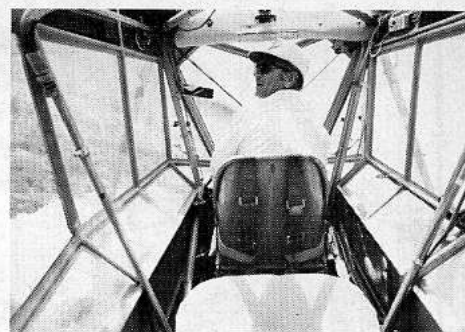
Builder Mike Moses proudly displays his uncovered creation to give an idea of the thoroughly manageable size of the model.

The Fieseler was well known for its vast amount of glass work, shown to good advantage in this close up of the rear of the cockpit. Note the MG-15 good for protection against such attacking aircraft as J3 Piper Cubs. Armament was light and virtually useless. Mike Moses accomplished the extensive cockpit glassing with clear plastic and "Hot Stuff" adhesive.



This photo of Perry Schreffler's Storch taken at Santa Paula during a test flight vividly projects the insect-like personality—and flying characteristics—of the VSTOL airplane.

The inside of an actual Storch is something on the lines of a cross between a hot house and a bird cage. Note the clear panels for downward viewing.



Instrument panel and flying controls of the Storch are relatively simple and uncluttered, a real point in favor of this subject when it comes to consideration for extensive detailing or even AMA Scale.

there are still copies available from the U.S. representative. Write to: Profile Publications, 979 3rd Avenue, New York, NY 10022 (Care of Inter/Graph). The price of the Profile is \$2.25 and there is a 35¢ postage charge. Orders must be pre-paid.

Another excellent source for information on the Storch may be found in Robert Trimble's essay, "Fieseler's Amazing Storch" which appeared in the March, 1975 issue of our own Air Classics magazine, the publication which inspired the introduction of the magazine you are now reading. There are, among other interesting items included in the article, numerous color photographs, a few of which we have borrowed and appear here. This issue is available from the Back Issues Department, Challenge Publications, 7950 Deering Ave., Canoga Park, CA 91304. Ask for Volume 11, Number 3, priced at \$1.50.

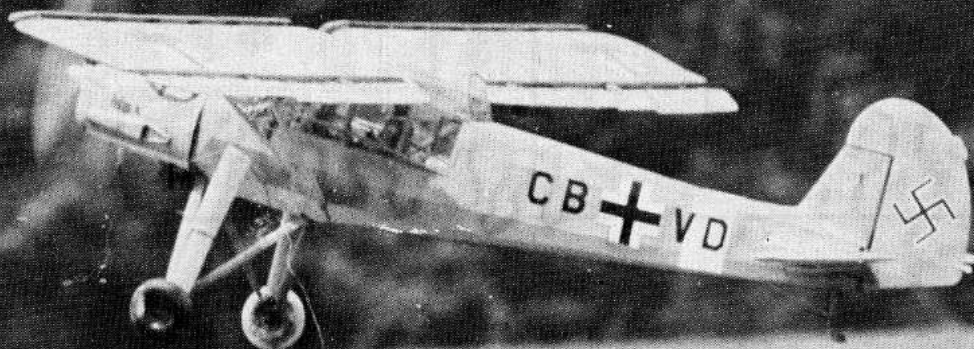
There is yet a third source available for excellent color profiles on the

Storch and this would be Air International magazine for April, 1975 (Vol. 8, No. 4). Five interesting color views appear on page 200 including a very attractive French Criquet (the virtually identical French-made version of the Storch) finished in an overall dark blue paint scheme with a red, white and blue rudder. As far as availability of this particular issue is concerned, one first must find a dealer in his local area who stocks this English magazine. We obtain our back issue copies of this publication from Ad'Air Book Shop, 7040 Deering Avenue, Canoga Park, CA 91303. The issue in question is available pre-paid for \$1.50 plus 50¢ postage.

Although a good deal of information has been published about the Storch in various books, the three above sources are by far the cheapest means of obtaining accurate detailing information on the aircraft.

