

SU-27 Flanker

Dear customer,

congratulations on your purchase of our model of the famous **Su-27 Flanker** fighter. Before commencing its building, please study the assembly instructions carefully and make sure you understand the building process. If need be, contact the manufacturer or your dealer

List of parts:

Name of part	pieces	Name of part	pieces
Fuselage of EPP	1	Elevator securing ring	4
Elevator control rod	2	Elevator shaft (carbon 5x100 mm)	2
Wing of EPP	2	Elevator lever	2
Elevator of EPP	2	Carbon undercarriage	1
Vertical tail of EPP	2	Aileron control rod lever	2
Engine nacelle	2	Wing spars (carbon 500x1 mm)	2
Elevator shaft bushing	4	Fuselage central part of EPP	1
Jet pipe of EPP	2	Instructions	1
Motor bulkhead	1	Self adhesive decal set	1
Engine nacelle upper part of EPP	2	Doubler of the fuselage motor section (Al 1,6x100 mm)	2

You will need also the:

CyA glue, CyA glue activator, sharp (modelling) knife, 150 mm extension cable. To complete the model you will need: a receiver (MZK), servos (Wipont W-060), a controller (TMM-1210-3 or Jeti 12), an accumulator battery (3 LiPol cells of 640-1200 mAh), a motor (HCS-80/2E or similar of about 80 W output).

Description of the model:!

The model is completely made of EPP and has some carbon components. With its weight beginning at 250 grams it is an ideal model for flying in any suitable spot (e.g. a school playground or in the street). It is intended not only for experienced pilots, but also for the advanced modellers. To power it you may use a motor from our production, e.g. the HCS-80/2E, and three Lithium Polymer cells. Thanks to a well thought-out design the construction would take only about 90 minutes.

Building process:

Unless otherwise stated, all joints should be glued with the rapid CyA glue. Start the building by assembling the engine nacelles (Fig. 1). Using the Fig. 2 as a guide, glue in place the bushings for the slab elevator. Insert the carbon tube through the location grooves and slide onto it the elevator lever, then the two securing rings, two from each side, respectively (Fig. 3).

Move the securing rings to their extreme external positions to eliminate any play in the carbon tube. Then carefully glue the rings, ensuring at the same time the freedom of movement of the carbon tube.

Glue the elevator servo in place and install the elevator control rods. Pierce/drill a hole through a cube of EPP and slide it onto the control rod, to serve as the control rod guide. Check the neutral position of the servo and glue the elevator lever in place (Fig. 4).

Repeat the process for the other engine nacelle; keep in mind the nacelles are right and left.

Now glue the wings to the fuselage central part, and, using a sharp modelling knife, cut a 1-2 mm deep slit into the wing from both upper and lower side. Press the carbon spar (rod) into the slit and glue there from both sides, using thin CyA glue (Fig. 5). Work on a flat surface to ensure the complete assembly is not distorted. Check the quality of the wing reinforcement and glue the fuselage in place (Fig. 6).

Glue the engine nacelles to the fuselage (Fig. 7).

Check the elevator shafts of carbon are coaxial and glue the vertical tail surfaces in place (Fig. 8).

Glue the elevator halves (Fig. 9). Ensure the wing and right and left elevator planes are parallel and that they are at the same angle relative to the wings.

Using the Fig. 10 as a guide, glue the motor bulkhead, screw-on the motor bearers (Fig. 11) and secure the motor in place.

Install the speed controller as per Fig. 12. The position of the controller is shown on the Fig. 13. Using a hand-held soldering gun, cut a hole for the receiver into the fuselage. If the controller's servo cable is long enough, there is no need to use an extension one. Connect cable extensions to the power cables of the controller, or cut the original cables short and splice them with new cables of the same thickness, and of the necessary length. Glue the engine nacelle upper part in place (Fig. 14). Now glue the EPP jet pipes to the engine nacelles (Fig. 15) and the doubler of the fuselage motor section.

The model is now ready for balancing. By shifting the propulsion batteries, set the position of the centre of gravity to some 320 mm from the motor bulkhead. Then, using a soldering gun, cut an opening for the battery pack; the dimensions of the battery opening shall be some 2 to 3 mm less than the outer dimensions of the battery pack, to ensure that the batteries would hold in place without any extra fixation.

