



Jeff Troy with
Harris Malkin

Flight Report

FuntanaS 90

Here's the conclusion of HM's look at Hangar 9's hot 90-class aerobat.

Little was left to do to my FuntanaS 90 ARF following last month's opening installment. I wanted to get some kind of an attractive pilot figure into the cockpit, so I selected one of the long-haired female busts from AirBorne Models. A dab of Hangar 9's 6-Minute Epoxy and two #8 screws hold the bust to the floor, and Pacer Canopy Glue secures the canopy to the frame.

After connecting the aileron, rudder and elevator extensions and the throttle servo, JR's 9-channel 649S PCM receiver was wrapped in two layers of 1/2" foam rubber, then secured to two balsa rails with nylon zip ties. Then I mounted the rails between the fuselage side stringers. The 1100mAh receiver battery fits conveniently against the side of the fuselage behind the fuel tank area, also wrapped in layers of 1/2" foam rubber.

I installed a small plywood plate in the side of the fuselage near the switch mount area. The mounting surface provided is ideal for a standard mini switch, but it does not provide enough area for JR's larger Noble switch or one-piece combination switch/charge jack component.

Setting the model's surface movements with the new JR XP9303 RC system is a pleasure. Programming is super easy to learn, and the new roller on the side of the case makes increasing and decreasing values effortless. I especially like the large liquid crystal display panel, which allows for a better view of whatever is being altered in the programming menu. For the first time, I didn't have to



guess what character would come up next in the model naming section; all the characters are displayed so you can see exactly what there is and where it is.

Surface throws for 3D flight and traditional flight are given in the instruction manual, with the recommendation to use the high rate switch positions for 3D settings and low rates for normal flying. Good advice. The model required approximately three ounces of lead shot for balance, which I stuffed beside the tank in a small bag.

Assembly complete, balance checked and double-checked, control surfaces adjusted and linkages checked and double-checked, my FuntanaS 90 ARF was ready for a get-acquainted test flight, followed by a full-blown wringout from Harris Malkin. With the Funtana's long standing reputation as a great flying and capable model, my anticipation was running high. This 90-size machine proved to be even more capable than I had expected.

With a beautiful blue sky and a gentle breeze right down the runway, conditions promised to be ideal. The takeoff roll needed some right rudder, but this was more the result of a misaligned tail wheel wire than rudder



Specifications

- Wingspan: 69.5 inches
- Length: 68.5 inches
- Area: 1107.8 square inches
- Weight: 8 to 8.5 pounds
- RC: 4 channels, 6 servos
- Power: .91 to 1.00 four stroke
.61 to 1.00 two-stroke

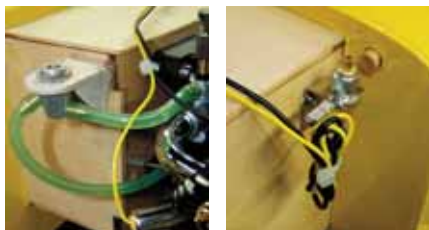
ARF Kit Includes

- Factory-assembled and covered airframe components
- Factory-painted fiberglass cowl, landing gear and wheel pants
- Wheels, fuel tank and engine mount
- Complete hardware package
- Crystal clear canopy
- 44-page assembly manual

Saito FA-100GK



Carburetor can rotate to assure optimum throttle arm location



Routine engine servicing is aided by Great Planes' Fueling Valve and Sullivan Products' Remote Glow Plug Adapter.



Completed engine compartment, ready for cowl trimming and installation.



IM Products chrome spinner and Zinger 15-6 propeller complete S90's nose.

position or engine torque. At full throttle, the model rotated in 20 to 25 feet. Even though this plane hadn't yet been flight trimmed, I couldn't resist pulling the nose up and rolling vertically into the sky.

At a mere 8 to 8-1/2 pounds, the 90-size Funtana is a very light airplane. With this kind of power-to-weight ratio and its exaggerated control surfaces, the Funtana does not require full throttle for straight and level flight. Once sufficient altitude was attained, the model was leveled and a couple of elevator and aileron clicks were all that was needed to achieve level flight trim. Following a couple of confirming passes around the field, it was time to really have some fun.

The test model was set up per the instructions, with the extreme surface deflections set on high rate. With 30 percent exponential on the ailerons, elevator and rudder, the Funtana handles in a very typical manner in low rate. Rolls are crisp and true, and little if any elevator correction is needed. Stalls are predictable and straightforward, and the model displays no tendency toward dropping a wing tip. Only a hint of down stick is needed to maintain level flight while inverted.

This FuntanaS 90 really performs well. Even in low rate, snap rolls are pretty wild, which to me, is solid evidence of great balance, a good power-to-weight ratio and the correct airfoil. Flying in low rate, the Funtana handles in a way that any intermediate pilot will enjoy and appreciate. Surprisingly, the airplane is so stable in the low-rate settings that I felt it could probably perform double duty as a basic to intermediate flight trainer if the surface throws were reduced.

JR XP9303 RC System



Complete XP9303 RC system, ready for installation into the FuntanaS 90 ARF.



Menu access is through top two buttons. Side roller increases/decreases values.



649S PCM receiver and JR 811 digital servos are standard in deluxe air set.



No more guessing! Entire character list is displayed on LCD screen during setup.



FuntanaS 90 ARF radio bay has ample room for RX, battery and throttle servo.



FuntanaS 90 ARF performs a sharp vertical climbout following a short takeoff. Saito 100GK provides ample power for 3D flight.

High rate is a different story, and wow, *what* a difference! The elevator proved a bit too sensitive for my taste, so a greater degree of exponential (60 percent) was programmed into the 9303. Once the change was made, it was much easier for me to manage the elevator in high rate.

With the sticks cornered, I can fly climbing snap rolls, a maneuver not seen too often. End-over-end tumbles are no problem, and recovery back to straight flight is just a matter of centering the sticks and pulling back a bit on the elevator. With the Saito 100GK at two-thirds throttle, the FuntanaS 90 will hang on the propeller all day.

Landings are predictable and easy to control, and long approaches aren't necessary. Just reduce to a click or two above idle, and the Funtana settles in perfectly. This model has all the desirable handling qualities for tight flying sites.

Hangar 9's FuntanaS 90 ARF is the end-product of a great design, and strong engineering and product development teamwork. This model exhibits flight characteristics that experts and intermediate pilots alike can and will enjoy. With just a simple flick of the switch, the Funtana can go from mild to extremely wild, which makes it a model that any pilot can use to advance his skill level. For all around advanced performance, it's a great choice.

For more information about the Hangar 9 FuntanaS 90 ARF, the Saito FA-100GK four-stroke engine or JR's new XP9303 computer radio system, see the ads on the next page and page 5, or telephone Horizon Hobby in Champaign, Illinois, at 217-352-1951. **HM**



Down the flightline inverted, Hangar 9's FuntanaS 90 ARF shows a small piece of its almost unlimited aerobatic capabilities.