We hope you enjoy Mike Moses' article.

Performing one of its super-slow fly-bys at a recent meet, Mike Moses' Storch as captured on film by Richard Uravitch is a most impressive performer.



## INTRODUCTION

The Fieseler Storch was one of the original STOL aircraft. This slow, graceful ship could putter along at 31.4 mph and land nearly vertically, a capability which was put to much use by the Germans during World War II. It never achieved the fame of other planes such as the ME 109, FW 190 and the Stuka but if you read some of the adventures of the Storch, you wonder why this is so. Storches were used in North Africa (where Rommel used one to direct panzer columns in the desert) in Italy (where a Storch rescued Mussolini) and various other areas throughout the war.

I guess the reason I picked the Storch was because it is different. Pattern planes that look and fly like guided missiles turn me off and unfortunately most stand off scale planes are super-speedy fighters that fly just like pattern planes. This model will take off

in 10-15 feet (scale take off distance is 20-25 feet) and will land nearly vertically with a slight breeze. It won't do fancy maneuvers but it sure looks nice to see the pilots inside on a low, *slow* fly-past. If you want a plane that's unusual and flies nice and slow, this one is for you.

## CONSTRUCTION

Since this model is for the experienced builder, I won't do a step by step procedure. Look carefully at the types of wood specified on the plans. If it says spruce, don't try to substitute balsa because it won't be strong enough. When gluing spruce, use a white glue such as Wilhold. The cement type glues dry too fast to soak into the spruce which results in a very weak structure.

## FUSELAGE

First build the 3/16" square frame

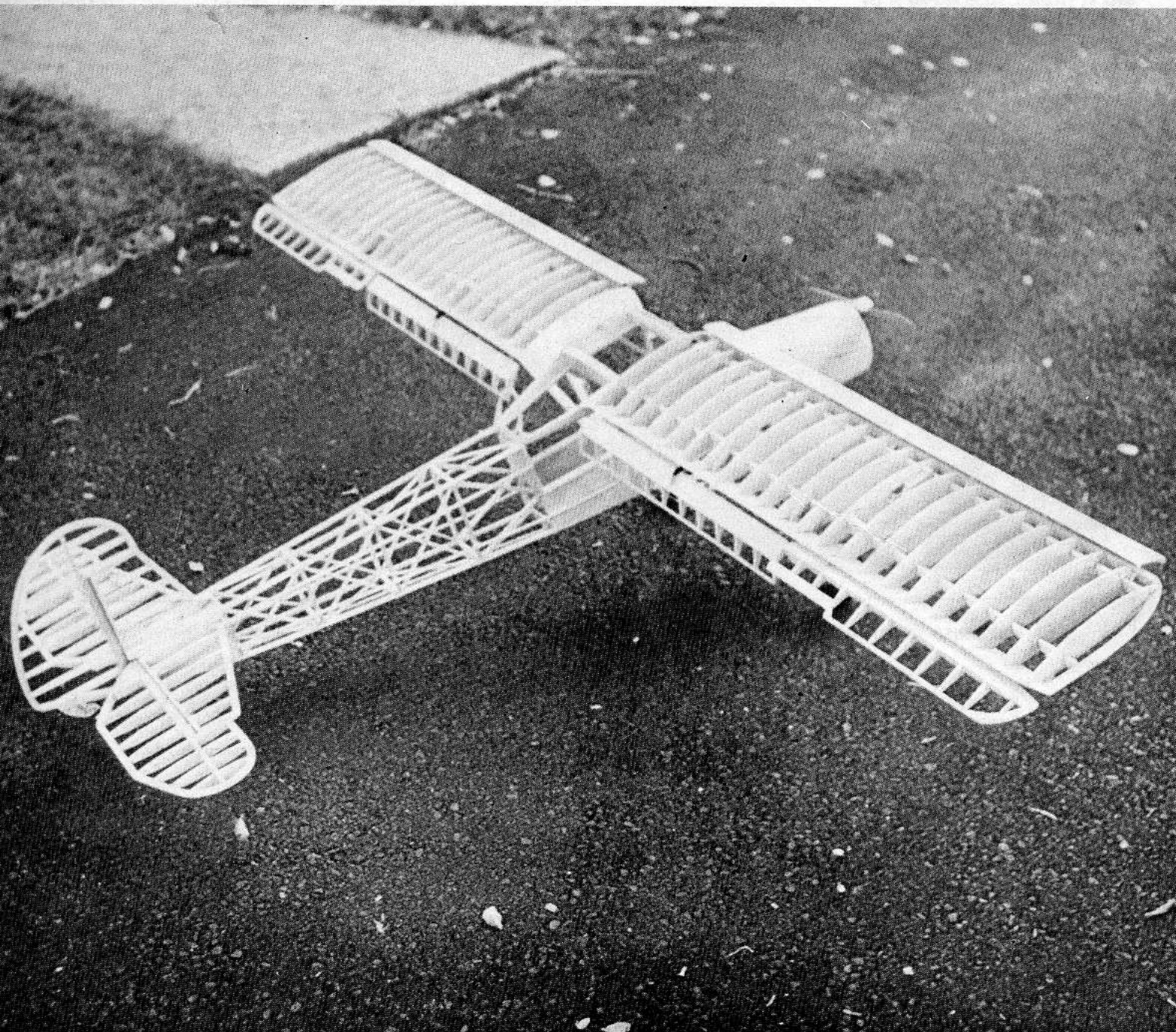
work halves and leave them to dry overnight. Glue on the doublers and then glue the two halves to the formers F2 and F7 and add F10. When dry, pull nose and tail in.

