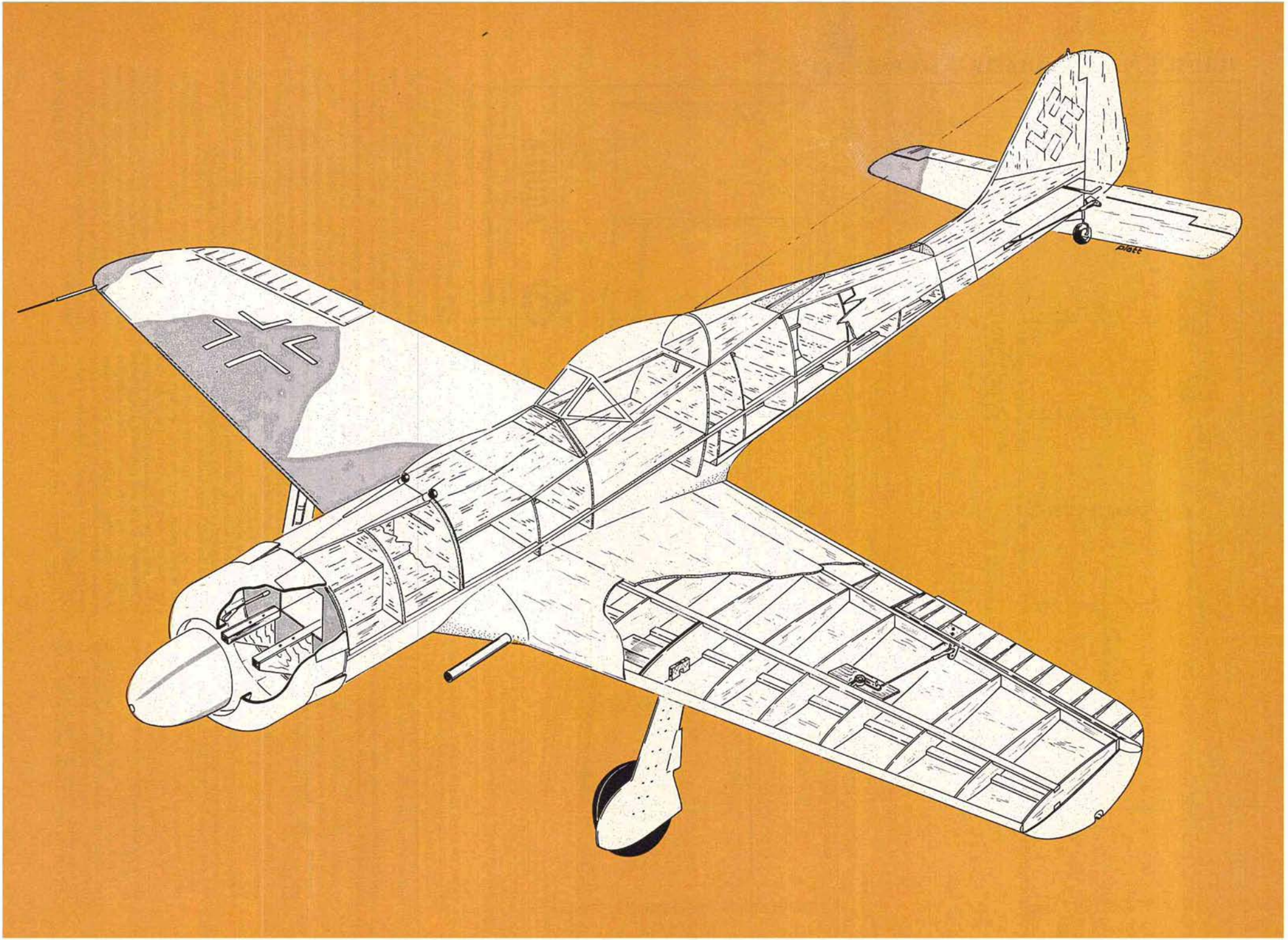


Dave Platt presents an off-beat aircraft that is a masterpiece in realism

FOCKE-WULF 190 D-9

One of the requirements that manufacturers list when considering subjects for a new scale kit, is that the plane should be well-known.

