

HM Review

Jeff Troy

The RAF in an ARF: ElectriFly's S.E.5a

The classic "Scout Experimental No. 5" is brilliantly executed in an ARF EP kit.



Specifications

- Wingspan: 34 inches
- Area: 420 square inches
- Length: 25.5 inches
- Weight: 1.3 - 1.5 pounds
- Power: 28-30-950 Brushless
- RC: 4-Channel, 4 servos, ESC

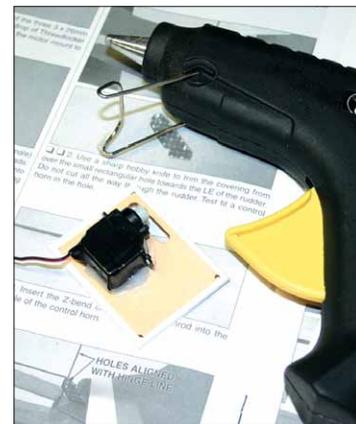
ARF Kit Features

- Factory-built components
- Factory covered in MonoKote
- Painted ABS cowl
- Full hardware and linkage
- Wheels and detail accessories
- 20-page instruction manual

Horizontal stabilizer and vertical fin fit into slots at the rear of the fuselage. Great Planes Pro Thin CA holds them permanently. Elevator panels are supplied as a one-piece unit with center joiner.

The Royal Aircraft Factory's (RAF) Scout Experimental No. 5, simply known as the S.E.5, was one of Britain's most successful front line fighters of the First World War. With its powerful Hispano-Suiza V8 engine, the solid little aeroplane was capable of speeds greater than 100 miles per hour, and could out-climb and out-maneuver most enemy aircraft of the day. Great Planes' ElectriFly division has captured the charm and charisma of the S.E.5a in a fabulous electric ARF, and in addition to its great looks and "friendly" bench experience, this RC model is one of the nicest flying WWI aeroplanes you'll find.

The S.E.5a's airframe is comprised of seven 100 percent factory-assembled components — one fuselage, upper and lower one-piece wings, one stabilizer,

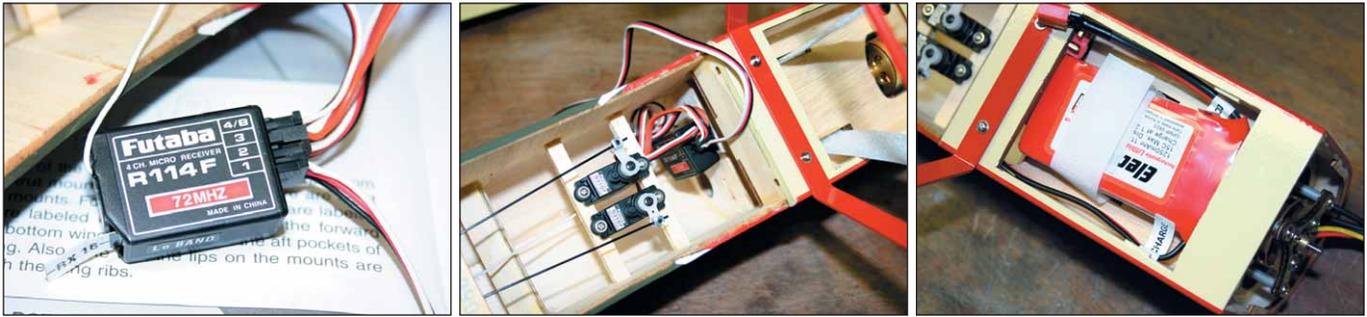


Great Planes Pro Thin CA is used to secure the model's ultra-thin hinges for the ailerons, elevator and rudder. Futaba S3107 aileron servos are secured to their panels with Woodland Scenics Low Temp Hot Glue Gun and Low Temp Glue Sticks.

one vertical fin, one dual elevator assembly and a rudder. Each component has been carefully constructed and sanded, then professionally covered with Top Flite MonoKote in a three-color squadron scheme. Complementing the wooden airframe are a fully assembled forward landing gear, formed and painted inter-plane and cabane struts, a dummy Vickers machine gun, and two painted ABS cylinder heads and exhaust stacks.

