



Slow air speeds gave the photographer plenty of time to set up for a great shot.

See this aircraft in flight through bonus photos and videos in the digital edition and at www.ModelAviation.com/maxfordblériotxi.

Experience the thrill of early aviation

First impressions: How often does one get to fly a trainer, sport scale warbird, and racing aircraft model all in one airframe? The Blériot Model XI by Maxford USA allows a pilot to do just that. As originally marketed by Louis Blériot, the Model XI could satisfy any pilot's desire and be used as a trainer one day and a light bomber the next.

Aircraft from the Pioneer Era of aviation were often used for more than one application. Blériot himself originally used the Blériot Model XI to cross the English Channel. This was a huge feat, because it was the first heavier-than-air aircraft to make the crossing, and the act placed 1,000 British pounds in Blériot's pocket.

The epic channel crossing secured a spot for Blériot and his airplane in the history books and provided him with a career in aviation. Taking off from France without a compass and with a French destroyer escort, Blériot crash-landed on English soil on July 25, 1909, prompting the newspaper headline, "Britain is no longer an Island."

Blériot accomplished this flight piloting an airplane equipped with a three-cylinder, semiradial, 25 hp Anzani engine—a modified motorcycle engine that was developed to be lightweight and air cooled. Along with the unusual engine, the Blériot prototype featured wing warping instead of ailerons, a rudder that moved as one piece, and elevators that encompassed the entire outer section of the horizontal stabilizer. The unique design was punctuated with an undercarriage featuring spoked, individually sprung front landing gear attached to the airframe via a large wooden structure reminiscent of a medieval rack.

The Maxford ARF nearly matches the Blériot prototype. From the preassembled open-truss frame to the three-cylinder dummy radial engine, this ARF is a work of art as well as a model airplane.

Other pilots at the airfield commented that the Maxford Blériot looked as though it belonged in a museum. My wife even remarked how attractive



Left: This shows the model's level of completion as it comes out of the box.



Plenty of extra details are available including a dummy engine, spoked wheel sets, and a pilot with a seat.

this model is. The original aircraft featured wing warping and undercambered wings, but with the limitations of balsa, Maxford substituted ailerons and a flat bottom airfoil.

For scale purists, Maxford includes instructions on how to eliminate the ailerons and make the Blériot a three-channel airframe. Not included with the kit were extra details that add to the model's realism, including a dummy engine, pilot and seat, and vintage spoked wheels (for roughly \$55). These optional components definitely enhance the model's overall scale realism.

The Maxford Blériot requires a radio system, servos, 400-watt brushless power system, and propeller. We used four Tactic TSX5 micro high-speed servos, a Cobra 2826-12 brushless outrunner, 40-amp speed controller, and a HobbyKing DRX DSM2 OrangeRx receiver with a Spektrum DX7 radio.

Construction

I first laid out all of the pieces in a "semi-exploded view" to get an idea of how much work is ahead of me. I opened the box and was greeted by the various parts taped with packing tape to the inside of the corrugated container. Well protected, removing the pieces from their respective storage places required a sharp hobby knife and patience.

I have assembled a few ARF kits, but as I previewed the instruction manual and laid out all of the pieces in front of me, I realized that this model would require more attention to detail during the build because of the number of parts and the rigging wires. The assembly guide includes many black and white photographs to help. Intermediate builders will have no problem making

their way through the process, but less-experienced builders such as myself should carefully read each step to make sure they clearly understand the directions.

The instruction manual has you start at the tail of the aircraft and work your way to the nose. The servos I selected were slightly large for the location provided by Maxford, but I was able to create the additional space needed to fit them in place with an emery board.

The horizontal stabilizer exactly matches the prototype. The outer sections function as elevators instead of the more-typical TE elevator. This was a unique design feature of the Blériot and I was happy to see that Maxford stayed true to the prototype.

AT A GLANCE ...

SPECIFICATIONS

Model type:	Semiscale ARF
Skill level:	Intermediate builder; intermediate pilot
Wingspan:	51 inches
Wing area:	552 square inches
Length:	42 inches
Weight:	70 ounces
Power system:	400- to 500-watt brushless outrunner
Radio:	Four-channel radio; four micro servos
Construction:	Balsa/plywood
Covering/finish:	Iron-on Mylar covering
Street price:	\$219.99

TEST-MODEL DETAILS

Power system:	Cobra 2826-12 760 Kv brushless outrunner, Cobra DL40A+ speed controller
Battery:	Turnigy nano-tech 4S 25-50C 3,300 mAh LiPo

Propeller:	12 x 6 Master Airscrew
Radio system:	Spektrum DX7 2.4 GHz DSM2 radio; HobbyKing OrangeRX six-channel receiver; four Tactic TSX5 micro high-speed servos
Ready-to-fly weight:	69 ounces
Flight duration:	7-15 minutes

PLUSES:

- High level of detail and a unique design attracts attention on and off the airfield.
- Solid, low-speed performance makes for enjoyably long flights using a 4S 3,300 mAh LiPo battery.
- Scale appearance and in-flight performance make this ARF look convincing in the air.