In some ways, this attitude is not very complimentary to modelers since it assumes the kit will only sell if the customer is familiar with the plane already. Put another way, it is feared that modelers are dumb enough to refuse a possibly excellent model rather than be educated to something they didn't know.

Before anyone gets mad about this, let us admit that when the investment in a new product runs into many thousands of dollars, some caution is understandable. The manufacturer feels he doesn't need any built-in disadvantages to help him lose his shirt on a new model. All indicators, as far as can be determined, should be positive. And yet, although an established favorite often outsells a more off-beat subject, there are scale fans who say that you can tell the level of a modeler's sophistication by the ships he makes — meaning that the worn out subjects are for beginners, while the esoteric types are for the connoisseurs and experts.

I candidly don't know if any of this is true, but if so, is there a compromise to be found anywhere? Could there be some plane that is well-known, and yet qualifies as interesting, off-beat and having the "expert" flavor?

The Focke-Wulfe 190 D-9 is such a subject. No fighter from World War II is more famous than the FW 190. Both its quality as a weapon, and the manner in which its superb design influenced fighter thinking everywhere, have become legendary. Even so, as good as it was, the F.W. 190 was not beyond further development. The *P-51* and the Japanese *Kawasaki 61 "Tony"* had both been improved vastly by almost accidental engine changes. This happened again in the case of the F.W. 190, the switch from the BMW radial "fighter" engine to the Junkers in-line "bomber" engine giving a great boost in performance. Also — to us the most interesting part of the story — the looks of the aircraft dramatically changed; in place of the crisp and pleasant lines of the A-series, the D's long nose and tail, and exaggerated gun-breech fairings, gave a malevolent and evil appearance, adding a lot to the "character" of the airplane.

At the time when this model was designed, it was uncertain whether it would ever be kitted, due to the factors previously mentioned. However, a combination of the Nats win in Stand-Off Scale and a quite unexpected level of interest in the model itself dictated events. We're rather heartened that a subject from left field can be popular when all the vibes are right. The future looks good for further deviations from the corny old "standards."

AERODYNAMICS

The force arrangement used in this model is as follows: Engine straight ahead (no down or side thrust).

The semi-symmetrical wing is mounted at +2° incidence and the stab at +1½°, giving a zero-zero alignment resultant when the 2° washout is considered.

This is exactly the same set-up we used in the past two or three designs and has proven itself very reliable. Especially good is the

low speed stability of the model. You can reduce the throttle and increase the up elevator until the ship is hanging at a very high angle, moving so slowly that most ships would have flicked onto their backs long before. Apart from the novelty of hovering the model, there is little real usefulness in having so low a stall speed, but it sure gives a good feeling of security when making slow landings.

For some reason, perhaps the very long tail moment, this ship is quite exceptionally smooth. This writer isn't exactly known as the world's greatest pilot, but has had no trouble in beating 80 points flight score in each contest entered.

CONSTRUCTION

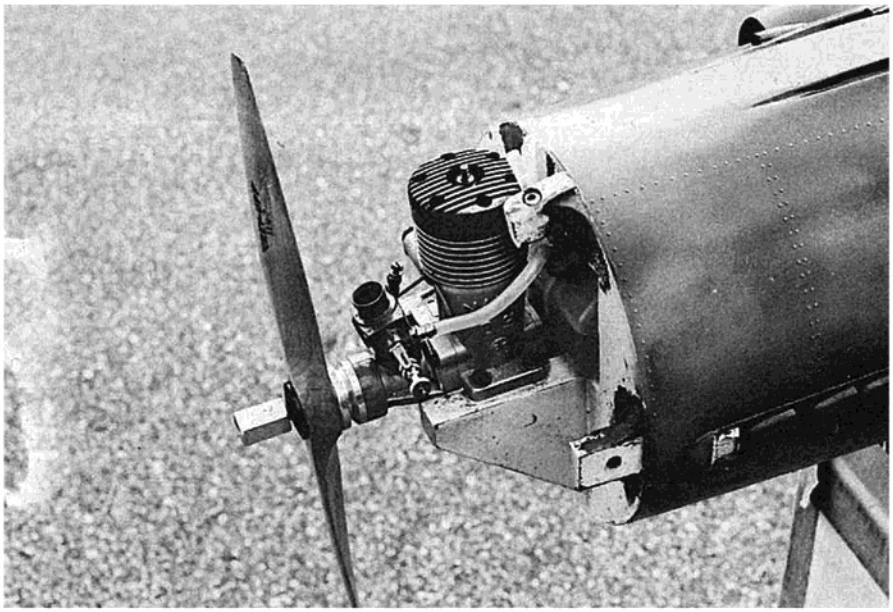
For the modeler who has a few balsa-built aircraft in his past, this model will present no problems. Absolute newcomers to the hobby should wait; scale RC loses too many potential adherents because of failure caused by inexperience.

