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Ampeer subscriptions are \$10 a year U.S. & Canada and \$17 a year world wide.

The Next Meeting & picnic: Date: July 12, 1996 (A FRIDAY!) Midwest R/C Field - 5 Mile Rd. just west of Ridge Rd. - start 4:00 PM thru Dusk ALL Electric Fliers Welcome to Fly with US!!

Ampeer

ELECTRIFLY A MODEL AIRPLANE (RULES OF THUMB)

by George Myers
from *Silents Please* (the newsletter of the Silent Electric Flyers of Long Island)
edited by: Fred H. Dippel, 2 David Ct., Glen Cove, NY 11542
May 1996 issue

We're talking here about model airplanes that are powered by electric motors and which you can lift in one hand. If you need one finger, two people, etc., thumb rules don't apply.

1. THE WING CARRIES THE WEIGHT

WING AREA IN SQUARE INCHES/10 = MAX. AIRPLANE WEIGHT IN OUNCES (example: 500 sq.in./10 = 50 oz.)

km comment: I have a problem with this one. It may apply to floaters, but for sport and stand-off scale I've found divide by 7 works just fine. My Sr. Skyvolt is 580/7 = 83 oz. - actual weight 80 oz. and 3 more oz. wouldn't hurt a bit.

2. THRUST MOVES THE AIRPLANE

AIRPLANE WEIGHT IN OUNCES/N = THRUST REQUIRED IN OUNCES
The variable N = Skill Level
Skill Levels
5 - Beginner; 4 - Novice, 3 - Pilot, 2 - Hot Dog, 1 Expert

3. CHARGED BATTERIES CONTAIN ENERGY

1/3 OF THE TOTAL WEIGHT OF THE MODEL SHOULD BE BATTERIES.-
Nicsads can hold about 1 Amp-hour per ounce, so if you know the weight allowed, you can calculate The amount of work that can be done.

4. MOTORS CONVERT ENERGY INTO WORK

1 AMP x 1 VOLT = 1 Watt (for direct current power)
1 HORSEPOWER = 1,500 WATTS (at ordinary overall efficiency)

What's in this issue?

Some Rules of Thumb - Wing Uses NiMh Batteries - Multi-motor Gearboxes - Word from New Zealand - Buzzard Bombs - Speed 400 cell combinations - SR at KRC - Mid-America Electric Flies 1996

1 HORSEPOWER does 550 FOOT-POUNDS of work PER SECOND

5. PROPELLERS CONVERT WORK INTO THRUST

THE SIMPLE WAY TO FIGURE IT (Thanks to fellow SEFLler Carl Schwab) IS TO PICK WHAT YOU NEED FROM THE HOBBY LOBBY CATALOG. HERE'S HOW:

A. WING AREA/10 = WEIGHT ALLOWED

B. WEIGHT/N = THRUST REQUIRED

C. AT THE REQUIRED THRUST, READ OFF THE MOTOR, GEARBOX, PROPELLER AND BATTERY YOU SHOULD BUY. or

C.FIND YOUR MOTOR, ETC., TO SEE IF IT MAKES ENOUGH THRUST.

D. IN EITHER CASE, THE SUM OF BATTERY, MOTOR, GEARBOX AND PROPELLER WEIGHTS SHOULD =1/2 THE WEIGHT ALLOWED.



The E-Mail Box
News Off-line to You

From: **William Miller**, 100624.3005@compuserve.com
In reference to his flying wing.

Ken,

Thanks for the interest in my 'wing. It has now clocked up a few flights and I have done several experiments with the cells. Two flights back I was running nine NiMh cells in series through the speed controller into the ducted fan. The handling of the wing was a bit unstable and we reckoned that the thrust angle was wrong. More serious was the temperature of the battery! By the time it had been flying, generally under full power, for about ten minutes I was getting nervous and subtly suggested to my flying companion (I am useless at flying) that maybe he should either land it or cut the power back a bit. But he was having too much fun.

When he did bring it down I could feel the heat from the battery pack through the plywood fuselage!. I quickly removed the battery hatch and pried the battery away from its attachment to the epoxy wing bandage. It was too hot to touch. I cooled it down by sitting it in the mud. After five minutes it was a good hand warmer!

