



Jeff Troy

Flight Report

Mini Edge 540

E-flite adds a hot 3D aerobat to its fine lineup of very capable small electrics.

E-flite's Mini Edge 540 3D gives discriminating RC pilots a powerful double punch for their money. This model delivers quality time, however short, on the bench, and outstanding intermediate to expert flight performance. Based on Mike McConville's popular 33 percent Edge 540 ARF from Horizon Hobby's Hangar 9 line, the Mini Edge 540 is a first-class aerobat for brushless electric power.

I chose my JR XP6102 computer transmitter and four of E-flite's new S75 sub-micro servos for my Mini Edge 540. These new servos are rated at 17.2 ounces at 4.8 volts,

and their transit time is only .12 seconds. Each servo comes with two mounting screws and a handy collection of servo output arms, including a reinforced, extra length arm, which is required for almost every contemporary small electric model produced for 3D flight. I installed one S75 servo in each wing panel for the ailerons, another in the tail for elevator, and a fourth inside the fuselage cabin for the pull-pull rudder system. The pull-pull rudder is a very nice feature of the E-flite Mini Edge 540 3D.



E-flite's new S75 servos and JR SPORT receiver are in HM's review model.



E-flite's Mini Edge 540 is a fully built-up balsa and lite-ply ARF.

My power system consists of an E-flite 400/4200KV Brushless Motor and an E-flite 20mm by 20mm Heat Sink, one of the newer E-flite 20-Amp Brushless ESC's, and a Thunder Power 11.1V 2100mAh LiPoly battery. I charge this setup with E-flite's compact Celecra DC charger, which is an ideal unit for charging 1-to-3-cell LiPoly motor packs.

E-flite's Mini Edge 540 is a great build. Throughout its assembly, I found myself continually amazed by the model's exceptional wood quality, clean laser cutting,



Small piece of paper is used to set motor for proper gear backlash.

drum-tight UltraCote covering and quality included accessories. Nothing in the box is "throw-away" fill; every fastener, every piece of control linkage, the painted glass cowl and wheel pants, landing gear legs and every other part of this model are all top shelf.



Specifications

- Wingspan: 37.25 inches
- Area: 297 square inches
- Length: 34 inches
- Weight: 24-26 ounces
- Motor: 400 brushless required
- Battery: 11.1V LiPoly required
- RC: 4-or-more-channel with four sub-micro servos and ESC

ARF Kit Features

- Factory-assembled components
- Factory covered in Hangar 9 UltraCote
- Fiberglass wheel pants and cowl
- Carbon fiber landing gear and wing joiner
- Complete hardware and control linkage
- 6.6:1 gearbox module
- 12-6 slow flyer propeller
- 44-page instruction manual



Pull-pull rudder is standard installation in Mini Edge 540 3D. Thunder Power 11.1V 2100mAh LiPoly pack is recommended.

Assembly goes quickly. The landing gear is assembled and installed first, followed by the aileron servos. Control surfaces are joined to the flying surfaces with CA hinges and Pacer's ZAP Thin CA adhesive, then the wings are mounted over the carbon joiner, and the stabilizer/elevator and vertical fin/rudder assemblies are installed with thin CA. The motor and cowl installations get builders closer toward completion, and the rest of the RC installation finishes the job. I completed my entire Mini Edge 540 in just one evening — approximately four hours of very pleasurable bench time.

Flying the model is exciting but predictable, and while its forte is clearly 3D performance, the Mini Edge 540 also makes an excellent choice for sport pilots who enjoy traditional pattern maneuvers, and may not be looking for all the harrier-torque roll-hover antics that the airplane is so highly capable of delivering. With my control deflections set to manual spec for low rate and “as

much as I can crank in” on high rate, my Mini Edge taxis and takes off like a pattern ship and flies a beautiful schedule of maneuvers with my switches in low rate.

I have my exponential set at 50 percent for low rates and 60 percent in high, and when the high rates are hit, the airplane is capable of almost anything. Because of the 60 percent expo, the model is able to maintain extreme



Maximum rudder throw is mandatory for knife-edge flight. stability, but still leap aggressively at every command when the sticks are thrown a little farther. The rudder should be set for extreme deflection if knife edge flight is to be performed with any authority. Rudder wag should almost contact the elevator panels at full deflection.

For more information about the Mini Edge 540, 400 Brushless Motor and 20-Amp ESC, the S75 Sub-Micro Servos and Celecra LiPoly Charger, see the ads on pages 5 and 53, or call Horizon Hobby at 217-352-1958. **HM**



It's hard to believe that this model spans less than 40 inches. Mini Edge 540 3D from E-flite by Horizon Hobby, Champaign IL.