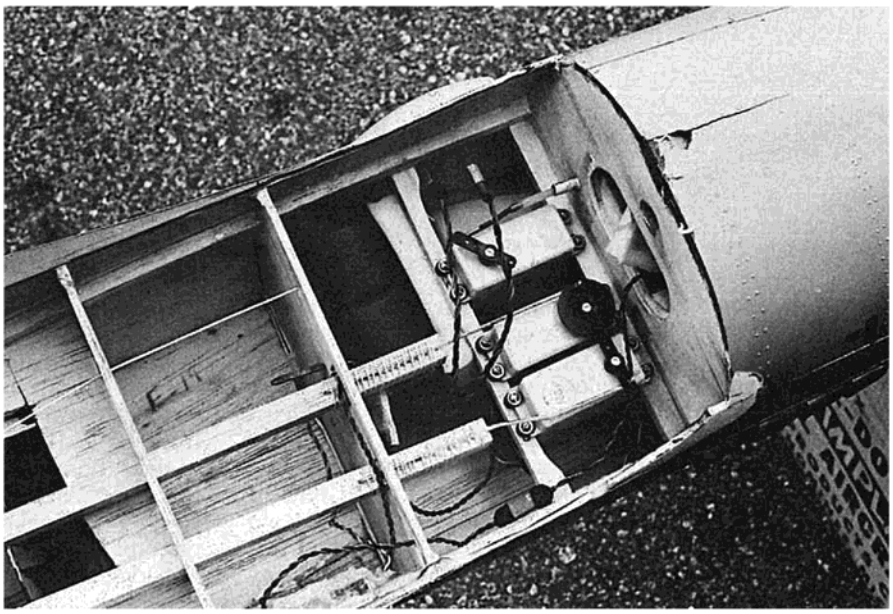
The wing should be built first as it will be needed to complete the last stages of the fuselage. The 2° washout comes in automatically due to the "jig" strip laid on the plans while building and sheeting.

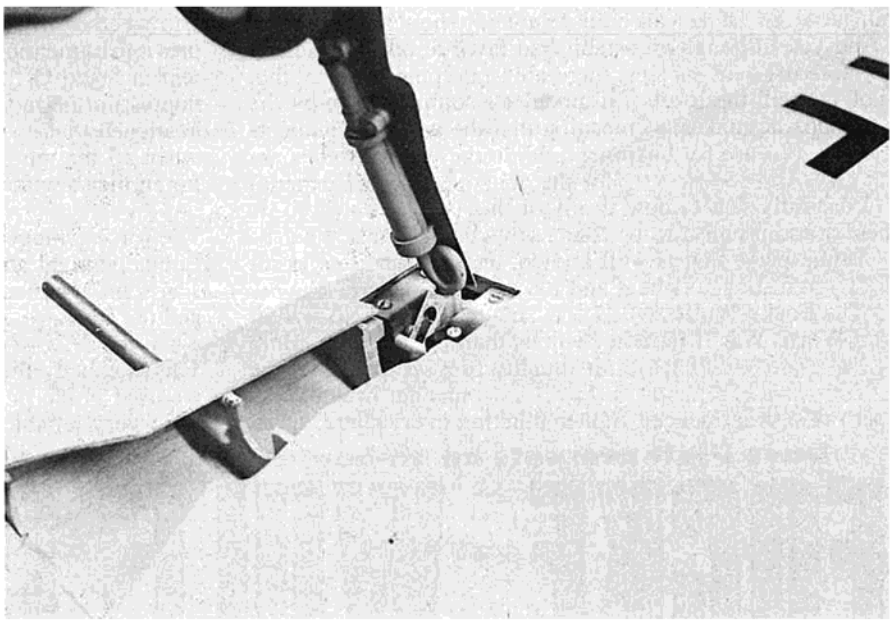
The fuselage is built around a basic horizontal crutch. The top formers are glued to the crutch, then the upper half is skinned. After removal from the board, the lower former halves are added and skinned.