Although the full-scale Scout was a relatively complex machine for its day, ElectriFly has made the model into a delightful workbench experience. Assembly begins with mounting the lower wing, then installing the horizontal stabilizer and vertical fin, which slide into slots at the rear of the fuselage and are permanently secured with Great Planes Pro Thin CA. The control



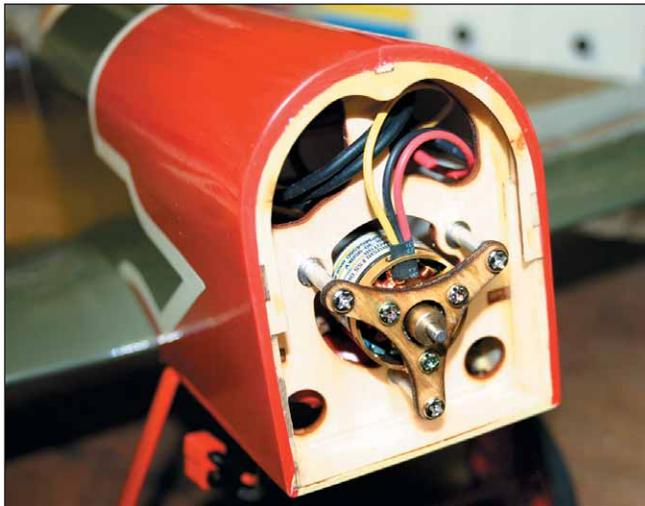


Futaba R114F receiver and S3107 micro servos fit in the RC bay. 3S 1250mAh LiPo pack provides power.

surfaces are hinged with Pro Thin CA, and the carbon fiber control horns are installed.

I chose the recommended ElectriFly Rimfire 28-30-950kV Out-Runner Brushless Motor and Silver Series 25A Brushless Electronic Speed Control setup for my new S.E.5a. These components mount effortlessly, especially the motor, thanks to the correctly positioned, factory-installed blind nuts on the back side of the firewall.

After soldering I-don't-know-how-many bullet connectors and Deans Ultra Connectors onto ESC wires, I was particularly impressed to find everything already in place on the Rimfire motor, Silver Series ESC and ElectriFly 3S 1250mah Lithium-Polymer Battery Pack. I still thought that I would have to solder the bullet connectors to replace the pin connectors on the Rimfire motor, but was so pleased to see that the pins are press fitted on the terminal ends of the wires. They simply pull off with a little pressure, and the ElectriFly bullet connectors can be quickly pressed on in their place. The entire motor, ESC and battery installation took less than 20 minutes.



Rimfire 28-30-950kV Out-Runner Brushless Motor is a direct install in this model. Four blind nuts come correctly factory installed behind the firewall.

The radio gear is installed next, and I chose a basic four-channel Futaba transmitter with an R114F micro receiver and four S3107 sub micro servos. The elevator and rudder servos mount on an integrated inner fuselage tray, and I used a Woodland Scenics Low Temp Hot Glue Gun and Low Temp Glue Sticks to secure the aileron servos to their servo covers in the lower wing.

A complete control system package comes in the ElectriFly kit, and it includes wire pushrods with Z-bends already in place, carbon fiber control horns, micro pushrod connectors, and heat-shrink sleeves to connect the aileron pushrods and upper aileron connecting rods. It doesn't take long to get all this linkage hooked up, and the instruction manual provides the recommended control surface deflections for high and low rates.



Hobby Merchandiser editor Jeff Troy and the new ElectriFly S.E.5a ARF at LCRCC's rural flying site.

Attaching the upper wing on a biplane is often a critical assembly step; setting the incidence incorrectly can result in a model that is all but unflyable. ElectriFly has taken all the questionable issues out of installing the upper wing, with a very cleverly designed yet simplistic mounting system — no jigs or incidence meters required.

