



Fly this classic scale aerobat today

by Thayer Syme



SPECS

PLANE: Decathlon

MANUFACTURER & DISTRIBUTOR: Park Flyers R/C

TYPE: Scale park flyer

FOR: Intermediate pilots

WINGSPAN: 38.25 in.

WING AREA: 266 sq. in.

WEIGHT: 22.86 oz. (17.4 oz. empty)

WING LOADING: 12.38 oz./sq. ft.

LENGTH: 31.5 in.

RADIO: 4-channel required; flown with a ParkFlyersR/C.com 4-channel transmitter and 6-channel micro-receiver; 3 servos installed

POWER SYSTEM: Direct-drive S-480 brushed motor, 7.2-inch prop, 16A speed control, Art-Tech 8-cell 9.6V 1000mAh NiMH battery

FULL-THROTTLE POWER: 15.7 amps, 115.1 watts, 5.03 W/oz., 80.5 W/lb.

TOP RPM: 11,340

DURATION: 10 minutes

MINIMUM FLYING AREA: Ballfield

PRICE: \$160

COMPONENTS NEEDED TO COMPLETE: 8 AA batteries

take over 4 hours, and if it really topped out at 9 volts it would never fully charge the 8-cell battery, as it peaks at almost 12 volts. The charger was my only disappointment with this project, and so I used a Multiplex LN-5014 peak charger instead. The efficiency of most batteries will increase over the first few cycles, so I programmed the 5014 to gently run four discharge-charge cycles overnight before I went out flying the first time. This is not necessary, but it will improve the first flight performance and duration.

Now attach the tail surfaces. The manual shows them being secured with small screws and 90-degree brackets. There are even slight molded depressions for the brackets. This step has been altered, and it now includes a tube of glue to secure the tail. Instead of using the unlabeled kit glue, I used foam-safe medium Zap CA and kicker. I applied the glue, assembled the parts and then applied the kicker around the edges.

The pushrods are set at the factory, and I recommend that you confirm that their lengths are correct before you fly. Just rotate the clevises as needed to center the controls with the transmitter trim's neutral. Before you attach the wing, plug in the ailerons and test that they work and are centered properly. It is a lot easier to make adjustments before you've buttoned the model up and attached the struts.

The struts themselves are a nice scale feature that look great and are not just along for the ride. They also stiffen the wing significantly for aerobatic maneuvers. The struts sleeve over plastic tabs in the wing and fuselage and are secured with small screws. The two slightly longer struts go in the back, so stand all four up on a table to find the longer ones.

The main landing gear is mounted in a slot in the fuselage and held by friction. As I dry-fit the tail surfaces for my model, I found that the bottom of the rudder interfered with the tailwheel steering arm. I made a quick pass with a single-edge razor blade and removed just enough of the bottom of the rudder to allow free motion. A small plastic bracket is mounted on the bottom of the rudder and captures the arm for steering.

Stand back and smile. I think you will be impressed by how true-to-scale this model looks, especially when you consider that you spent less than an hour assembling it.



AIRBORNE

The steerable plastic tailwheel gives good control on the ground, and I had plenty of fun running around my driveway a bit to get a feel for its handling.

If you have a smooth surface, there is plenty of power to get off the ground. Don't worry if you don't though, as it's also easy to hand-launch. Just throttle up and give it a firm, level push forward, and it will accelerate and climb briskly. It's nice to see that despite the current fad for Brushless/LiPo power systems, a conventional direct-drive brushed motor and a set of NiMH batteries can still fly a model nicely.

The Decathlon features full house 4-channel control and is just as maneuverable as the prototype. After a few circuits to get the feel of it, I found it very capable; it will easily loop and roll from level flight, and it will hold inverted with a little forward pressure. Backing off the power a bit will extend your duration nicely, and 5 minutes plus at full throttle can easily be stretched to 10 minutes or more in calm conditions. A second battery will obviously increase your flying time per session.

This is not an unlimited 3D aerobat by any means, but it doesn't pretend to be. Instead, it is an honest sport flyer that looks very realistic in the air and handles predictably. It does very well in a moderate breeze, though duration suffers in the wind, as I protect against the turbulence by using more power. In calm air, it is a delight to take off and climb out realistically before taking it up higher for a little sky dancing.

Pilots have long appreciated the Bellanca Decathlon for its utility as an economical two-seater and as a spirited aerobat capable of sustained inverted flight and outside maneuvers. Intermediate RC pilots will be happy to know that Park Flyers R/C offers a ready-to-fly version that's complete with everything all in one box. You will only need batteries for the transmitter.

This model presents a welcome alterna-

tive to more common designs while it retains the classic look and comfortable handling inherent to a high-wing tail-dragger. There are only a few steps to complete before you are ready for your first flight, so let's get started.

TIPS FOR SUCCESS

The assembly required is quite basic and can be accomplished quite quickly at the kitchen table. You will need eight AA batteries for the

transmitter, but everything else is included, even tools! Power up the transmitter, and then turn on the model to set all the servos to neutral. By doing this, you can set up the model while the included 8-cell 1000mAh NiMH pack battery is on charge.

The included wall charger was labeled for 280mA at 9 volts, and the manual recommends a 2-3 hour charge time. When I looked at these numbers I quickly realized that charging a 1000mAh pack at 280mA would



CONCLUSION

With quick assembly, everything except the AAs in one box, a scale look and lively performance, this is a great first or second aileron model for someone with a little stick time behind them. It also makes a fun little flyer for more experienced pilots looking for some fun. With a full complement of hobby-grade gear already installed, you will be in the air in no time with a capable aerobat that will stand out on the flight line. ☺

Links

Multiplex, www.multiplexusa.com, (858) 748-6948

Park Flyers R/C, www.parkflyers.com, (800) 470-8932

Zap is manufactured by Pacer Technology, www.zapglue.com

For more information, please see our source guide on page 121.