the

October 1995

The Officers:

President :	Vice-President:	Secretary/Treasurer:
Ken Myers	Richard Utkan	Debbie McNeely
1911 Bradshaw Ct.	240 Cabinet	4720 Duck Lake Rd.
Walled Lake, MI 48390	Milford, MI 48381	Milford, MI 48382
phone: (810) 669-8124	phone: (810) 685-1705	phone: (810) 685-1105
Board of Directors :	Board of Directors :	Ampeer Editor:
Keith Clark	Jeff Hauser	Ken Myers
2140 E. Highland Rd.	18200 Rosetta	1911 Bradshaw Ct.
Howell, MI 4848843	East Point, MI 48021	Walled Lake, MI 48390
phone: (517) 546-2462	phone: (810) 772-2499	phone: (810) 669-8124
Ampeer subscriptions	The Next Meeting: Thursday, October 5,	
are \$10 a year U.S. &	at Dublin Community Center located on Union	
Canada and \$17 a year	Lake Rd. near St. Pat's Church	

Lake Rd. near St. Pat's Church

The HOT ONE

world wide.

July 15 and 16 were two very hot days in Saline, MI. The Mid-America Fun Flies filled the skies with the best planes and pilots to date. The quality of the planes has reached the point where very good is the norm for performance and craftsmanship. There were some wonderfully outstanding efforts and epower has definitely become the "experimenter's area" for model airplanes. Many of the planes were original, with some very interesting kit conversions from glow. I know that every year I say that, but it is true.

There were 53 registered pilots on Saturday and near 50 again on Sunday. With this many registered pilots, there were well over 200 planes at the field each day. Floaters, rockets, scale, fun-fly, sport, wings, deltas, ducted-fans, multimotors, biplanes - just name it and they were there.

The Ann Arbor Falcons and EFO members worked very hard, in the broiling sun, to see that their guests had a good

time, and the contestants did, despite the oppressive heat. The frequency control went well, the food was ready, registration and impound were well manned - oops Debbie, Michele & Chris - I mean peopled!!!

7:30 P.M.

you

CD

but

you

As **Ralph Weaver's C-130** most of know. Keith and I share duties. many of

may not know that Dave Grife is also a very important person for this contest. He is the one who has set up the KRC type flight stations and sees that all things run smoothly in this area. Good job.

This meet wouldn't be complete without the Saturday night picnic, which was truly outstanding. Dave Hare gets it all ready, made a wonderful, refreshing

What's in this issue?

Mid-America Electric Flies Special Issue Plans from Bill Bowne

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fruit salad and grilled the steaks for the steak sandwiches. Wow, what a super job! Thank you so very much Dave.

The contestants, and interested spectators, are the



most important part of this event. They came from all over including; Ohio, North Carolina, Illinois, Pennsylvania, Indiana, Minnesota, Wisconsin, South Dakota, Texas, Ontario and, of course, all over Michigan. This is their contest and they took full advantage of the beautiful flying site to showcase their creations.

It used to be that Keith Shaw would go out and present his fantastic planes and flying ability, and the crowd would respond with very warm applause, and they still do, but applause punctuated the whole weekend, as wonderful aircraft strutted their stuff. Many of us owe it all to Keith for leading the way. He should be very proud of the pioneering work he has



done. Because of him, many of us are "where we are today". We all salute you and thank you for your wonderful contributions to e-flight -Keith you are fantastic! There were several special awards given out

on Saturday. Longest Timed Flight - Ken Bates; All up/Last down - Ken Bates (Wow, what a glider guider he is!!!) Most Beautiful - Jim Young for his 40 powered Skybolt; Best Scale - Lynn Carpenter for his Monocoupe; Best Multi-motor - Ralph Weaver for his C-130; and CD's Choice to Jim Young for his fantastic flying Cub, a 90% Goldberg scratch built.

On Sunday the awards went to: Longest Timed Flight - Wayne Fredette; All up/Last down - Les Garber; Best Ducted Fan - Jim Dorsey for his flying wing; Most Beautiful - Lynn Carpenter for his Tiger Moth biplane; Best Scale - Dick Cordray for his Taube - CD's choice Mark Thomson for his delta wing.

On Saturday there were 115 registered flights and Sunday 98. There were also the all up/last down flights as well as the ham and 27 Mhz bands, which brought the total number of sorties to near 300. What a busy weekend of flying.

Chad Sinke won the Airtronics radio, donated by

Airtronics! Cool.