The next procedure is to add the landing gear wires. The landing gear is fully shock absorbing and must be built ruggedly if it is to last. Add external stringers and follow the plans. You will find when you go to put the engine, tank, etc., in that the front end gets very crowded. There is room for up to a six oz. tank which gives 10 minutes of running time on a .40. The cowls are made of 1/64" plywood. They wrap around the front end and can be held on with wood screws.

The 1/64" plywood covers on the

---

The reconstructed skeleton of some strange prehistoric flying reptile seems an accurate description for the uncovered model. With all that wing area so far up front—not to mention flaps—it is not surprising to learn that the model can lift off in 10 feet.

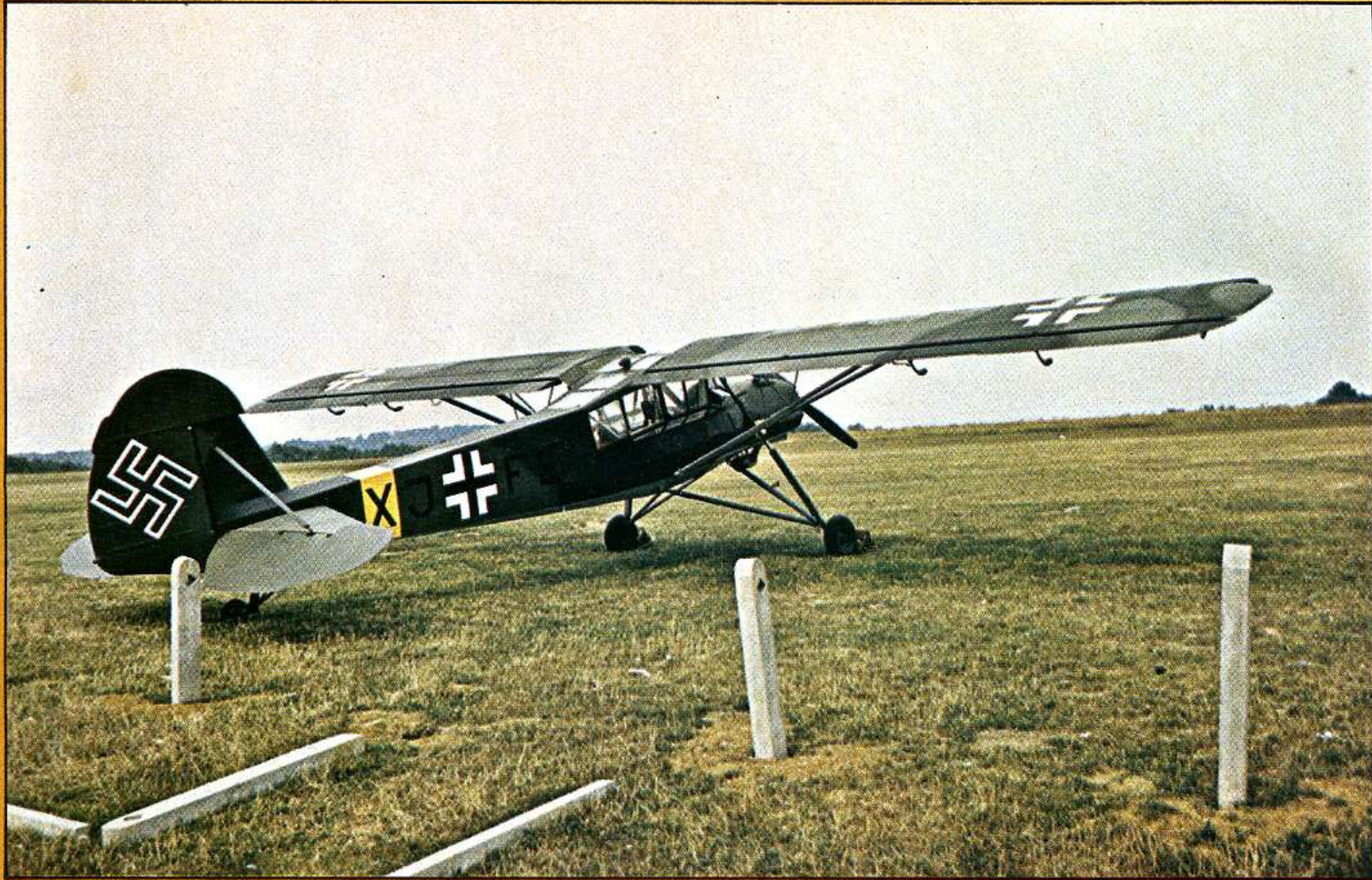




Finished in North African campaign colors, Mike Moses' Fieseler Fi 156 Storch is not only impressive in appearance, but practical for R/C operation as well.



There are several Storchs still flying in the world, mostly in Europe, but a few in the U.S. as well. This Storch, finished in desert camouflage, turned up at a recent California fly-in. The unit lettering is correct in size but not authentic. (Michael O'Leary photo)



Here we have a real aircraft, the French manufactured version of the Storch, the Morane-Saulnier Criquet. This aircraft was photographed in France at an antique fly-in and as can be seen, is finished in authentic Luftwaffe night operations markings.



