

Item No.: F1701



# F9F

## PANTHER



# Instruction Manual

- This manual is for all versions of the F9F Panther
- This Manual uses one color scheme as an example

Thank you for purchasing the F9F Panther. This model is designed for the intermediate to advanced flyer. The model is receiver-ready and includes everything that you need to assemble and fly your F9F Panther, except for the radio transmitter and receiver. Please read the following instructions carefully, assembly is easy and should only take an hour or so.

The F9F Panther was Grumman's first jet fighter and one of the United States Navy's first successful carrier-based jet fighters. A single-engined, straight-winged day fighter, it was armed with four 20 mm (0.79 in) cannon and could carry a wide assortment of air-to-ground munitions.

The Panther was used extensively by the U.S. Navy and Marine Corps in the Korean War. It was also the first jet aircraft used by the Blue Angels aerobatics demonstration team, from 1949 through late 1954. The aircraft was exported to Argentina and was the first jet used by the Argentine Naval Aviation.

Total F9F production was 1,382. The design evolved into the swept wing Grumman F-9 Cougar.

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## Main Specifications :

Wingspan: 27" (685mm)  
Fuselage length: 28-3/4" (730mm)  
Flight weight: 19.5 oz. (552g)

64mm EDF

4300KV out-runner brushless motor.

3-cell 11.1V 1600mAh 20C lipo battery

30A ESC

3pcs. 9g Servo

Optional Landing Gear (Sold Separately) w/ steerable nose wheel and servo included

Radio System with minimum 3-channel Transmitter and Receiver

Battery charger capable of charging a 3-cell Lipo battery

All of the above parameters only for the RTF with landing gear, if you purchase another version, you could refer the above and choose another spareparts.

## Note:

1. This is not a toy! Operators should have some basic experience. Beginners should operate only under the guidance of a professional instructor.
2. Before beginning assembly, please read through the instructions and carefully follow them throughout the build.
3. Freewing and it's vendors will not be held responsible for any losses due to improper assembly and operation.
4. Model airplane operators must be at least 14 years of age.
5. This airplane is made of EPO foam material, covered with surface spray paint. Don't use chemicals to clean as it may cause damage.
6. You should avoid flying in areas such as public places, areas with high voltage power lines, nearby highways, airports or in other areas where laws and regulations clearly prohibit flight.
7. Do not fly in bad weather conditions, including thunderstorms, snow, etc...
8. Lipo batteries should be properly stored in a fire proof container and be kept at a minimum of 2M distance away from flammable or explosive materials.
9. Damaged or scrap batteries must be properly discharged before disposal or recycling to avoid spontaneous combustion and fire.
10. At the Flying Field, properly dispose of any waste you have created, don't leave or burn your waste.. Ensure that your throttle is in the low position and that your radio is turned on before connecting the Lipo battery.
11. Ensure that the throttle is in the lowest position and transmitter is turned on, before connecting a Lipo Battery to the ESC of the aircraft.
12. Do not try to catch the airplane while in flight or during landing. Wait for the airplane to come to a complete stop before handling.

## Kit Contents



Check to ensure that your kit contains all the parts shown in the Photo above.

### Spare parts for F9F



**F9F landing gear (Optional)**  
Item No.: F170106



**64mm EDF**  
Item No.: F90210



**2627-4300kv Brushless Motor**  
Item No.: F90131



**F9F Fuselage**  
Item No.: F170104



**F9F Tail Wing Set**  
Item No.: F170102



**F9F Main wing Set**  
Item No.: F170103

## Assembly

1. Apply a small amount of epoxy to one of the horizontal stabilizers.



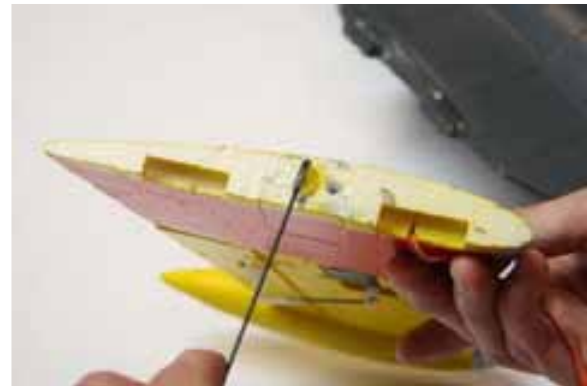
3. Apply a small amount of epoxy to the vertical stabilizer slot for the horizontal stabilizer and glue it in place. Repeat for other side.