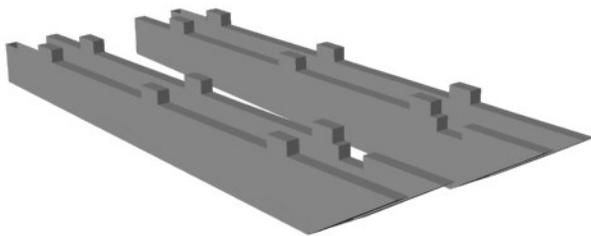
Now the model is complete, you can enhance its appearance by applying the marking self-adhesive decals. For the first flight, set the deflection of the controls to the half of their travel.

Pictures

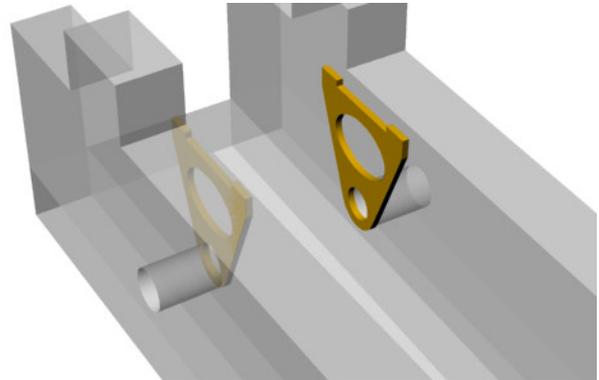
As the model, due to the propeller torque, tends to roll to the left, set the trailing edge of the right half of the elevator some 4 mm up. The model has specific flight characteristics – thanks to its layout it can fly not only fast, but also very slowly. Bear in mind that the propeller torque effect is much more pronounced during slow flight, especially after the launch, and the model rolls slightly to left.

This model is no toy – therefore avoid flying in crowded places or such areas where health or property not only of yourselves, but also of third persons could be jeopardised.

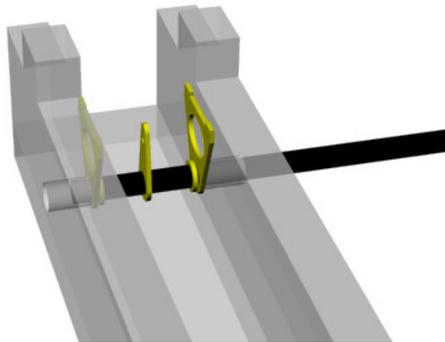
Lots of fun and many happy landings wishes FreeAir.