Speaking of sponsors we had some great ones. Check out the sponsor list at the end of the article. These are the folks to support with your hard-earned hobby dollars. Not only did Kirk Massey support us, he came up from Texas to provide his great product line directly to us at the field. I believe that most fliers and spectators visited his booth and came away with something. I now have a 10 lb. digital scale, something I've always meant to get and since he was there - got it!

Speaking of Kirk, he found out just how fast our weather can change, when he was caught offguard by a fast moving thunderstorm, late on Saturday afternoon. Thanks to several folks at the field, he did get most of his stuff packed up before it was totally soaked or blown away. A special thanks to those of you who helped Kirk secure his gear.



Luckily there were only a handful of oops. My best buddy, Jeff Hauser, lost his beautifully modified Sky Tiger due to flutter; Dave Henshaw lost one on a takeoff oops; Wayne Fredette had a mid-air; and Dave Grife's TirStar blew apart in mid-air, all by itself, with a resounding **POP**, heard all over the flying site.



This part is a bit difficult for me to write about, because it directly relates to me. For many years, Charlie Spear was a participant at our annual e-fly. He was a wonderful friend to e-flight

and really helped to bring it up to the state it is in today. He was always a joy at the field and shared all of his "newest" creations with a great zeal. For those of you who never had the chance to meet him, you missed meeting a true gentleman and great friend to e-power.

Keith and I had decided that we would start a perpetual "Charlie Spear Memorial Award" to be presented each year to someone who has advanced the cause of electric flight. There is a plaque, held by the Falcons, that will be brought to the field each year, with the winner's name added to it, and a separate plaque for the winner to take home.

(continued on the next page)

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Our Fantastic Sponsors:

AirAge Publishing (Model Airplane News) * Airtronics Inc. * Astro Flight Bob Smith Industries Coverite * Dremel * Easy Built Models * Futaba Hi Line Ltd * Hobby Lobby International, Inc. Kress Jets, Inc. * Master AirScrew: Windsor Propeller Co. * Model Electronics Corporation * New Creations R/C * Sermos R/C Snap Connectors SR Batteries, Inc. * Radio Controlled Models, Inc. * R/C Report * Rocket City Specialties * SoarSoft Software * Sig Manufacturing Co., Inc * Tower Hobbies These are the GOOD GUYS - Support'em!!!

I was very much surprised when Keith called up John Mountjoy, Charlie's friend and co-author for the electric



flight column in "R/C Report", and started to present the award. Keith and I hadn't discussed who the award was going to, the reason for being surprised, but I figured he just went ahead and did it so that it could

be presented that day, and I always trust Keith's judgment anyway. In a few moments I found out why we hadn't discussed it - you guessed it. I was suddenly moved and extremely proud to be the first recipient of this award. Shaking hands with John and Keith, hands weren't the only thing shaking. I was truly overcome with emotion. I am very proud and happy to have received this award. I consider this the highest point I've ever reached in modeling. I am flattered beyond belief, and as I write this, my eyes are still honestly watering. Thank you all so very much. Thank you Charlie for being who you were, for you shall forever be a part of me, part of my e-flight experience, part of what is my life.

For those of you who sought me out to say thanks for the Ampeer, talk about making my day!!! I really appreciate the kind words. Ya think this wasn't a great weekend for me? Wow.

Again, thanks to all of the Falcons, E.F.O.ers and

contestants for making this one the great e-fly ins of the decade. I would recommend that you join us next July if you like e-flying, since this is what it is all about.

Please Note the Sponsors - They are the great ones!

A Great Way to Say Thanks

from Doug Ward, R.D. #1, Box 189, Irwin, PA 15642 Dear Ken,

You and Keith certainly do know how to run an event! In spite of the oppressive weather I was able to see more and talk to more people than would be otherwise possible at such attractions as the KRC. The turnout was excellent and all the work you guys did was first rate.

In keeping with the spirit of things, I have written a thank-you note to Kress Jets, Inc., expressing my gratitude for their raffle prize (copy enclosed). While I have seen some electric jet activity, I never gave it a serious thought until now. I might just give this thing a try.

In about three weeks Elaine and I will be setting out for an electric meet in Canada where I hope to do a little more cool weather flying. With our luck they'll be in the midst of the heat wave of the century, but it won't matter since I am now Michigan-trained to deal with it. After Canada comes the KRC followed by our own electric meet on September 30. Keith usually comes to this one. In October we will be veering south for the Gulf States Electric Meet in Louisiana --another excellent adventure--and that will probably end the contest circuit for the year. See what you can do when you're retired? (What a terrible thing to say!)