MINUSES:

- Tail wheel steering can be vague during the takeoff roll.

I had some issues making the glued joint stick on the horizontal stabilizer and would suggest allowing plenty of time for it to dry. After letting it completely dry, I stress tested the surface areas to verify that it wouldn't fail in flight.

After finishing the tail linkages, I moved to the wing assembly. The pilot can decide to permanently glue the wings in place or to use the rigging wires to hold them to the fuselage. I wanted the rigging to be 100% cosmetic, so I permanently glued the wings to the fuselage after I mounted the motor and landing gear to the aircraft.

Because of the various motor size options, the preassembled landing gear can be slid forward or backward to fit different types. If you purchase the dummy engine, I suggest mounting it before installing the main landing gear.

At this point of the assembly, the Blériot was technically ready to fly, but it wouldn't be complete if I skipped installing the rigging wires. Borrowing one of my wife's sewing needles and using a toilet paper roll as a spool, I went to work threading the rigging. The needle was invaluable, and I would have been frustrated with this part of the project without it.

The makeshift spool also helped to keep things flowing smoothly because the bundle of string provided with the kit would tangle if you looked at it the wrong way. Tying knots in the thread was nearly impossible, because they would easily untie. To solve this, I decided to forgo the knots and used CA to attach the rigging to the airplane. This method worked well with the wing rigging wires, the open-truss frame, and tail section of the aircraft.

The last step with every build is to check the CG. The aircraft balanced perfectly with the battery placed as far forward as possible.

I devoted many evenings to assembling the Blériot and intentionally took my time so that I would get it right. When I finally had the model completely assembled, I was pleased with how magnificent it looked on the bench!

Flying

Slipping the recommended four-cell LiPo flight battery into place is easy, thanks to the open design of the forward part of the fuselage. I was not satisfied with using the single piece of surface-mounted hook-and-loop material that was provided in the kit as the sole means of holding it in place. I was able to borrow a hook-and-loop strap from another aircraft.

Using a 3,300 mAh capacity battery put the Blériot's all-up weight at 4 pounds, 5 ounces, which is 1 ounce less than Maxford's specified weight. The wing's LE is even with the firewall, which normally would all but guarantee a tail-heavy aircraft. The mass of the suspension-equipped main gear negates the need for ballast.

The landing gear's unique design and configuration is styled

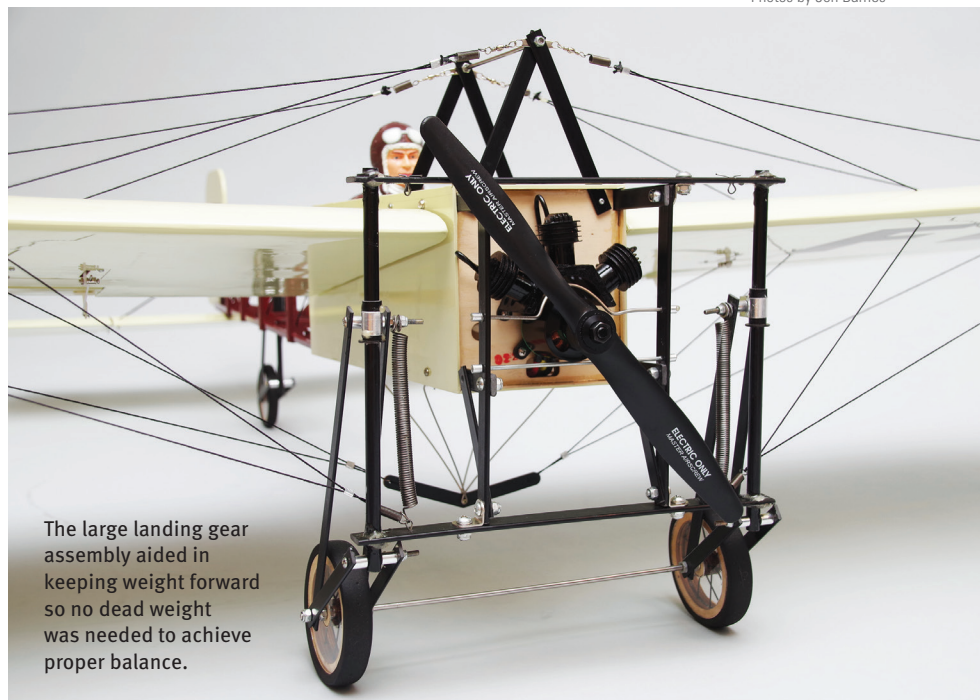
after the full-scale Blériot. The position of the tail wheel at the aft end of the fuselage qualifies the Blériot as a tail-dragger; however, the stance of the airplane on the gear is relatively flat and more reminiscent of a tricycle-gear-equipped airplane. The large-diameter wheels and springy suspension work together to create a Cadillac-like ride.

