



My, most reliable and most used model for years was my Me 163 Komet (see Nov '85 issue); it was compact, cheap to fly and great fun. However, a combination of a leaky clunk tank and a number of minor accidents (pilot errors, I'm afraid) meant that a replacement was needed. I felt that another jet style model would be suitable and picked on the North American FJ-3 Fury as it's a bit different and has a short nose which is useful to offset the effect of sweep back on the c.g. position. The model presented here uses the two channel gear from the 163 but a throttle could be added if you want. I wouldn't put a bigger motor in it, though, as it is a very fast model anyway...

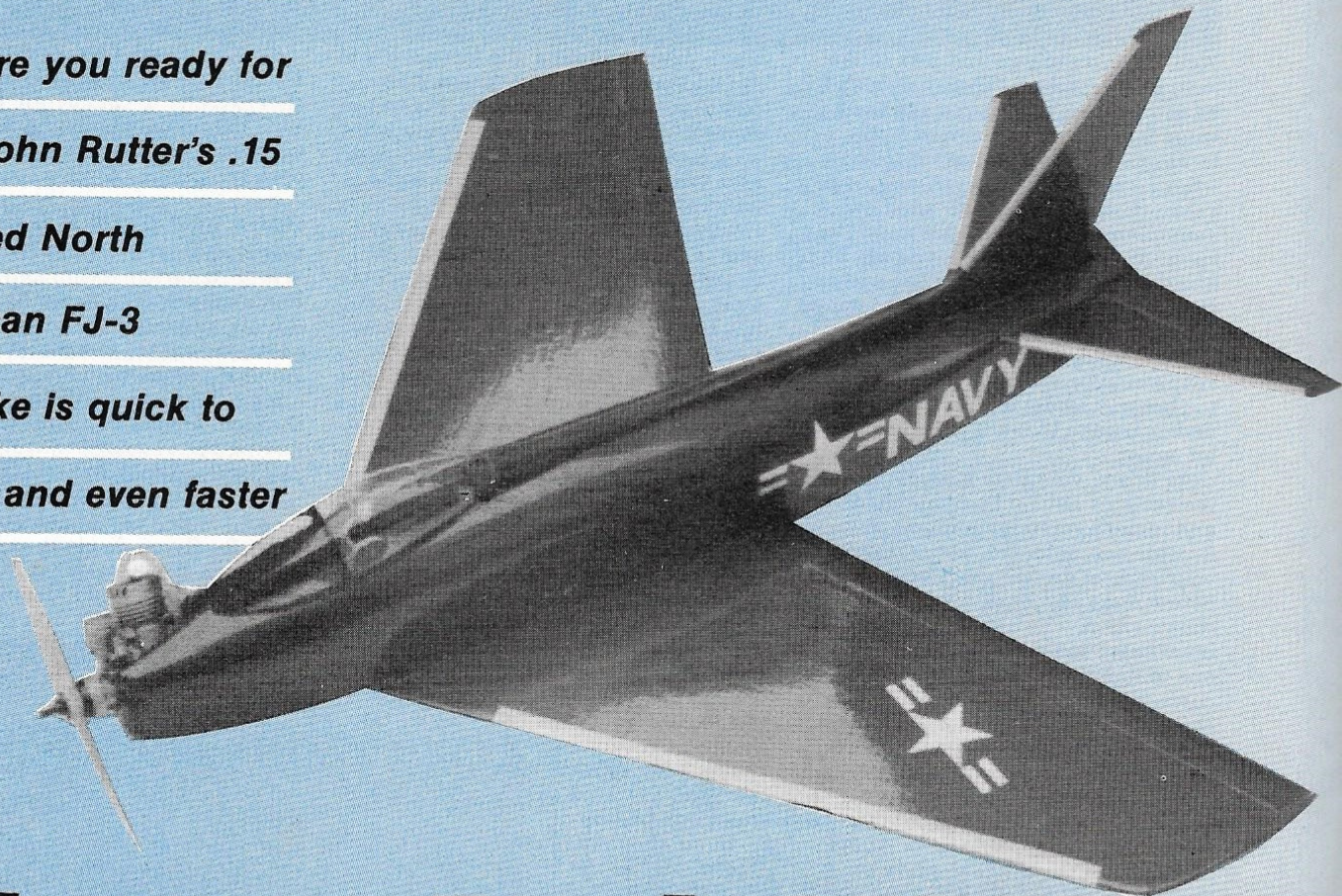
Getting cracking

As usual for me, I started with a kit of parts (photo 1) and then assembled the flying surfaces using fairly firm 1/4in for the wings and 3/16in for the tail. There is not a lot to say about them except that the grain of the wood should follow the leading edges for stiffness, apart from the control surfaces where the grain should run

along their length. I top hinged the ailerons and elevators with film and used ball link connectors due to the sweepback. (Photo 2). The wing centre section is reinforced with a narrow strip of thin glass and the retaining dowel and aileron bearers epoxied to the top surface (don't add the latter until the wing has been cut free of the fus later on). The dihedral shown in scale and the model, as a whole, is to scale outline, the only cheats being in section and the width of the wing chord which is extended by 1in on the l.e. All control torque arms are flattened, drilled and bent brass tube to suit the torque rod wire used (16 or 14g).