Before the next flight I fitted air scoops and air exit holes to the battery compartment, added another three cells and adjusted the fan thrust angle forward a bit.

The wing was much better behaved on this flight, climbing quite quickly to several hundred feet from a flat

field in no wind. Again it was up for over ten minutes under power as there was very little thermal assistance. The power however could be cut back to take some load off the battery. We brought it down just to check the battery temperature, not for lack of power. This time the battery was fine, warm but not hot. I launched it for another flight, but it didn't really have much power left to climb.

I did some measurements on the battery/motor/speed controller combination which I will write up properly and send you, if you're interested. I should also have a photo or two of the wing. The wing certainly attracts interest! I get all sorts of comments like 'is that a washing machine on top'. 'what's the drag generator for?', 'where's the rest of it?!'. However after it's been screaming quietly around the sky for ten minutes the comments are more 'what have you got in there?'. 'how does that work?', etc.

My latest experiment, after measuring the battery voltage and current under load is to parallel the cells so I now have 2 x 6 cells, giving about 7.8V at 4.8Ah. This should increase the flight duration somewhat. I estimate that if I use five minutes of full power to climb I should have about thirty minutes of half power to play. If the Atlantic ocean stops pouring out of the sky this weekend I hope to try out this theory! However I feel I should put the wing away for a while and learn to fly my slope soarers (in fact learn to fly anything!). But everyone else just wants to fly my wing! After this 2x6 experiment I'll write up the results and send them to you.

I'm thinking about a 4m wing next.....must learn to fly first though!

Best regards, Bill

From: **Dereck Woodward**, dwmstw@aol.com
Subject: Gear boxes - To "G" or Not to "G" :-p

Hi there Ken,

Yes - why hang two motors onto one shaft? I've been flying that MG box on the Lazy Bee, and it works. However ...

Mike Swain, who distributes them, sent me one with a pair of Mabuchi 380's fitted. They must be less powerful / efficient / whatever than Speed 400's, from experience, but I don't have the spare time to swap them and try it.

The power output is less than the Bee's usual unit - a cooking Speed 600 on a Graupner 3:1 box spinning some kind of big prop, from 10 x 6 to 12 x 7.

That poor model doesn't know what is going to hit it from one outing to the next!!! Add to that the twin 380 unit makes a \$@!! of a racket with gear whine. Plus side is the freewheel - when you go power off, the prop keeps spinning all the way down to the stall. That looks neat and

should cut drag compared to a stopped prop.

The workmanship is superb, well worth the very little extra in English prices - I don't know what it would be by the time they reached these shores. I may well get one of their single 600's for use in stuff like the Lazy Bee. I stripped the gears on two of the Leisure Boxes, the Graupner is holding up well, but has a long front shaft that is unsupported - may be a source of wear if you ran it with an off balance prop.

Another problem - the MG twin box has the prop shaft on the same line as the motors. This lowers the prop in the model compared to the Graupner box and puts the prop a good 3/4 of an inch nearer the ground - usually hits on landing, so touch and goes are right out!

I probably will keep the MG twin as a novelty.

I like geared units on the whole, but would rather have one motor, two gears for simplicity and lowest possible loss in use. I've considered two 600's in one box, that seems better - a guy in England lashed four 600's onto one shaft in a scale Pup, but he was doing it because he wanted to!

The 400's are very limited motors, though I've had a lot of fun with them in a couple of models. There's some in England now that can take higher current across those weeny little brushes, one modified unit costs a lot, others are probably the result of some creative sourcing and only cost a little extra.

Despite what anyone says, I have never flown a 400 model that was worth the bother on six cells. Mostly seven is the minimum to get things moving and the Germans must really melt 'em down on up to ten in small scale ships

Here's one to watch for - Mike Swain, the guy behind those MB boxes, has got a Lazy Bee flying on two Red Flame Blaster Ducted Fans! The fans are on stubs either side of the body, under the wings, the nose is faired in a little like a Grumman Goose 'boat though she is strictly a dry land bird. I have a couple of shots and they will be appearing over here sometime. As Andy Clancy said to me - no-one has stopped a Bee flying yet, despite whatever they've done to it.

Andy reckons that the trick with a Red Flame Blaster is to take off the fan, grind a small depression into the motor shaft and epoxy the fan back on. The epoxy in the depression makes a 'key' to lock on the fan, so you can use seven or eight cells instead of six. That really makes the little fellow hum some.

