

I have been flying electric models exclusively for about three years and the ducted fan will fill a large void in my propulsion system repertoire. Thank you very much for your generosity.

To get me started, I would like to have you send me your catalog. I have enclosed a check for \$3.00 to cover the cost.

Yours truly,  
Douglas Ward  
RD. #1, Box 189  
Irwin, PA 15642

(Thank you Doug. It has been a great e-year!)

**More Thanks and an Interesting Offer!**

from: Timothy P. McDonough  
127 S. Oaklane Road, Springfield, IL 62707  
(217) 523-8625 or timmed@cencom.net

Dear Ken,

Thanks for the great weekend of flying that you, Keith Shaw, the Falcons and the Electric Only Flyers put on in July. It was the most fun I've had at a fly-in in the 6 years I've been flying RC planes. I've just recently started exploring electrics and was very impressed by the people and planes at the event.

Enclosed is a sample of a T-shirt I designed that will appeal to the electric flyers in your club. Please keep the shirt for yourself, raffle it off to raise money for the club treasury, give it away as a "dead stick" award, or whatever you like.

If any of the Falcon's/EFO's are interested in additional T-shirts, my price to clubs is \$12.50 per shirt plus \$5.00 shipping for the entire order. All shirts must be shipped to the same address and paid for with a single check to get the club price. My regular retail price

is \$16.00 per shirt. The only sizes available are XL and XXL.

**More Thanks, Info and Pictures**

from: Lester W Garber  
2324 East 5th Street, Duluth, MN 55812  
218-728-6827

Dear Ken,

Thanks to all of you for putting on such a wonderful fun fly! It would have been perfect if I could have brought along some of our cool northern Minnesota air! I learned so very much talking to electric flyers from all over the country.

The enclosed photos are an extra set and I thought you might like them.

For anyone who is interested, here are some statistics on my flying wing:

**Design:** Modified El Condor by Brian Shaw (May 94 RCM plan no. 1168.) Elevator and rudder only.

**Design Modifications:**

Lighter construction and MicaFilm covered. (80 in. span, about 1000 sq.in., about 5.90 oz./sq.ft. wing loading). Built up wing halves (38.5 in. half span, 4.8 oz. each) plug into vacuum bagged 3 in. wing center section (2.17 oz. with elevator servo) using a .250 dia. carbon fiber joiner rod.

Kevlar - epoxy body of my own design made in a female mold (1 layer .60oz. glass, 2 layers 1.7 oz. kevlar). Finished weight 1.58 oz...

**Weight Data:**

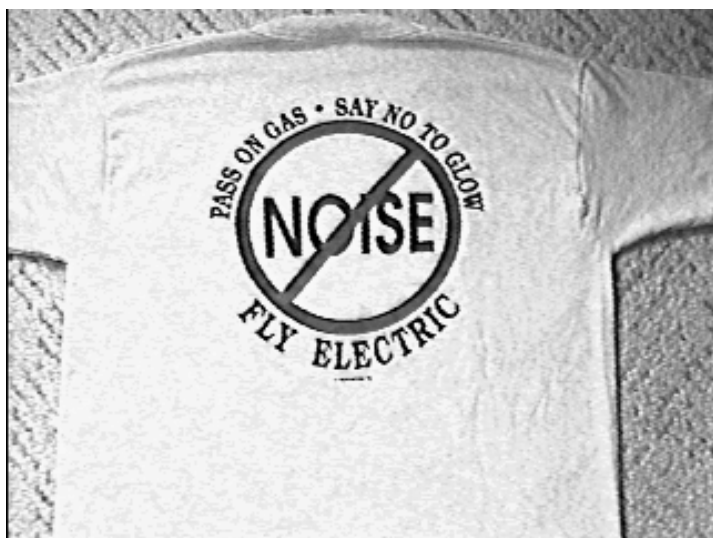
Airframe: 13.54 oz. Rec. + Servos: 3.24 oz. Motor + Gear: 9.18 oz.; Prop + Spinner: 1.57 oz; Batteries: 13.31 oz. **GROSS: 40.84 oz.**

**Motor:** Hobby Lobby (GR1717) Speed 600 BB 8.4 V with 2.8:1 geardrive.

**Prop:** Hobby Lobby (GPE12010) 12-10 (trimmed to 11.5 D to clear wing).

**Batteries:** 7 - 1700 SCRC. Total run time is about 8.5 min.. This gives 7 good 1 min. climbs and one last slow 1.5 min. climb. (pack weighs 13.3 oz.).

**Radio:** Futaba 4NBL-E (AM) Receiver MCR-4A with built in speed controller and BEC. Servos: 2 S3101. (I have several of these radios, my only complaints are the receiver/speed controller/BEC does not have a brake, the motor burps on now and then during glide and the speed controller will burn out if you try to run an Astro 05 FAI).