The tail surfaces are simple sheet devices. When gluing on the stabilizer, have the rest of the model assembled (wing screwed to the fuselage) and block the model up on a level surface so you can check incidence settings. Play with the blocks until the wing-root is at *exactly* 2° incidence to the table. When it is, glue on the stabilizer, checking the measurements for a 1½° incidence on the stab. Along with getting a warp-free wing, this stage is the single most vital operation in the whole project of building the model.

Some parts of the design, being somewhat difficult in shape, have been moulded from plastic and are available to the magazine plan builder. The F.W. 190



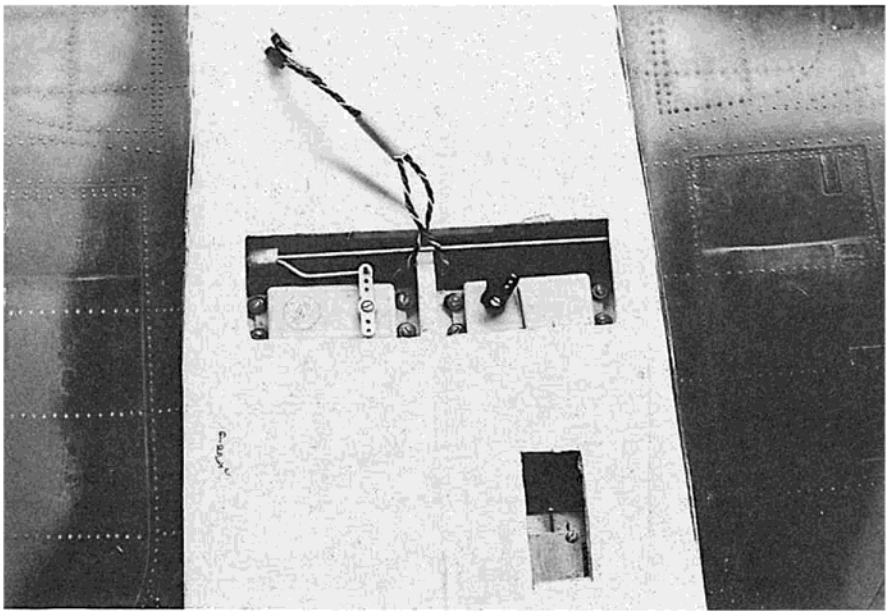


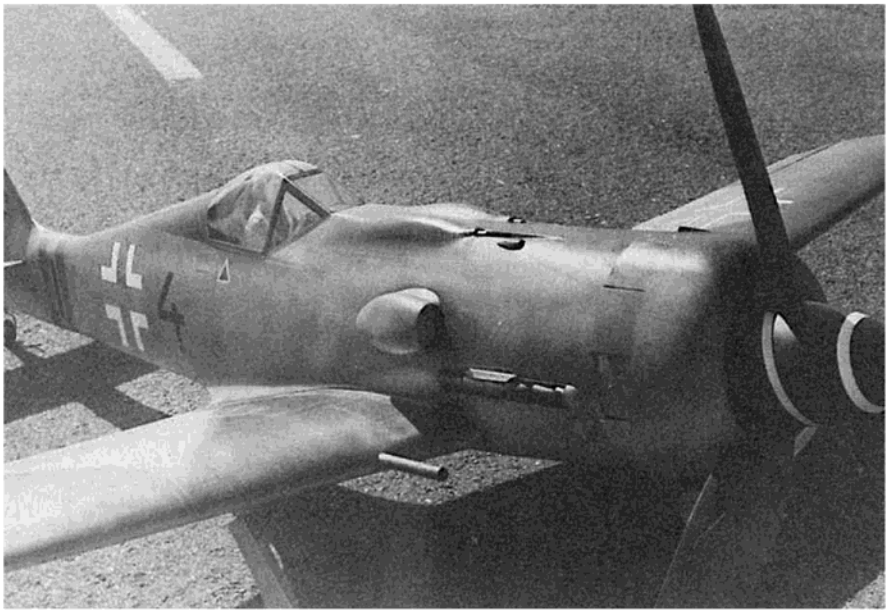


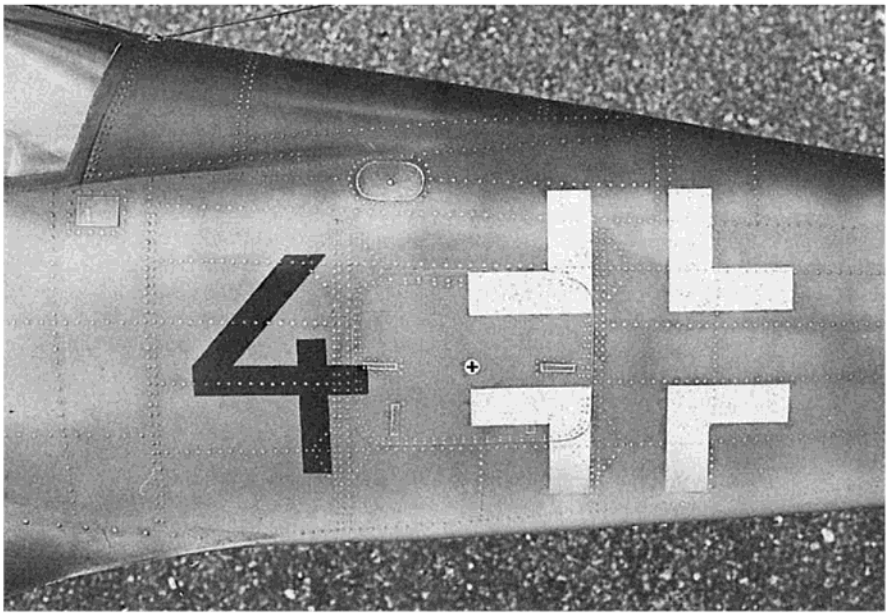
TOP: Very tidy power plant department. Square tank slips into boxed recess. Dave advises model be flown without cowl, first few flights.

CENTER: Plenty of room for the radio, but get it all up front. Servos mount directly to rails - - - plastic servo trays too flexible, spoil trim.

RIGHT: Left hand Rom-Air retract unit in place. Removal for maintenance very simple.