Ground operations are smooth and easy; it fairly glides over even rough runway surfaces. The optional pseudo-spoked wheels help recreate the illusion of the full-scale Blériot's metal spoked wheels.

With the aircraft's pudgy nose aimed into the wind, I rolled smoothly and deliberately into the throttle. After all, the three-cylinder engine that powered the full-scale Blériot surely would not have provided excess acceleration.

As the speed built and I prepared to rotate, the model

Photos by Jon Barnes



The large landing gear assembly aided in keeping weight forward so no dead weight was needed to achieve proper balance.

suddenly pulled hard to the left. Thinking that I had merely allowed my corrective rudder thumb to fall asleep, I taxied back and reset for another takeoff attempt—and the same sudden hard veering was repeated.

Confident that I was simply not applying the timely and proactive rudder inputs typically required to counteract the torque encountered during a takeoff, I tried several more times to execute a smooth, straight, scalelike takeoff. Close visual observation and analysis finally revealed that the tail wheel control linkages were actually the culprit behind the foiled attempts.

The rudder servo horn connects to the rudder via a long pushrod; another pushrod then transfers the rudder motion forward to the tail wheel. This assembly could benefit from being slightly stiffer with less inherent free play.

I found it necessary to roll into the throttle fast and hard in order to successfully keep the Blériot tracking straight down the runway. Doing so is anything but scalelike, but it allows the rudder to quickly achieve the authority that it

needs to effectively control the Blériot's heading.

If attempting to mimic the in-flight behavior of a vintage monoplane is your fancy, the Blériot is a joy to fly. The Cobra brushless power system provides slightly more than 500 watts of power when used with a Master Airscrew 12 x 6 propeller, but the Blériot is happy cruising around the sky at half throttle.

Although the model was equipped with ailerons, I noticed that the Blériot makes its turns using mostly rudder input. I flew the Blériot in a variety of conditions—from light to gusty winds. The Blériot performed most predictably when flown in the former. The large frontal area and open fuselage contribute to the model's tendency to drag. Flying it in higher winds seemed to exacerbate the drag and the model threatened to show an ugly side.

The Blériot's slow-speed capabilities are impressive. Add a modest headwind and the Blériot can nearly slow to a walk. Basic aerobatic maneuvers such as rolls, loops, and stall turns are possible, but I did not feel particularly pressed to push the model through many.

Landings are beautiful and easy to perform; the Blériot glides down and reconnects with the earth with a light, springy bounce or two. Given the model's willingness to sip the amps, my 6- to 7-minute flights often saw only 1,000 mAh pumped back into the flight battery.

Conclusion


I have always had a keen interest in less-frequently modeled aircraft. Although I have had an opportunity to fly several Maxford USA models in the last half dozen years, the Blériot is, without a doubt, my favorite!

Some aspects of the assembly were challenging, but eminently enjoyable. I was enamored with the completed model's appearance and found myself wanting to find an

appropriate place within my house to display it in between flight sessions—yes, it looks *that* good!

The fuselage's open-truss design, with its complex network of rigging wires and spring-loaded landing gear, combined to create a model with a much higher level of detail than a typical ARF. The addition of the optional dummy engine, pilot figure, and spoked wheels are icing on the cake.

Although performing truly scalelike takeoffs is nearly impossible because of the control linkages used to control the tail wheel steering, the Maxford Blériot does not disappoint in the air. Superb slow-speed performance endows this model with the ability to putt around in a scalelike fashion.

If you favor Scale aircraft and have not yet owned a model that dates back to the infancy of aviation, the Maxford USA Blériot is an enjoyable way to experience the excitement of that era. 

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The Blériot resembles a box with wings.



With the rigging complete, the Blériot goes from model airplane to work of art.