



This gas-powered aerobat is fun and easy to transport

The 30cc class of airplanes is the perfect size for anyone who is looking for a model to perform similarly to a Giant Scale gas airplane, but has transportation or storage problems.

At a scale of 26%, the Redwing RC Slick 540 qualifies as a legal size for International Miniature Aircraft Association (IMAA) Giant Scale events. Documentation can be achieved with a three-view drawing of someone carrying aircraft.

My review model used the O.S. GT 33 for its power plant, and Xpert SI-4501 high-voltage brushless servos all around.

In the Box

The Slick arrived in a sturdy box. I know you might read that in other reviews, but it took me 20 minutes to carve my way into it. The corrugate was roughly $\frac{3}{4}$ -inch thick and glued together on every edge. After I finally got the top off, I found all of the major parts packed in bags, which were secured in the box.

The box contained the fuselage, cowl, single-piece hatch/canopy, horizontal stabilizers and elevators, rudder, wings, carbon-fiber landing gear, wing tubes, and tail wheel. The fuselage has a built-in canister tunnel, with a bolt-on hatch. All of the control surfaces were drilled with the hinges remounted, but nothing was glued in place. I like that the final gluing is left to the customer because it gives us a chance to double check that the hinge lines are correctly drilled.

The Slick comes with a large supply of miscellaneous hardware. A fuel tank, titanium turnbuckle pushrods for the ailerons and elevator, pull/pull hardware for the rudder, wheels, and axles, and a set of fiberglass control horns to be glued into the control surfaces are included.

Also in the box was a set of carbon-fiber control horns—the type that bolt onto the plastic arms included with most servos. Wing bags and hardware to bolt the carbon-fiber control horns onto the servo arms were not included. The hardware was satisfactory and I didn't

replace any of it.

Assembly

I began by gluing the control surfaces in place. This process is easier if you can get a second set of hands to help. I stuck a small piece of tape over each of the holes along the hinge line, and soaked the pivot point of each hinge in petroleum jelly to prevent accidental gluing.

The hinges were glued in place with 30-minute epoxy, and everything was taped in place while the glue cured. The wings have a tube near the LE that runs from the root rib out to the wingtip, with a matching hole on the side of the fuselage. This could be used for nearly anything you want to mount on the wingtips and power from inside the fuselage, such as lights or smoke.

The firewall had a DLE-30 mounting template laser-etched into the wood. The template is identical to the O.S. GT 33. Using the template as a guide, I drilled and test-mounted the engine and located a spot on the side of the motor box for the ignition module.

After some trial and error, I ended up with 1.75-inch standoffs.

There is a removable hatch for the top of the motor box and the front of the canister tunnel, but no hardware was included to attach them. You could glue them in place. I found



Photos by the author

The O.S. GT 33 is a perfect fit in the Slick.

AT A GLANCE ...

SPECIFICATIONS		Futaba R70008SB receiver
Model type:	26% gas-powered Slick 540	Ready-to-fly weight: 12.75 pounds dry
Skill level:	Intermediate builder; intermediate pilot	Flight duration: 15 minutes (.75 tank of gas)
Wingspan:	75 inches	Construction: Balsa/plywood
Wing area:	1,100 square inches	Finish: Oracover
Length:	72 inches	Time to complete: 12-15 hours
Weight:	11 pounds	
Engine requirements:	30-36cc gas engine	
Radio requirements:	Six-channel recommended	
Retail price:	\$369	
TEST-MODEL DETAILS		PLUSES
Engine and propeller:	O.S. GT 33; 18 x 8 Redwing propeller	• Removable hatches.
Radio system:	Futaba 14SG;	• Built-in canister tunnel.
		• Excellent flight characteristics.
		• Fuel economy.
		MINUSES
		• Lower cowl screws difficult to install.
		• Incorrect wing tube diameter (later corrected by the manufacturer).

some screws to secure the covers so I could easily remove the hatches for access.