One Phillips-head screw secures each of the model's four painted composite interplane struts to its mounting lug on the lower wing. The four cabane struts have factory-bent tabs at the lower ends, and these simply press into tight-fitting slots in each side of the fuselage. When the upper wing is placed over the eight struts, the alignment is perfect. The four interplane struts are screwed to the mounting lugs under the upper wing, and the four cabane struts are screwed directly to the bottom of the wing.



ElectriFly S.E.5a is complemented by ElectriFly's Ultra EP Box, Triton Charger, Accu-Cycle Elite and a collection of Hobbico hand tools and accessories.

After installing the dummy Vickers gun, the ABS cowl and exhaust pipes, ElectriFly 10x4.5 PowerFlow propeller and charging the ElectriFly LiPo battery on my Triton charger, the little British Scout was ready to fly. Total bench time was less than four hours, and every minute of it satisfies, even for seasoned craftsmen.

The S.E.5a delivers in spades on the flightline. The takeoff run on my club's grass runway in rural Pennsylvania is always smooth and effortless, with no stuck-in-a-rut walkouts and no nose-overs. The Scout lifts gracefully, and its Rimfire Brushless setup makes it more than capable of extremely steep climbout if desired.

The S.E.5a's aerobatic performance envelope rivals that of the full scale, both in appearance and perceived airspeed. Vertical climbs and inverted flight are possible, although the model always shows its best to a crowd when performing maneuvers that are typical of World War One combat aircraft — wingovers, chandelles, Immelmann turns, Split-S and stall turns, egg-shaped loops and big, fat barrel rolls. Silly me, my only regret is that I forgot to tie a small scrap of white silk around the included ABS pilot's neck before I took the model from the workbench and out to the flying field.



Takeoff from grass runways are a natural for the British Scout. Plenty of power for a steep climbout.

ElectriFly's S.E.5a ARF spans just 34 inches and weighs approximately one-and-a-half pounds, battery installed and ready to fly. With 420 square inches of wing area, the model's wing loading is somewhere in the 8-ounce-per-square-foot range. The agile flight performance and extended air times very clearly show the results of its sound design and quality construction throughout.

Maneuver after maneuver, the S.E.5a continues to impress me with its charm and grace. It doesn't have the heavy metal thunder of a World War II model, but it will surely bring an RC pilot back to the days when chivalry in air combat was still prevalent, when officers saluted an opponent who brought them down, and when a shot of whiskey was the only thing to prevent nausea from the smell of castor oil. This is a truly classic early aeroplane.



ElectriFly's "Scout Experimental No. 5" on a low and slow flypast is breathtakingly beautiful. The model maneuvers with tremendous realism, and is stable enough for low-time pilots with trainer experience.

While I don't recommend ElectriFly's S.E.5a as a basic trainer, I do feel that it's entirely suitable for anyone who has mastered a trainer. It's a beautiful little aeroplane that will wow anyone who sees it fly. Mine flew in front of my relatively large RC club on a busy contest day, and all eyes were glued as she performed for the camera.

The level of prefabrication in this kit is very high. Nothing has been spared in bringing the electric modeler a kit that s/he will appreciate with every step of its assembly and every trip into the blue. All parts have been laser cut for the tightest possible fit, then assembled and sanded to produce the baby-smooth surface required for a clean covering application. Best of all, the S.E.5a's flight performance is, at the very least, equal to the pleasure that it provides on the bench. The S.E.5a is a thumbs-up winner.

For additional information about the ElectriFly's new S.E.5a ARF, see the ads on pages 5, 29 and 72, visit the Web site at www.bestrc.com, or call Great Planes Model Distributors in Champaign, Illinois, at 217-398-3630. **HM**



Although only 34 inches from tip to tip, ElectriFly's British S.E.5a is a most agile and impressive WWI fighter.