The fus sides are reinforced with 1/64 ply to the line shown on the plan, using an impact adhesive. The centre three formers are glued to one side with that side flat on the plan. The other side is added and, when dry, the tail and then nose formers are glued in place while pulling the sides in with tape or elastic bands. The size and position of F2 may vary with the motor you use but it has to be accurately epoxied in place. I didn't find either side or down thrust necessary. Glueing

**O.K., are you ready for
this? John Rutter's .15
powered North
American FJ-3
lookalike is quick to
build - and even faster
to fly!**



FUN-Jet FURY!

the 3/8in triangular strip in place can be tricky as it has to bend quite a bit; be careful that it doesn't distort the rest of the fus. Once set it can be planed level with the fus sides and the layers of 1/4in added to the fus bottom.

The position of the wing slot should have been marked carefully on the outside of the fus. This slot is cut out after the fus bottom has been planed and sanded to shape; the nose and tail blocks can be added at this point too. The wing is slid into the fus slot and the slot is trimmed to give equal dihedral on each side. When you are happy with its position, the film can be trimmed from the joint and the wing glued in place, to the fus *bottom* only. At this point I added the retaining dowel, mounting screw retaining plate and drilled for the wood screw I used to keep the wing on. Cut the wing away fore and aft with a razor saw. Now add the aileron servo mounts and the aileron controls if you like. (Photo 2 again).

Once the elevator servo rails and servo have been fixed in place (photo 3) the elevator pushrod (I don't like snakes) and tailplane can be sorted out. Again, trim away film from the tail fus joint before glueing. The fin is pinned in position at this point (photo 4 - makes for easier sanding and covering of the rear fus later) and the fus top is planked. Only the bit over the tail is at all tricky and here I had to resort to wetting the wood to get it to twist. Tank installation is easiest before planking, of course, but you should be able to get at it from the wing seating area. To avoid that leaky clunk tank I made a 'clank' tank (tin version of a clunk!) and stuck it in place permanently with silicone.

When the planking has set it can be planed and sanded. I put a pilot in my model so a hole was cut in the planking over the tank bay for the figure to sit in. I used an 'Action Force' SAS pilot - it's accurate, features moveable parts and cost less than £1 at a toy shop! Cut away the nose to get the engine in (having the mount holes pre drilled in F2 helps, as does using blind nuts on the rear of F2) and, when satisfied, fuel proof the nose area with epoxy paint or polyester resin. Cover the fus in film. Add any cockpit detail and the spine (from scrap 3/16in) and glue the fin in place. The canopy I used was a home-pulled version but you may be able to find a commercial one that is close enough if you can't be bothered to make a plug and yoke. Whatever you use for a canopy, paint it on the inside before gluing in place with impact glue. The pilot was held in place by sticking him to the tank with silicone.

Finishing and installation

I've already made it clear that I used film to cover my model; I used very dark blue overall and cut the markings out of film too. The full-size Fury was

more commonly seen in light grey and white but there is no film this colour (my wife complains that she can't have a pink film coloured model either!). The completed model is very close in appearance to an F86 sabre though, so that opens up the colour possibilities if you aren't too fussy on scale detail...

All that remains is to add the Rx and battery and balance the model. The point shown leaves the model slightly nose heavy but stable - I doubt that you will want it any further back and the less lead you carry at the back the better. Set the control throws as shown on the plan; 1/8in on the ailerons doesn't seem a lot but this is a fast, short span model and it rolls very quickly. Try it first.

Up, up and away!

To the best bit, at last. Not that it should have taken that long to get there, it's easier to build than it is to describe how to do it. If, like me, you don't fit a throttle, then don't fill the tank before that first flight just in case you didn't set it up right or can't cope with it. Get the motor going well and get a helper to give it a firm throw to the right of dead into wind - mine tended to turn left after launch. This effect is more pronounced on calm days.

With my Fox .15 the model will climb almost vertically, but settle for a bit less on the test flight. Try to get the trims sorted out quickly and keep your eye on the model, it covers ground quickly and, being small, is hard to keep track of at first. When the motor cuts, if you have the height, try a stall; it should be a fairly gentle and straight affair. The glide should be fast and steep - it's no soarer but it flairs out nicely for landing. The lack of wheels means that you can fly it from any soft surface including snow (see photo).

As you get used to the model you will find it rolls quickly and will do nice smooth, big loops as well as the more usual tight ones. If you increase aileron throws the roll rate becomes truly spectacular, around 2-3 rolls a second (I couldn't count them fast enough). *But* I found that at this silly rate of roll the model was prone to going into a flat spin and coming down like a helicopter, motor flat out, to a gentle but totally out-of-control landing. The wing strakes seemed to help avoid this, as did moving the c.g. to where it is on the plan. The good news is that, as set-up on the plan, I have been unable to provoke this show stopping (literally) manoeuvre. The model shows every sign of being my regular every weekend model for a long time to come and it is certainly different as well as being exciting to fly - and cheap, too!

Construction photos at right show just how easy this snappy Fury is to build - a spectacular little performer at budget cost.