Let's make the next school year your best one. *Hals und Beinhruch!*

This is Doug's letter to Kress Jets, Inc.

Kress Jets, Inc. 500 Ulster Landing Road Saugerties, NY 12477

Dear Mr. Kress:

I recently participated in the Mid-America Electric Fun-Fly in Michigan, a fantastic meet under the blazing sun of Ann Arbor, and at the pilots' raffle I was fortunate enough to win one of your products, an EJK 3.33 Clipped Tip Electric Ducted Fan, KR-5 motor included.

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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.



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.









Wing Man from Chicagoland

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



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Shot taken down one of the rows of cars to show sizes of eaircraft today.



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)

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Bowne cont.

motor and allowing air to flow around it and into the battery area.

Now, for that commercial pitch:

If you recall, when Mickey and I were at the '92 Ann Arbor E-Fly, I had a direct drive 40 (C40DD) pattern model on 18 cells. Since the E-Fly, our rough Iowa runway did in the old Ulu (ground squirrel holes make great landing gear ripper-outers!). So, I built another one. I also built Mickey a fast glider (Corvus) and a geared 15 sport ship (Snickers). I drafted all the plans on Modelcad and got them professionally printed. I will be selling them at KRC, but I'm sending you an attachment, giving information about the plans and quoting prices. Should anyone want to get one via the US Mail, I won't charge for postage for folded plans, but I will ask for \$2.00 for rolled ones.

We now return to our regularly scheduled letter.

I can honestly say that all three models fly well. Over the years, I've had many requests for plans for some of the models I've designed. I finally decided to get plans made. It's been a real experience! I didn't know how mediocre a program could be until I tried to use Modelcad to run a plotter. The quality of the plans didn't suffer, but the number of gyrations (and extra expense) it took to get them made was frustrating. If I sell all the plans I had printed, I'll wind up with a SMALL profit. If I don't sell them all, then my foray into the plans business will be over with.

I'm working on smoothing out the plans for a geared 40 PT19. We had the plane at last year's KRC, but Mickey was shot down on take off (No joking. It wasn't her fault). I've fixed the plane, and we PLAN on having it at KRC '95. If enough people are interested, I'll include the PT19 plans in my "inventory."

Also, I'm waiting to hear from Flying Models about whether or not they plan on running my Waco YKS plans. If FM doesn't want the article, then I'll include the Waco in my inventory.

One thing that led to designing the Snickers was how well my horribly out of scale Sea Fury flew. Mickey had it at Ann Arbor '92, but it was destroyed at the end of last year's flying in a takeoff accident. It was ugly, but it flew well and aerobatic flights were pleasantly long (No, plans for that model will NOT available. Someday, I'll redesign the model, but the new one will at least look something like a Sea Fury!).

The key was in using 14 cells on a standard Astro

C15G, turning an APC 10 X 8. The prop/motor only drew about 20 amps at full bore, which was more than enough power for aerobatics. Cutting back to about 1/2 throttle (or less) on the down side of loops and reserving full throttle ONLY for climbing (or escaping from screwed up maneuvers!) really extended flight duration.

Oh well, time to get back to the CAD. I'm working on a non-scale trainer (C05G), a WWI bipe (C05G to C15G), and a WWII fighter (C05DD or C15DD). At least the CAD is good for relieving summertime cabin fever!

Hope to see you at KRC!

Sincerely, Bill Bowne



(please note that his plans don't have jaggies like you see here - these are the result of my low-level scan.) Snickers: shoulder-winged sport ship \$9.00 Wing area: 384 sq.in. Span: 49 in. Airfoil: Symmetrical (both foam and built up shown) Weight: 48 - 60 oz. Wing Loading: 18 - 22 oz./sq.ft. Motor: AF 05/15 geared Cells: 8 x 1200 to 14 x 1000

Propeller: 10x8 Watts/pound: 55-80



Ulu MkII: Sport pattern \$10.00 Wing area: 600 sq.in. Span: 60 in. Airfoil: NACA 2412 or Symmetrical (both shown) Weight: 96 oz. Wing Loading: 23 oz./sq.ft. Motor: AF 40 direct or geared Cells: 18 to 20 (1200 to 1400 mAh) Propeller: 9x7 (20 cells) Watts/pound: 83 10x6 (18 cells)

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Corvus: High Performance Glider (flaps and ailerons) \$12.00

Wing area: 616 sq.in. Span: 74 in. Airfoil: Eppler 221

Weight: 80 oz. Wing Loading: 18.8 oz./sq.ft. Motor: AF 25 direct Cells: 15 -16 (900 to 1400 mAh) Propeller: 9x5 (16 cells) Watts/pound: 60 9x7 (15 cells)



Fairchild PT-19 Electric: Not available yet, but will be at least two sheets, totalling about \$20. Wing area: 750 sq.in. Span: 72 in.

