F86 Sabre

Photo Number------- Associated text

sab01- Add 12mm balsa triangle to the fuselage sides, in the positions show

sab02- Glue the 50mm EDF unit into F2 using UHU contact adhesive or hot glue

sab03- Glue F2 into position

sab04- Glue F3 into position

sab05- Glue F4 into position

sab06- Glue the other fuselage side into position

sab07- Glue the two F5 s into position

sab08- Make saw cuts (to aid bending) in the 12mm triangle as shown on the plans

sab09- Glue F6 into position

sab10- Glue F7 into position

sab11- Sand the bottom edge of the fuselage ready to accept F8

sab12- Glue F8 into position

sab13-

sab14-

sab15- Make up the thrust tube and tape along the overlapping seam with 3M tape

sab16- Spot glue the thrust tube onto F7

sab17- Glue F9 into position

sab18- secure the speed controller into position and test for correct rotation of the fan

sab19- Glue F10 into position

sab20- Wet the fuselage sides to aid bending

sab21- Working from F10 backwards, glue the fuselage top sides on to the fuselage formers.

Sab22-

Sab23- Sand the top fuselage edging, flush with the tops of the formers

Sab24- install the elevator pushrod tube outers and glue F11 into position

Sab25- Secure the two elevator servos into F9

Sab26- Using a razor plane, begin shaping the fuselage

sab27-

sab28- Using a sanding block, sand smooth the planed edges

sab29-

sab30- File the tailplane slot so the tailplane sits comfortably at the correct angle

sab31- The notch on the tailplane T-1 should locate into F6. Be careful not to break these o ffwhen glueing T-1 into position

sab32- Slide the push rod wires into the pre-installed outers

sab33- Secure push rods on to the servo horns

sab34- Fit the elevator horn and temporarily secure this into position. Cut the pushrod to length, fix Z bend side to control horn & slide other side of pushrod through E z connector. Secure E z connector with thread lock.

Sab35- Glue F12 into position. Note the cross bar is not needed in the production model

Sab36- Glue F13 into position, adding scraps of 12mm triangle to give additional support

Sab37-

WINGS

sab38- Overlay cling film on the wing plan to protect against residual glue. Pin the main spar SP1 over the plans and add W1, WB1, W2 etc

sab39- Glue into position the remaining formers

sab40- Glue WS1 into position

sab41- Add the rear top spar

sab42- Add the leading edge

sab43-

sab44- Chamfer the wing sheeting leading edge with a sanding block to give maximum glue adhesion against the leading edge strip

sab45- begin sheeting the top wing

sab46- showing the cutting of the wing sheeting

sab47- trim the sheeting trailing edge with a straight edge against the rib ends

sab48- Add the rear bottom spar

sab49- Glue W2A into position

sab50- Remove the wing jig tabs

sab51- Glue SM1 into position

sab52- Glue W10 and install the micro servo extension leads

sab53- Sheet the underside of the wing noting the location of the servo and hand launch hole openings

sab54-

sab55-

sab56-

sab57- Using a knife, reveal the location of the servo and launch hole openings

sab58- Extract the aileron servo lead socket and glue SM2 into position

Sab59- Make up the other wing to the same stage

Sab60- join the wings

Sab61- Remove a small section of trailing edge between W2 and W1 as shown

Sab62- Make a small hole in the top of the wing and extract the aileron extension lead sockets. Then glue the wings on to the fuselage.

Sab63-Using tape to protect the wings, glue into position F14 and sand the edges with a sanding block

Sab64-

Sab65- Use some scrap 2.5mm balsa to seal the gap between the wing and F8

Sab66- Glue WT1 into position and sand to a smooth profile

Sab67- The canopy is glued to the edge of F15 after internal detailing is done. Sink one 5mm dia magnet into the cut hole in F12, and flush with the surface. Add the second magnet to the underside of F15, again flush with the surface

AILERONS

Using the 20mm Trailing edge stock as ailerons, cut each aileron to shape and chamfer the LE as pictured on the plans.

Using a knife, make slots in the wing and aileron for the hinges

Test fit the Ailerons but only attach after covering the model

Putting together

The VAC formed nose cone can be trimmed and overlap glued onto F6.

Sab68- The plastic vents are very important. Position the vents and draw round with a pen. Cut away and recess glue, the vents into position.

The model can now be covered with a proprietary iron on film. Note, the nose cone will need painting with enamel/acrylic matching paints

Sab69- Wing tanks are provided, and these are made from two laminates of WT1. These will protect the wing servos on landing. The tanks are made and covered separately. When fixing these, remove a small section of covering on the wing to allow for a good wood to wood adhesion.

Sab70- Use thin cyano to secure the elevator hinges in place and re-attach the nipple link to the horn and push rod.

Install the servos and the control horns on to the ailerons. Pass Z bend throught
control horns & slide other side of pushrod through E z connector. Secure E z connector with thread-lock. Use thin cyano to secure the hinges.

Add the receiver and secure this between the two elevator servos. Set up the control throws as detailed on the plan.

Flying Notes:

The Balance point shown on the plan should not be deviated from and should be achieved with the battery packs suggested in the positions shown.

The movements for the elevator and ailerons are shown on the plans. Use these values and adjust to suit your flying style. The model is designed for the more advanced pilot who has previous experience with flying EDF jets

The model is quite light in weight and should only be flown when wind conditions are between 0-10 Knotts.

The calmer the better.

The model should be hand launched (on full power) with a good throw and the nose pointing slightly upwards.

As with all EDF jets, after launching, keep the model tracking straight and level while allowing the flying speed to build up. Once this is done, begin to ease in up elevator, to achieve a scale clime out.

Gain height and throttle back to about half power and then trim the model for level flight.
The model will have sufficient power to carryout mild scale aerobatic manoeuvres, but keep them smooth and jet like…

Landings can be achieved with either power on or off….the model has a very good glide rate and will remain stable and controllable as long as the flight speed is maintained. We do hope you Enjoy building and flying your EDF Sabre