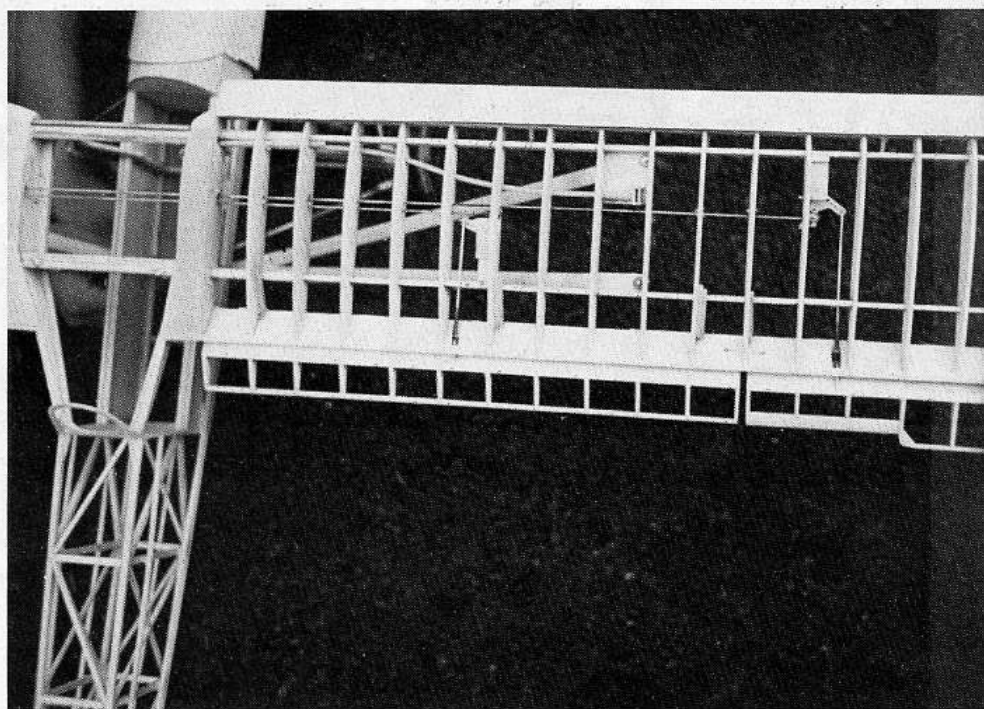
And here we have—a model! This excellent photograph taken by our Eastern Area Editor Richard Uravitch at a recent contest shows Mike Moses' second effort at modeling the Storch as finished in dark green camouflage. A superb job of modeling!



landing gear must be formed very carefully. Cut blanks and soak in water for a few hours. Then, wrap around a  $\frac{1}{2}$ " dia. dowel and close-pin the ends together. When dry, repeat the process using a  $\frac{1}{4}$ " dowel. When dry, trim down to size. The small covers can be epoxied directly to the  $\frac{1}{8}$ " music wire. The large covers must be made as shown on the plans. Be sure the bottom cover slides freely in the top cover. When building the horizontal and vertical stabilizers, instead of cutting out ribs, just use rectangular blanks and sand to shape after they have been glued in place. It's easier and faster. The fin and stab are glued to the fuselage before covering.