Airfoil: Clark YH

Weight: 120 oz. Wing Loading: 23 oz./sq.ft. Motor: AF 40 geared Cells: 20 (1400's) Propeller: 13x10 Watts/pound: 60

Pre & Post Press Coverage

from Merritt Martin of the Ann Arbor Falcons The following is the pre and post newspaper coverage of the Mid-America Fun Flies.Announcements were in the Saline Reporter and Ann Arbor News. The following article is from the July 5, 1995 "Saline Reporter".

Model Airplanes Take to Saline Skies

The 10th annual MidAmerica Electric ModelAirplane Fly is scheduled for July 15-16 at the old Saline airport, located one mile southeast of Saline on Macon Road.

Upward of 70 pilots will fly radio-controlled model

airplanes powered by nicad batteries. Airplanes will vary from World War II scale models to stunt airplanes reaching speeds up to 130 mph, to motor-powered gliders that have been flown for several hours on days with good thermal lift. Electric powered fan jet models also will be flown.

The event, sponsored by the Ann Arbor Falcons Model Airplane Club and the Electric Flyers Only Club of Walled Lake, is expected to attract pilots from across Michigan, Ohio, Indiana, Ulinois, North Carolina, South Dakota, New York, Pennsylvania, West Virginia, Kentucky, Missouri, and Canada.

Nationally recognized pioneer and model airplane innovator Keith Shaw will exhibit his fleet of unique models.

SALINE AREA members of the Ann Arbor Falcons involved in the event include: Jerry Schmid, C.J.Wysocki, Gary Gordon, Randal Roth, Mark Miller, Ken Arnold, Ken Bates, Daniel and Adam Cogan, David Hares, Susan Hares, Albert Lutz, Merritt Martin, and Chet Rutledge.

Spectators are welcome to attend and no entrance fee will be charged. Refreshments will be available.

The MidAmerica Model Airplane Fly will take place from 9 a.m. to 4 p.m.

(As was mentioned before, a similiar mention was in the Ann Arbor News of July 12th. - km)

Following the Meet, the Saline Reporter ran almost a full page of picture - reproduced here - and the following on July 19.

MORE THAN 70 PILOTS displayed their radiocontrolled model airplanes last weekend in the 10th an nual MidAmerica Airplane Fly at the old Saline airport on Macon Road.

Ranging from replicas of old war planes to stunt planes, the event attracted pilots from across the state and MidWest.

Pictured at right, nationally recognized pioneer and model airplane innovator Keith Shaw of Ann Arbor exhibits his fleet of unique models.

Below, David Grife poses beside his replica of a World War II British model plane. The plane, which features retractable landing gear, was built over a fivemonth period by Grife from plans he drew.

The event was sponsored by the Ann Arbor Falcons Model Airplane Club and the Electric Flyers Only Club of Walled Lake.

(photos on next page)

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This is the Grife below picture referred to in the article. It gives a good indication as to the size of his Misquito.





Spectators and Pilots at the 10th Annual Mid-America Electric Flies on July 15 & 16, 1995



The September Meeting

The meeting was held at the South Lyon field. It was attended by Gus Wiklund, myself and very special guests ChuckDavenport and his wife. They stopped in from Willoughby, OH, as they were visiting Michigan. Chuck has some very nice planes, and is stuck in the position of "being a lonewolf" e-flier. We had a nice time chatting at the South Lyon Big Boy, after flying. Well, at least I flew. I am not sure why you folks weren't there. Could it have been the cool 50 degree temperature, the constant drizzle, or the 25+mph wind? Anyway, I did fly, we did look at Chuck's planes and we did have a very nice time. See ya all soon.

Myers is ON-Line

You asked for it, you got it. I am now on CompuServe. You can reach me via CompuServe 102575,3410 or via the InterNet 102575.3410@compuserve.com

I am not very active, in that I don't go on and check my mail everyday, but it should be faster than snail mail if you have a question or whatever.

Enjoy the Beautiful Fall Weather - Fly E-power Today!

For Sale:

Doug has an Amptique airframe for \$40 and a Futaba Attack 4ch transmitter and receiver for \$80. He will have them at the next meeting, Oct. 5, at the Dublin Community Center.