After the necessary holes were drilled, I masked off around the firewall area and spray painted the motor box and firewall with a light dusting of gray

primer. I then applied a second light coat of stone-effect paint to give it an oil-proof finished look.

When the paint was dry, I mounted the engine and cut the cowl in increments so I wouldn't cut too much away.

The fuel tank was plumbed and the fuel lines were installed (with an inline fuel filter), then I added the switch and fuel filler. An extra servo box was included to mount the throttle servo inside the fuselage. I epoxied this in place behind the firewall to get a short and direct throttle linkage.

The aileron servos mount into servo doors, which are screwed into the wing. The elevator servos mount into the side of the fuselage, in front of the horizontal stabilizers. The ailerons and elevators use titanium turnbuckles for pushrods. The rudder servo was

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The rudder has plenty of authority, so only a small amount is required for a knife-edge pass. Knife-edge coupling is minimal.

installed inside the fuselage, and pull/pull cables were run out through the back of the fuselage, crossing along the way.

I mounted my receiver behind the wing tube and my flight battery above the rudder servo to achieve CG. I used Xpert SI-4501 high-voltage digital brushless servos. This allowed me to run a single, two-cell 2,100 mAh LiPo battery with a remote ignition kill, which helped keep the weight low. I zip tied all of the wiring in place, charged my flight battery, and it was ready to go.

Flying

I used an 18 x 8 propeller for engine break-in, as the instruction manual

recommended. The O.S. started up after a few flips, and required little tuning to get it nicely idling and transitioning. It is one smooth engine with little vibration, and is quiet, even with the stock muffler.

I taxied to the runway, gave it full throttle, and gently pulled the Slick into the air. The airplane felt smooth and required only a couple of clicks of up-elevator to trim for straight-and-level flight. The CG position on the wing tube felt good, with only slight pressure required on down-elevator to maintain a good inverted 45° upline.

Knife-edge coupling was minimal—tucking to the belly and rolling toward the direction it was tucking. It required

such a small amount of mix that I was comfortable flying the airplane without it. Knife-edge flight was a breeze. The Slick tracked perfectly and the Xpert servos did a great job of maneuvering the aircraft.

The only problem I had with the servos was that they didn't seem to center as well as I would have liked, resulting in the Slick feeling as if it was going in and out of trim, depending on which way I pushed the stick.

The Slick felt light. Slow-speed flight showed no strange tendencies, and there was minimal wing rock during slow, harrier-type flight. It easily hovered with plenty of power to pull out, and it was quick in straight-and-level flight. After

CARF



There is plenty of room inside the fuselage for neat and organized installation.

The only issue I had with the airplane was that the wing and stabilizer tube diameters were too small, so I had to wrap some tape around them to make them fit in the sockets. I brought this to the attention of Redwing RC, and company officials said that they would correct this problem as soon as possible and send replacement tubes to all of the customers who have the airplane. It is a nice model and comes with good customer service! 🛩️

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MANUFACTURER/DISTRIBUTOR:

Redwing RC
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www.redwingrc.com

SOURCES:

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(800) 637-7660
www.osengines.com

Futaba
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the first flight, I began bringing the model lower, and it wasn't long before I was comfortable enough to bring it down on the deck for some 3-D fun.

Landings were smooth and uneventful, and it was easy to grease in.

Conclusion

The smallest gas airplanes I have are 50cc, and I wasn't sure what to expect from a 30cc-sized model. The Slick surprised me. It flies as well as a 50cc

airplane, handles the wind great, looks good, and has the convenience and power of a gas engine.

After experimenting with flight times, I found that the O.S. GT 33 would use a half tank of gas in a 10-minute flight. This is extremely economical, and I could easily do a 15-minute flight with plenty of gas left for a few passes.

The Slick easily fits into the back of my truck, so I don't have to take my trailer if I want to fly it.



The Slick 540 makes a smooth inverted pass. The aircraft comfortably flies IMAA and 3-D maneuvers.