### WING

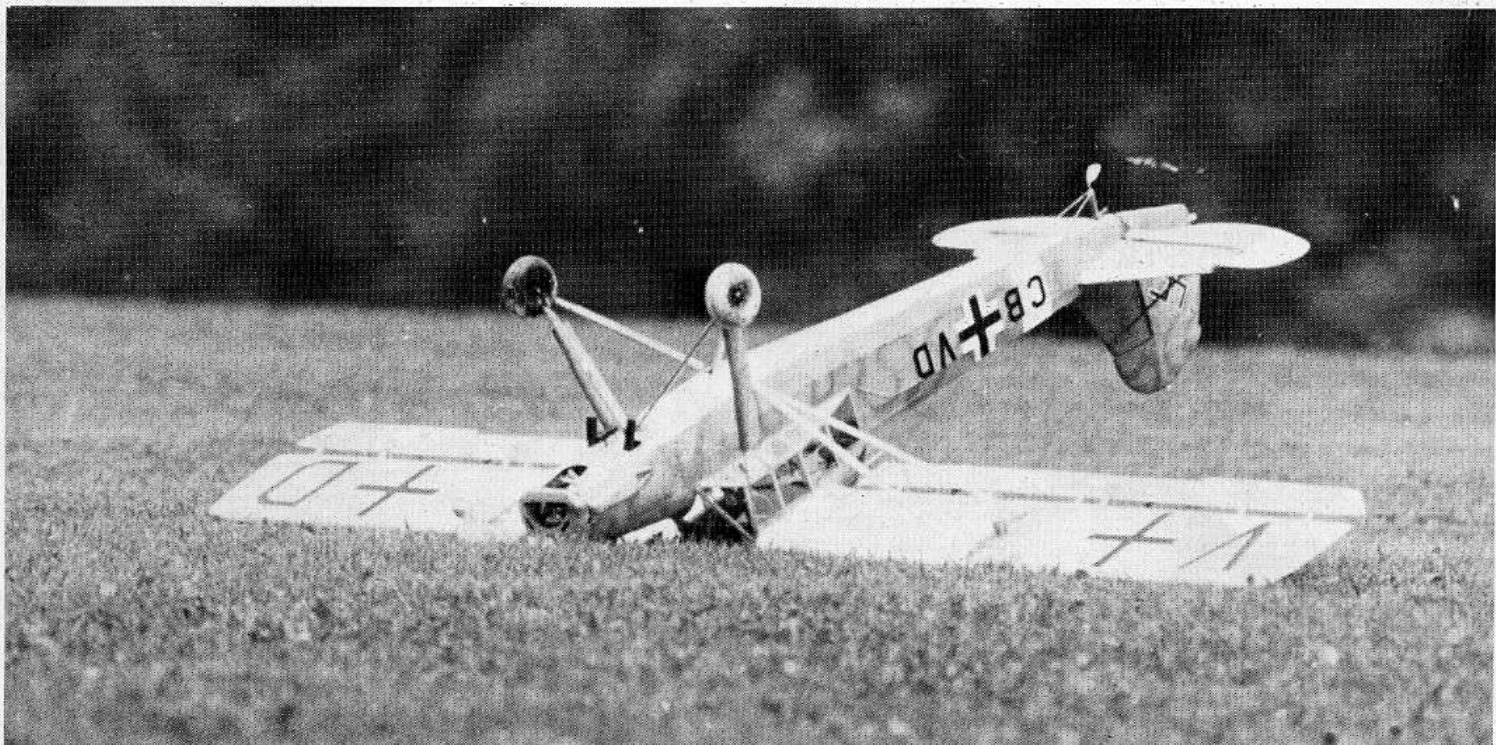
The wing is built in three sections—right panel, left panel and center section. The center section should be built right on top of the fuselage to insure a good fit. The aileron and flap push rods must run through the center section but if you run them under the  $\frac{3}{16}$ " x  $\frac{1}{8}$ " cross piece, they will be hard to see. It will be necessary to cut notches into the trailing edge of the wing to clear the pushrods to the aileron and flap control horns but these will be hidden by the flaps and ailerons. Be sure to use the differential bellcranks on the aileron as these make the plane much easier to fly by giving



Wing construction detail shows the layout for connecting rods to flaps and ailerons.



Now this sort of thing is embarrassing—especially at a contest. Believe it or not, the accident rate with Storchs during WWII was comparatively high, this due mostly to over confidence on the part of hot-rod Luftwaffe fighter pilots who were out for a good time in a "sport" airplane.



more "up" aileron than "down" and thus reduce the amount of rudder needed in turns.

Make the wing struts and strut mounts very strong because these take most of the stress of the wing. Don't worry too much about getting the exact distance for the gap between the flaps or ailerons and the trailing edge. I have varied this considerably with no ill effects observed. The leading edge slats are carved and sanded from light balsa. Don't leave these off because they are largely responsible for the model's slow speed capability.

#### FINISHING AND COVERING

In preparation for covering, there is one word that is most important. SANDING! Sand the model thoroughly and when you think it is done, sand it again. Blow off all the dust and you're ready to cover.

I used Silkspun Coverite for this model and found it works great. Just

iron it on like you would Monokote and then turn your iron up to high and watch it pull drum tight. I used Sig dope and an air brush to apply the dope. Spray on two coats of clear and apply a couple of brush coats to the engine area. Next, spray on the color. For this version, the colors were sand on top oversprayed with grey swiggles and light blue on the bottom. You should only need two or three coats of the color depending on how dark the color is.

The letters, crosses and other markings can be painted on or you can use Monokote. Be careful when masking with Coverite as the masking tape will pull the paint right off the covering. I suggest you use drafting tape which is less sticky. Now, glue clear plastic sheets on the window framework. I used Hot Stuff—watch your fingers! Next, to hide the ugly seams—apply 1/4" wide masking tape over the seams and Hot Stuff in place. Then,

paint these the same color as the fuselage and see how nice it looks.