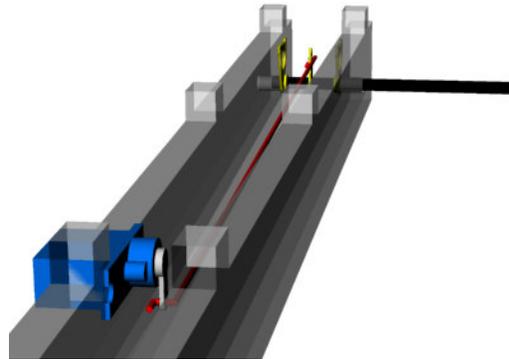
1



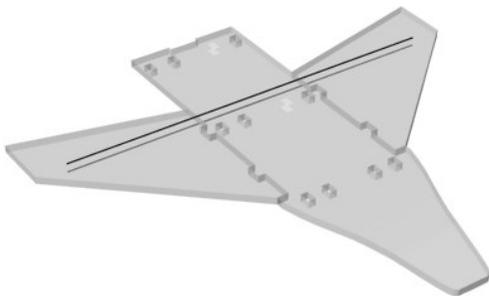
2



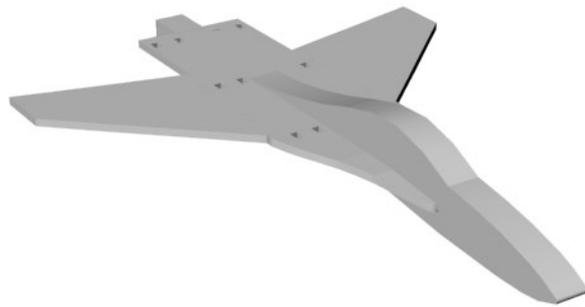
3



4

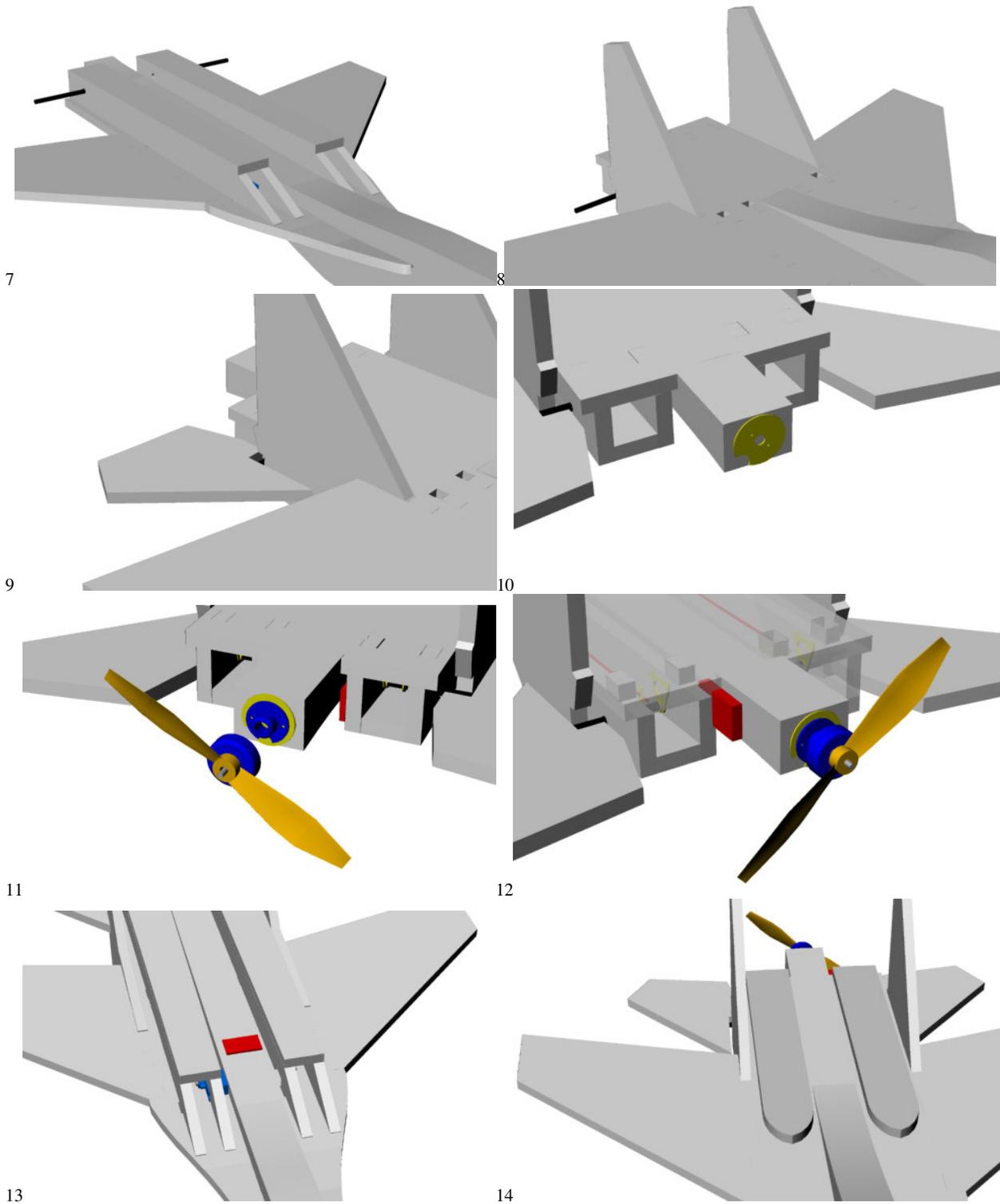


5



6

Pictures



Pictures

