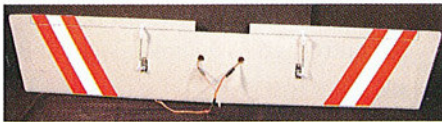
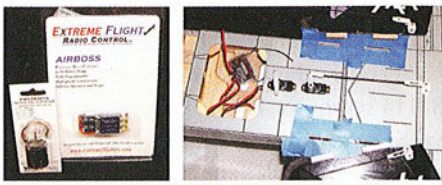


AirBorne Models F-14 TAMEcat EP

Jeff Troy's 40-size trainer is scaled down for electric park flying.

FRANK GRANELLI



Reduced in size but otherwise based on the uniquely original-design, glow-powered primary trainer by *Park Pilot* editor Jeff Troy, AirBorne Models' F-14 TAMEcat EP combines aggressive, jetlike looks with all the traits of a good basic trainer. The model offers light weight, a large flat-bottom wing with slight raised entry to prevent ballooning, excess vertical fin area and an overly large horizontal stabilizer.

The 40-size model may have been designed as a primary trainer, but the excess power and especially light weight of the EP model have transformed the TAMEcat into an advanced, scale airplane that can own the sky when you push it.

The F-14 TAMEcat EP is a blast to fly, and it's fun to build because it assembles even more easily than a trainer. The wing is a one-piece unit with the ailerons hinged but not yet glued, making it easy to mount the aileron control horns.

All three tail parts utilize interlocking construction, which adds strength and ensures proper alignment. AirBorne has already removed the covering under the stabilizer where the glue will be applied, and the holes for the control horns come factory drilled in each control surface.

The wing attaches to the fuselage with a single tab-in-a-slot at the leading edge and two Phillips-head screws at the trailing edge. The motor mount comes installed, so assembly goes quickly.

It would be extremely difficult to assemble this airplane incorrectly. Most assembly steps are self-explanatory, and that is a good thing because the instructions don't go into a lot of detail. Text is limited, but the close-up photographs show everything. Study them carefully before you start building.

The TAMEcat's aileron servo mounts are perfectly aligned with the drilled mounting holes for the control horns. The aileron control rods are also factory made, and fit perfectly. I chose E-flite S-75 sub-micro servos, which move quickly and produce 17.2 ounces of torque.

Fuselage assembly begins by installing the rear flying surfaces. I used 12-minute epoxy to secure the self-aligning horizontal stabilizer and two vertical fins. Apply the adhesive and position the stabilizer, then insert the tabs on the bottom of both vertical fins through the slots in the stabilizer and into the slots in the fuselage. Use a triangle to ensure that the vertical fins are installed at 90 degrees to the stabilizer. Attach the control horns to the rear control surfaces, then mount them with thin CA on the hinges. Finish the tail by installing the servos and the factory-prepared pushrods and linkage.

The F-14 TAMEcat EP comes with a KM0283010 outrunner motor that bolts right onto the airplane's motor mount. I added Extreme Flight's Airboss brushless speed control, rated at 35 Amps.

The TAMEcat comes with a painted fiberglass cowl that needs no trimming and fits neatly over the motor and mount. A 10-6 folding propeller with a built-in spinner is also provided. Use the spinner backplate to ensure that the cowling is correctly aligned when you drill the cowl mounting holes in the fuselage. Remove the spinner backplate and secure the cowl with four screws, then install the propeller blades on the backplate. Mount the propeller and spinner cone.

Tricycle landing gear is provided, although the nose gear is not steerable. Takeoff into the wind from a paved surface is no problem, but it's probably best to hand-launch the TAMEcat if flying from a grass runway. If that's the case, save some weight and don't use the gear.

The Spektrum DX6 and an AR6000 receiver guide my TAMEcat EP. This is a 2.4GHz computer system, so interference is not an issue. I mounted the receiver under the rear top hatch, and used an extension to reach the ESC. A 6-inch Y-harness can be used for the aileron connections, or you can plug the aileron servos into separate receiver channels.

At full power, the F-14 TAMEcat EP will jump out of the hand-launch, and the climb rate is incredible. Initial

trim was good, if not perfect, so I let the climb continue up to roughly 300 feet. There, I pushed to level and the airplane accelerated very quickly. While its top-speed is not dangerously fast, estimated at 45 to 50 M.P.H., it gets there fast.

The TAMEcat EP is very agile. Each full roll takes approximately 1.5 seconds, and the flat-bottom airfoil requires adding extra down elevator after the third consecutive roll to maintain altitude. If the model should lose altitude during any maneuver, the pilot can easily get it back because of the TAMEcat EP's unlimited vertical performance. Point it straight up, give it all the electrons at once, and watch it shoot upward until you realize that you can't see it anymore.

Stall turns require half throttle for the small rudders to arc the airplane over. Surprisingly, the small rudders cause the airplane to bank without aileron input even though the wing has very little dihedral. Snap rolls are slow, so stopping them at wing-level is easy.

Use the recommended control throw settings and the airplane will not snap, spin or knife edge. Experienced pilots might prefer to increase the elevator and aileron deflections, and set the rudders for "all you can get."

Spins and snaps become fun with increased control throws. Inverted flight is incredible for a flat-bottom airplane. The TAMEcat EP will maintain level inverted flight with very little down elevator input, and do multiple reverse outside loops and multiple vertical-8's till the battery dies. There is no tendency to roll out of any inverted maneuver, not even the outside avalanche. Vertical rolling maneuvers get very vertical, very fast, so be careful not to climb out of sight; it will if you let it.

Slow-speed flight is another near wonder with the TAMEcat EP. The extra elevator movement allows the airplane to almost stop in midair. The model refuses to stall without power input, and it might even be possible to Harrier-land the TAMEcat if the landing gear is attached to protect the propeller during touchdown. Regular landings are at roughly 15 M.P.H.

Despite all my maneuvering, an 11.1V 2100mAh battery lasts at least 12 minutes. Long flight times, impressive slow-speed performance, vertical at its best and being relatively easy to fly, the F-14 TAMEcat EP, at only \$119, including the motor, is an airplane worthy of your hangar.

Additional assembly and performance information, including videos, are online at www.masportaviator.com. 