4. Check that horizontal stabilizers are at 90 degrees to the fin.



5. Apply 5-minute epoxy to the root of one wing panel.



6. Apply 5-minute epoxy to the wing tabs on the fuselage.



7. Attach and hold the wing in place until the epoxy cures. Repeat for the other wing.

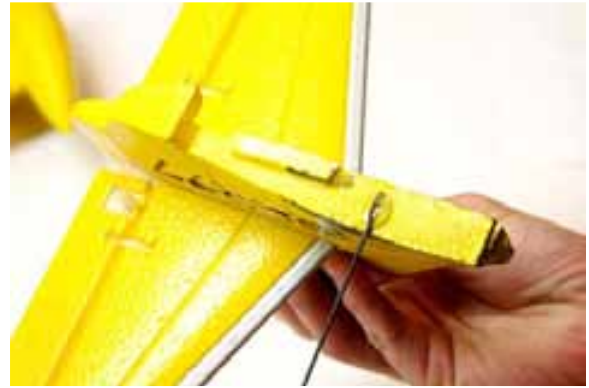




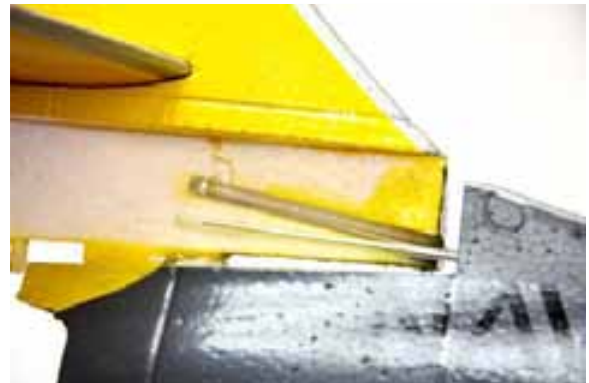
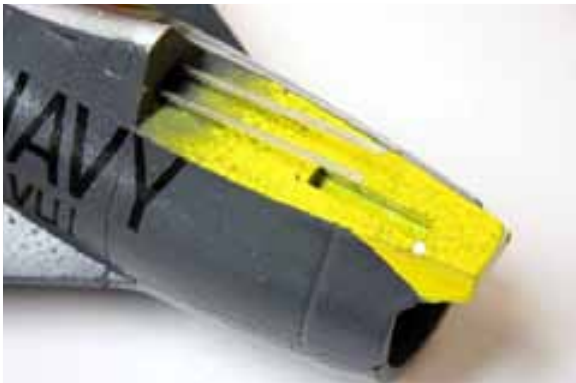
8. Insert the aileron servo wires into the holes in the fuselage and route them to the Rx.



9. Apply 5-minute epoxy to the bottom of the vertical stabilizer with the foam insert on the right side removed.



10. Carefully install the vertical stabilizer onto the fuselage, making sure the elevator tube goes into the exit slot. Be sure not to foul the pushrod opening with glue.



11. Epoxy the area where the foam insert goes. Carefully install the insert while making sure the elevator tube goes into the exit slot.



12. Use a radio or servo tester to center the servo.

Slide the elevator pushrods through the tubes and attach the clevis' to the control horns.

Slide the control rods through the servo control arm. Center the elevator and lock the servo control arm down on the control rod by tightening the control arm screw.



13. Apply 5-minute epoxy to the nose cone and attach it to the fuselage. Ensure it is aligned properly.



14. The hatch has magnets at the front and a tab at the back. Lift the hatch from the front and slide it forward to remove it. Install your receiver using double sided tape or Velcro.



15. If you decide not to install the optional landing gear (sold separately), glue the front plastic nose cover onto the fuselage with contact adhesive or 5-minute epoxy.



### **Optional Landing Gear Installation**

Remove the plastic covers on the wings. Use 5-minute epoxy to install the plastic landing gear base. Next, feed the steering servo wire into the nose and glue the nose gear base in place. Connect the nose wheel steering lead to the rudder channel on your receiver.





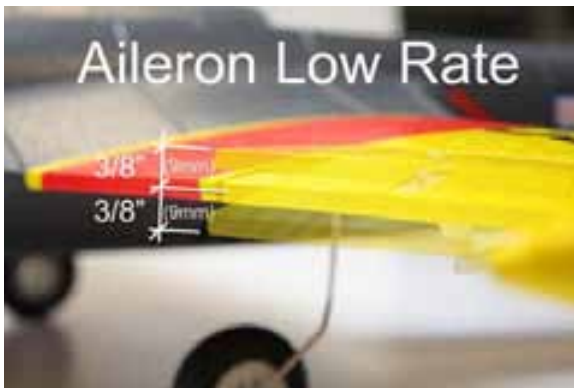
17. Install the battery pack in the hatch and position it forwards or back to achieve the proper center of gravity.



## Control Throws

### Ailerons

**3/8" Up and Down on Low Rates.**



**1/2" Up and Down on High Rates.**



### Elevator

**3/16" Up and Down on Low Rates.**



**5/16" Up and Down on High Rates.**



**After initial flights adjust the control throws to best suit your flying style and ability.**

## Center of Gravity

20. The Center of Gravity for the F9F Panther is 1-3/4" (45mm) back from the leading edge of the wing where it meets the fuselage. Adjust the position of the battery to achieve the correct Center of Gravity. Never attempt to fly a model that is not correctly balanced.



1. Set throttle to the lowest position and set transmitter trims to neutral.
2. Turn on the transmitter.
3. Adjust each control surface to its neutral position by mechanically adjusting each clevis.
4. Make sure that your transmitter is fully charged. Conduct a range test of your radio system per the manufacturer's specs.
5. Check all flying surfaces for correct direction of movement, correct amount of movement and for correct centering, adjust as required.
6. Fully charge your flight batteries prior to flying.
7. Hand launch into the wind and land into the wind.

### **In Flight Adjustments**

1. **On the initial flight climb to about 75-100 feet and see if any trim is required. If the model rolls to the right, apply some left aileron trim to level the wings. If the model dives, apply some up elevator trim, etc.**
2. **Landing should be made into the wind, reduce the throttle to just above idle and keep the nose level or a little high allowing the airplane to sink toward the ground. Apply a little throttle as the model reaches an altitude of a foot or so, this will slow the descent and aid in the flare to a smooth landing.**



**Have Fun!**  
**We hope that you have many great**  
**flights with your Freewing**  
**F9F Panther**



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