

Electric Replica: What works

A report on the Electric Replica Class models we fly in SAM 100, AKA "The Roadrunner Squadron." Other modelers have been kind enough to provide me with data on their own Electric Replica models.

Author: Steve Moskal

03/10/15

Modeler	Stephen Moskal
Model	1940 Comet Sailplane
Wing Span	36"
Kit/Plan	Micro Models (020 Replica Kit)
Covering	Coverite MicroLite Film : Dark Blue, Transparent Yellow, Red (opaque)
Motor	Hobby King Brushless Outrunner 18-11 2000 KV, 10 grams, Rated Peak 5 amps
Prop	7-4 APC Slow prop
Battery	350 mAh Sky LiPo 2S from Hobbypartz.com
Receiver	Spektrum AR 6300 2.4
Servos	Spektrum micro with white JST connectors to match AR 6300
ESC	Castle Thunderbird 9
Draw Test	Run for 2 minutes 4.38 amps at start; down to 3.8 amps at the end of the two minute static run
All Up Weight	7.0 ounces ready to fly
Comments	No weight was needed to balance at CG recommended on kit plan. You can see my "build" of this model on my blog http://www.cometkid.com/ After running two minutes of air time for the event, the 350 mAh LiPo pack showed 55% capacity remaining. 2nd Place finish at the SWR at Eloy, AZ January 2012

Modeler	Robert Galler
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Model	So Long
Wing Span	32"
Kit/Plan	Body was built in 1983 by Jim Taylor, wing from RN model plans only.
Covering	Covering AeroLITE SOLITE- gray solid Solite and transparent red Solite.
Motor	LazerToyz brushless 2211-17, 2 mm shaft
Prop	7x3.5 prop , GWS, EP 7035
Battery	VAM Power 2 cell LiPo 300 mAh (25C)
Receiver	Berg RS 41011 4 channel with channel 42 crystal
Servos	Blue Arrow 50251, 2.5 grams each
ESC	LazerToyz 10 AX Brushless
Draw Test	With 7x3.5 prop and 2 cell battery it draws 3 amps, 29 watts and produces 7.0 oz thrust.
All Up Weight	6.0 ounces ready to fly
Comments	Wing area- not listed on plan or Klarich list but I estimate 150 sq. inches The body tail and rudder frames were by Jim Taylor circa 1980. Wing by me of course. 4 th Place finish at SWR Eloy, AZ January 2012

Modeler	Vic Newton
Model	Playboy
Wing Span	36"
Covering	Japanese tissue
Kit/Plan	Model by unknown builder, so not sure if from kit or plan
Motor	Hacker A10-12S brushless outrunner
Prop	GWS E-453

Battery	E-Flite 2S cell 200 mAh 25C
Receiver	Hitec R6106 2.4
Servos	Hitec 50
ESC	Not marked (thought to be a Castle Thunderbird 6)
Draw Test	Unknown
All Up Weight	7.98 ounces ready to fly
Comments	<p>Vic finished in 1st Place at the Inaugural Electric Replica event sponsored by SAM 100 at the Southwest Regionals at Eloy, AZ in January 2012.</p> <p>Model was bought at club auction in California circa 1992 with Cox 020 mounted. Vic originally converted to electric using brushed Speed 280.</p>

Modeler	Luther Peters
Model	Quaker
Wing Span	36"
Covering	No information
Kit/Plan	No information
Motor	Turnigy 1811-2000 motor
Prop	7x3.5 prop
Battery	Gens 2S 450mAh (high discharge) from Hobby Partz
Receiver	"Spectrum mini"
Servos	No information
ESC	No information
Draw Test	No information
All Up Weight	No information
Comments	" I bought the batteries on sale for under \$4.00 each. I have had excellent results with them. Lightweight and plenty of zip. I never had to run full throttle because it would take it out of sight in the time we are allowed."

Modeler	Colin Widdison
Model	Comet Clipper MK II
Wing Span	36"
Kit/Plan	No information
Covering	Coverite Microlite Film : Dark Blue, Transparent Yellow, Red (opaque)
Motor	BL-2204/14 Outrunner from RcHotDeals.com that they say approximates the EFlite Park 250
Prop	APC 6x4
Battery	800 mAh 2s LiPo
Receiver	"a no-name Spektrum compatible"
Servos	Blue Arrow Micro
ESC	Castle Thunderbird 6
Draw Test	No information
All Up Weight	9.16 ounces ready to fly
Comments	Please note : This model was in the air twice at SWR 2015, both times for no more than 2 or 3 seconds. The first was a glide test that looked OK. The second was an attempted hand launch that ended as I fumbled with the TX and nosed the model into the dirt. There was no damage save for a bent prop shaft but as you may have deduced by now my selection of components, etc has not been shown successful.

Modeler	Stephen Moskal
Model	Playboy
Wing Span	36"
Covering	Coverite CoverLite film
Kit/Plan	See Comments
Motor	Rimfire 150 motor

Prop	4 1/2x3 prop
Battery	Rhino 2S 360 mAh
Receiver	Spectrum AR6400 LBL
Servos	See comments
ESC	See comments
Draw Test	Initial amp draw is 2.9A quickly dropping to 2.6A
All Up Weight	Initial weight was 3.5 ounces ready to fly. After test flying the model I added ½ oz. to the back of the firewall. The model now weighs right at 4 ounces.
Comments	<p>SpectrumAR6400 LBL unit that provides a 2.4mhz receiver having 1000' range, two linear output servos, Brushless speed control plus provisions for plugging in three more servos, if needed. This receiver unit weighs 7.6 grams.</p> <p>This model was purchased from Buzz Averill in Albuquerque, NM. Buzz has scratch-built many sizes of Playboys from digitized plans. No changes were made except to move the battery position to right behind the firewall.</p>