



Jeff Troy

# Flight Report

## Hangar 9-Carden Edition YAK 54

**Two industry powerhouses team up to create this 89-inch giant. Here's Part One.**

The Hangar 9 division of Horizon Hobby has a reputation for quality ARF and RTF models with top-shelf performance and excellent value. Carden Aircraft is a producer of giant-scale aerobatic models with an equally strong reputation for quality and value. When two high-end model makers join forces to produce a special-edition airplane, the result can be nothing less than spectacular. Such is the case with this result, the beautiful Hangar 9-Carden Edition YAK 54 89-inch ARF.

This is an amazing model, and because of the variety of equipment that will go into the airplane, I've elected to review the model in three separate installments. Basic assembly of the YAK 54 is covered here, and the radio and engine installation are covered in the May issue of *Hobby Merchandiser*. The June issue brings you the final installment, which takes you through the final setup and our initial flight testing of this magnificent aerobat.



*UltraCote covering is expertly applied, with straight color breaks and wrinkle-free corners. Jeff Troy corrects slight blistering from shipping with Hangar 9 covering iron and heat gun. Covering should be ironed down onto all surfaces.*



Assembling the Yak 54 begins with an inspection of the kit components. The fuselage is constructed of laser-cut wooden parts with a balsa-covered, foam bottom and turtle deck. The flying surfaces and control surfaces are balsa-sheeted foam with wooden leading and trailing edges, and reinforcement where necessary for strength.

A huge, factory-painted, fiberglass cowl is included, with a unique four-point mounting system that lets the model retain its clean surface with no protruding screw heads. The main landing gear is also factory painted, and carries a set of factory-painted fiberglass wheel pants and lightweight wheels.

The covering is professionally applied Hangar 9 UltraCote in a six-color scheme. It requires a little tightening here and there before starting assembly. I use a Hangar 9 iron and heat gun, working slowly at approximately 300 degrees to ensure that the covering is tight, and ironed fast to the surfaces underneath.

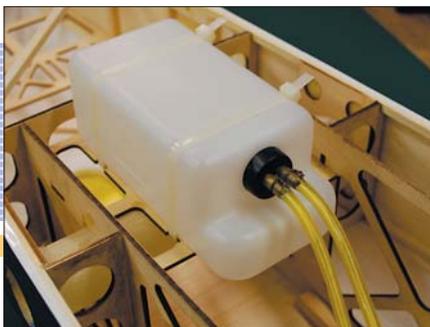


### Specifications

- Wingspan: 89 inches
- Area: 1,434 square inches
- Length: 84 inches
- Weight: 16.75 – 18.5 pounds
- Engine: 45 – 60cc gasoline
- RC: 4-or-more-channel system with six 100-ounce-minimum servos

### ARF Features

- Factory-built airframe components
- Factory covered in UltraCote
- Factory-painted main landing gear, fiberglass cowl and wheel pants
- Hardware and fastener packages
- Control horns, rods and linkage
- 36-page assembly manual



*Gas tank comes factory assembled and strapped into position, complete with fuel lines. Laser cutting has made super-light wooden components a reality; note the proliferation of lightening holes. Tail wheel steers with rudder, so ground shock to rudder servo is a non-issue. Horizontal stabilizer panels and wing panels slide on over carbon-fiber tube joiners, and are easily removed for transportation.*

This is a big and beautiful model, but not much effort is required to assemble it. All control surfaces but the rudder are factory hinged, with the gaps sealed to prevent flutter. The two-piece rudder and fin hinges are in, so the builder has only to mate the surfaces and slide the full-length wire through the hinge barrels to finish the task.

The tail wheel assembly goes in next, followed by the horizontal stabilizer panels, which slide on over a carbon-fiber joiner and are then retained with screws. Control linkage will be covered in the next installment.

The YAK 54 comes with a large, clear canopy with paint-simulated frames. A helmeted pilot bust is included in the kit, and so are adhesive-backed instrument panel graphics. I used Hangar 9 12-Minute Epoxy to secure the bust, and thin CA around the panel graphics. Pacer Formula 560 Canopy Glue works great for the lid.

Install the axles, wheels and wheel pants on the landing gear, then fasten the gear to the bottom of the fuselage with four socket-head cap screws. The engine will be installed next month, but I'm putting the cowl back on so the model looks its best for the camera. Pass the carbon-fiber wing tube through the fuselage, then slide the wings panels over the tube.

I cut and trimmed the graphics from the two included sheets, and used the photos in the manual and on the box to place them correctly. That completes the basic assembly, and has the YAK 54 ready for engine and radio.

Installation of the Evolution G50X gasoline engine and the top-of-the-line JR 2.4GHz 12X RC system is next, and that's when the fun really starts. The G50X is a powerhouse, and the 12X is absolutely amazing. I hope you're as excited about this fine airplane as I am. **HM**



*Hangar 9 and Carden Aircraft have partnered in the creation of a beautiful aerobat. The YAK 54 is an attractive model from any angle.*