FOCKE-WULF F.W.190 D-9

Designed By: Dave Platt

TYPE AIRCRAFT
Stand-Off Scale
WINGSPAN
65 Inches
WING CHORD
11" (average)
TOTAL WING AREA
710 Square Inches
WING LOCATION
Low Wing
AIRFOIL
Semi-Symmetrical
WING PLANFORM
Double Taper
DIHEDRAL, EACH TIP
3¼ Inches
O.A. FUSELAGE LENGTH
58½ Inches
RADIO COMPARTMENT AREA
(L) 4½" (W) 5½" (H) 3"(serv. & recr.)
(L) 2¾" (W) 5½" (H) 2½" (batt. pack)
STABILIZER SPAN
23 Inches
STABILIZER CHORD (incl. elev.)
5⅛ Inches (average)
STABILIZER AREA
118 Square Inches
STAB AIRFOIL SECTION
Flat
STABILIZER LOCATION
Mid-Fuselage
VERTICAL FIN HEIGHT
7¼ Inches
VERTICAL FIN WIDTH (incl. rudder)
8 Inches (average)
REC. ENGINE SIZE
.60 Cubic Inch
FUEL TANK SIZE
14 Ounce
LANDING GEAR
Conventional
REC. NO. OF CHANNELS
5 With Retracts
CONTROL FUNCTIONS
Rud., Elev., Throt., Ail., Retrac. L.G.
BASIC MATERIALS USED IN CONSTRUCTION

Fuselage	Balsa and Ply
Wing	Balsa and Ply
Empennage	Balsa
Weight Ready-To-Fly	128 ozs. with retracts
Wing Loading	25.96 Oz./Sq. Ft.

TOP: Wing root carries all RLG equipment. "Window" in skin to grease valve periodically.

CENTER: Gun blisters, supercharger intake, long nose all combine to bestow deadly appearance.