#### FLYING

The Storch flies very slowly and is easy to fly. You *must* use *both* rudder and *aileron* when you turn. It ground handles very nicely but it doesn't like crosswinds. The Storch will handle a surprisingly strong wind but at 4½ to 5 lbs. it does get bounced around some. Be sure the CG is at the point shown on the plans and you shouldn't have any problems.

Engine used was an "O.S. Max .35" which pulls the plane at a realistic speed on an 11/4 prop. If you build heavy or want a power reserve, go up to a .40 but be sure you can idle it well. The plane has proven very reliable over two contest seasons which included many firsts and seconds at local meets. I have enjoyed the Storch very much and hope that you do, too. □



Storch of a different color? Here would be an interesting subject as far as detailing and finishing is concerned. This rare WWII color photo authenticates the use of "6 and 3/4," a captured FI 156C-5/Trop as pressed into service by an AAF fighter squadron as a utility hack. This was far and away the most common fate of intact or repairable Storches that fell into the hands of the advancing Allies.

Another view of Mike's second Storch. The prototype for this aircraft was experimentally fitted with three 110-pound bombs to be used for anti-submarine work in 1940.



## SCALE R/C MODELER PLANS (AND ACCESSORIES)

- S-1 POLLIWAGON:** Full-house version of sleek VW-powered home-built. Scale 3" = 1'. Span 78". .60 engine. (SR/CM December 1975). . . . . \$5.00
- S-2 FIESELER "STORCH":** Two-three function, .049-powered rendition of German STOL lightplane. Span 45". (SR/CM February 1976). . . . . \$5.00
- S-3 FIESELER "STORCH":** Full-house version of model above. For .35-.45 engine. Span 70". (SR/CM February 1976). . . . . \$8.00
- S-4 PIPER NAVAJO CHIEFTAIN:** Eight-foot span twin-engined executive aircraft. Huge 8x10' plan. For two .40-.60 engines. (SR/CM April 1976). . . . \$10.00
- S-5 HUGHES H-1 RACER:** Four-view working drawings, showing both short and long wing versions. A collector's item. (SR/CM April 1976). . . . . \$5.00
- S-6 BRISTOL SCOUT "D":** Schoolyard Scale 2-3 function biplane. Span 31", for .049 engine and small radios. (SR/CM August 1976). . . . . \$5.00
- S-6A BRISTOL SCOUT ACCESSORIES:** Deluxe, vacuum-formed cowl. . . \$3.00
- S-7 FIAT CR42 FALCO:** Combat biplane of WW II. Full-house, and any .40-.60 engine. Span 63". (SR/CM October 1976). . . . . \$8.00
- S-8 PIPER J-3 "CUB":** Schoolyard Scale with simple construction Two-three function radio and .049 power. Span 42". (SR/CM December 1976). . . \$5.00
- S-8A PIPER J-3 ACCESSORIES**
- Vacuum-formed cowl . . . . . \$2.00
- Decal sheet . . . . . \$1.00

All plans Ozloid process reproduced. Merchandise sent First Class Post Paid. Plans sent **immediately** upon receipt of order, when amount is enclosed. Sorry, no C.O.D.s.

Back issues of magazines available for \$2.00 each from: Scale R/C Modeler, Back Issues Dept., 7950 Deering Avenue, Canoga Park, CA 91304. **DO NOT SEND PLAN ORDERS TO THIS ADDRESS.**

FILL OUT THIS COUPON AND SEND TO:

### SCALE R/C MODELER PLANS

c/o Harold Osborne, 1832 Conejo Lane, Fullerton, CA 92633

Please send me the following:

QUANTITY \_\_\_\_\_ ITEM NUMBER \_\_\_\_\_ DESCRIPTION \_\_\_\_\_ PRICE \_\_\_\_\_

\$ \_\_\_\_\_ SUBTOTAL \_\_\_\_\_ TAX \_\_\_\_\_ TOTAL \_\_\_\_\_

I have enclosed \$ \_\_\_\_\_ .Calif. residents add 6% tax.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

ALL PLANS SENT FIRST CLASS POST PAID