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**Comments on Design:**

Over the last year I have built five versions of the El Condor using various motor and battery combinations. The first three no longer exist: Two were destroyed trying to get them out of thermals and one was lost in a thermal. The design is extremely stable and flies like an electric Playboy. Like most flying wings with reflex airfoils and plank configurations, it is almost impossible to stall if full up (45 deg.) elevator is feed in slowly.

Dead air times now average over 40 min. (8 climbs with 1 min. of power and 4 minutes of glide per climb). These dead air times are a consequence of the motor, prop, and battery system, not the flying wing configuration. A conventional design with the same drag, wing loading, and power system should fly a lot longer. Somewhere I read that given a flying wing and a conventional design with the same wing loading, the flying wing will have about twice the sink rate!

Looking forward to next year and have already begun my next project.

(Thanks for the data on your award-winning plane, and a special thanks for all the pics, some of which follow.



**Dick Flemming's Hellcat**

**To the right:**  
**Keith Shaw with two of his famous "wings";**  
**the King Crimson four motor & Horton ducted-fan.**



**Below:**  
**Dave Grife's twin 40 Mosquito.**



**Jeff Hauser's SkyTiger**



**Lester Garber's El Condor**

**Wing Man**  
**from**  
**Chicagoland**

**Joe Price**  
**with one of**  
**his tiny**  
**wings. He**  
**has many**  
**kinds of**  
**"wings"**  
**and they**  
**all fly**  
**very well.**

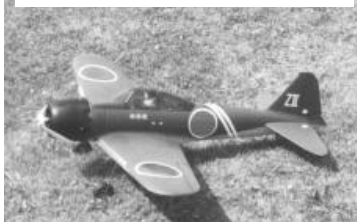


Pick a Spit, any size, by the Dorseys of Hamilton, Ont.



Shot taken down one of the rows of cars to show sizes of e-aircraft today.

Dr. Mountjoy's Zero



Jim Young's Skybolt



### Ampeer errors, Sig Wonder, Plans

from: Bill Bowne  
307 Colorado Trail  
Browns Mills, NJ 08015

Dear Ken;

I've been meaning to write you for some time, but I have to admit it finally took a grumble to get me to finally sit down and start typing. So, here's a (minor) grumble, a blatant commercial, and some good ol' yakking.

#### First, the grumbles:

Having been a newsletter editor, I know things can easily get messed up. I've been reading your newsletter for about 3 years, and I've rarely had reason to grumble. When I got your August '95 issue, however, I had to say something.

(1) My stapled issue lacked pages 1 to 4. (Let's hear it for the post office - km)

(2) Mike Patzig's article about a "Good, Cheap Motor" ended just as he was about to tell us where to get one of them. Please, give us the rest of the article! (Yep, the last line was missing - it said to contact Mike.)

Whew! Now that that's done, let's chat.

In 1994, I saw Mike Stewart's Wonder fly at the Burlington County E-Fly (NJ) and I promptly swiped the idea. Both Mike and I built ours with standard geared Astro 05's (Co5G), running on 8 900 or 1000 mAh cells, and turning APC 10 x 8 props. Mike's, with new 1000 SCR's had better performance, but mine, on old 900 SCR's, had longer duration. . which is why I beat him in Combat at the '94 Syracuse E-Fly. We both built ours as Electrics, so they came out with lighter airframes than Clyde's (my bare airframe was a little over 10 ounces).

Shortly after the Syracuse E-Fly, I sold my Wonder to Bob Afflerback. I didn't like the Wonder's lack of rudders and I wasn't fond of its tendency to hunt in the yaw axis during flight (perhaps the effect of a too large prop?). Bob didn't mind the yawing, and after he plugged in an Astro FAI 15 geared (FAI15G), it really didn't matter! The model went from being fairly aerobatic to being one hot rocket! The model had only two problems: First, it needed a good, strong hand launch (the eventual cause of its demise at the '95 LeHigh Valley E-Fly). Second, when the power went away, the model landed like the Space Shuttle!

I can recommend the Wonder as an excellent plane for looping contests and a pretty good one for rolling contests or combat. Just remember, though, that no rudder means slips, spins, stall turns, and other rudder maneuvers are almost impossible. Also, the thick, draggy wing requires a lot of power to keep flying, resulting in shorter flight times. For the '96 Syracuse E-Fly Combat event, I'm thinking about designing a sort of semi-symmetrically winged Wonder.

The main modifications I made were as follows:

- (1) Cut away most of the firewall to install an Astro motor mount.
- (2) Lowered the thrust line (by installing the motor box "top" down)
- (3) Replaced 'iron balsa' with lighter wood.
- (4) Covered with Black Baron film (That was a mistake, though. The weak film let the wing warp, and no amount of bending and re-shrinking would keep the warp out).
- (5) Left the top of the motor bay open, exposing the

(continued on the next page)