LEFT: Rivet pattern adds little to building time, much to character of model.

D-9 set contains canopy, cowling, gun hood, exhaust banks, supercharger intake, decals and complete building/flying instructions. Cost is $17.95 postpaid from Dave Platt Models, 1300 W. McNab Road, Ft. Lauderdale, Florida 33309.

The leading edge extensions and the fairing under the center section of the wing are made in an unusual way. This is an example of how some of the newer materials coming into fashionable use in modeling can be adapted in cute ways. Phenolic Micro-balloons, a brown dust-like compound, mixed with polyester finishing resin, makes light, rigid and easy-to-sand parts, as well as being useful in its original purpose as a filler. The mix can be poured into paper templates taped to the model, and when it sets up, can be refined by carving or sanding to proper shape. Needless to say, this operation uses only a tiny fraction of the skill (and time) it would take to carve blocks of wood to the required shape.

DETAILS

There has been a good deal of controversy about the "rights" or "wrongs" of including surface detail on Stand-Off Scale models. Those in opposition maintain that the whole essence of the Stand-Off event was intended to be its simplicity, and the ability of the not-so-expert modeler to compete on even terms. Extra detail on the models runs counter to these aims, it is said. On the other hand, the fellows who are going to the more detail approach have reasons for this. To them the Stand-Off event is a stepping stone on the way to true scale and the incredible standards of detail and accuracy demanded in that event. They want to "learn the trade" by trying out their techniques on Stand-Off models.

We're not going to take sides in this issue because, frankly, we believe that both sides make an equally good case. The F.W. 190 we flew at the Nats didn't have surface detail, but as the photos show, our present one does. In this case, it wasn't that we were trying out techniques. Our reason was based on "cost effectiveness" logic; the improvement to the overall impact of the model compared to the time taken to incorporate the panels and rivets made them a bargain. In other words, we're saying that when a model takes 4-6 weeks to build anyhow, details which add only 2 or 3 evenings are well worthwhile when they help the appearance so much as these do. The rivets are simple and amazingly fast to apply — use thinned out Elmer's white glue and hypo to apply it. The various hatches (dinghy compartment, etc.) are cut out of thin metal foil or pressure sensitive vinyl ("Contact").

Then, too, we have always been suspicious of the concept of events that newcomers can compete in "on an equal basis." However simple an event may be, guys who have learned more will have a better chance. Like it or not, there can be no legislation that will cancel superiority.

FLYING

Most modelers, understandably, are so all-fired to see a new scale model in the air that sometimes they neglect vital things and end up with pieces. The first time you get this model on the field, please allow it the benefit of patient preparation.

Start the engine and adjust the needle for reliable high speed, with no lean-out tendencies when you hold the ship pointing vertically up. Good. Now adjust for an idle, the slower the better but, most importantly, *reliable*. Range check the radio *with the engine running*. Check the retracts and all controls, many times!

Leave the cowling off for a few flights. It will be easier to readjust engine settings often needed on first flights. When everything works well and you can start the engine at idle position without fuss, fit the cowl on.

Unquestionably the most important (yet most underrated) factor influencing how well a model flies is *trim*. Newcomers to RC often wonder how someone can learn to fly, say, inverted flight mere inches off the ground and so *smooth*, not a single correction visible in a pass maybe 100 yards long. The secret is that the pilot isn't doing it. The model is flying on its own. The trim is such that the model, once given a heading, will fly stably without control inputs.

To stay in trim a model needs to be "tight." Control surfaces should feel rigid to the touch; no slack movement around center. Use plenty of hinges on the surfaces. No slop anywhere in the control rods, bellcranks, etc. Above all, the radio needs to be accurate, especially servo centering. If a surface comes back to a different neutral each time, you can't expect to trim the model out properly. Open gimbals help, which is why a lot of experts won't use anything else.

However, even this isn't the entire story. Sometimes the pilot himself can be at fault. We have observed scale models flying erratically when they could have flown smoothly if the pilot had left them alone more.

Compared to RC models, real airplanes make very wide turns, It helps, in practice flying, to imitate real ship characteristics — wide turns, long landing approaches, flat take-offs and so on.. Attention to these matters will improve your skills and put you among the trophy winners. □