Ampeer is really appreciated over here in the DC area. I download it and pass around through the local E flight grapevine. We have to get really organized one day.
Yours in modelling
Dereck Woodward

From: **Lex Davidson**, ldavidson@hrc.govt.nz
nz - that's New Zealand folks

Subject: Ampeer etc

Dear Ken,

Thank you and your helpers (*Jeff Hauser & Don Myers km*) for **The Future is Electric** page. Have enjoyed reading *Ampeer* since about March. Real good stuff and very impressed with how the PDF format works. June issue is a bit bigger though. The photos I guess? (*Yep km*)

There are 3 may be 4 in our cub who are giving electric another go or trying it for the first time. The 400 size and appropriate models is certainly boosting the success rate. The info in your *AMPEER* is very helpful. The Shaw papers were terrific value.

Most impressive electrics in our club to date have been 500 size pylon racer, twin OV10 Bronco. Based on Model Airplane News drawings Nov. 1995 issue. One of our people has taken delivery of a Raptor and is thinking of an Aveox power system. Should be good.

I know you have published a lot on 400's Do you have anything on the 8.4v Robbe 400/20 with their planetary 3.7:1 gear box? The motor seems really hot. Spins a Graupner 8x4 folder at over 8,000rpm. Very high shaft speed. (*Anyone have more info on this one? km*)

Looking forward to learning more

Kind regards

Lex Davidson

From: **Dale Wilde**, 74723.2170@compuserve.com

Subject: His Buzzard Bombshell

Ken: <<Well how'd the Buzzard Bombshell work out?>>

First try the Buzzard bombed. It was underpowered, couldn't take off and when hand-launched just settled down after it lost momentum. I was using the Astro 15G on ten cells, so I added two more cells, which increased the RPM on 11-7 prop to 7500, which was enough to fly but not great. Plane weighs 5#, and wing loading is only around 13oz. however, with that big fuselage and wing there is a lot of drag. I originally had in this an old K&B .40 with 11-5 and about 5 oz. of lead in the nose, which overpowered it. When I changed to electric, it balanced well with no additional ballast. I just purchased a variety of Master Airscrew electric props but haven't tried them yet.

I've scaled plans in the computer for three more electric airplanes, and also just got in a supply of light wood to start building. First is called "Pussycat" by Bob Benjamin from MA 1/95. I plan this one for the Speed 600 motor/3:1 gearbox, I'm not sure which of the other two I'll start first,

one is the "Spacewalker", by Laddi Mikulasko, MA 6/94 and the other the "Tigerkitten" also Benjamin MA 9/91. Both would take the 15G motor. What's your opinion of these? (*Good Planes - km*)

I downloaded the June Ampeer, (Thanks) and have a question about the article on Speed 500 and 600 motors. In the math examples, values for I_m are given which must have been obtained experimentally or am I missing something in the overview tables? (*The I_m is measured - it is just Amps and the I_o is the no load amps km*) I'd like to calculate the P_w and W_m factors for my 600, which is cat-No. 1787. Also, has Erinie Labelle flown that twin Beech?

I've always had a thing for twins, we had a club fly-in this morning and I flew a .40 powered twin called "Double Impact" a Dick Sarpolus design. Plane flies great, very stable. Twice I've had one engine quit and had no problems setting up an approach and landing. (*Assume this was glow plane, huh :- (km*)

I have an ongoing project here to build a Bellanca 28-92 trimotor. This is a one-of-a-kind race plane built in 1938 for the Bendix race. The original plane had 250HP outboard engines and 420HP in the nose. It was a big monster, with 46' span. My original intent was to design 1/7 scale for two .40's or OS.32's as outboard engines and a .60 for the nose. Thanks to Jeff Troy's docu-search I have been in touch with a number of other modelers interested in this plane, Laddie Mikulasko has built one as sport scale using speed 400's. This has been written up in Electric Flight but I haven't seen that issue yet. Joe Jopling of Fort Worth, TX and Jerry Holcomb of Vancouver, WA are both designing electric scale versions. Joe is designing for 1/10 scale and Jerry at 1/6 scale. If I keep flying e-power I may shift my 28-92 to electric, 1/7 scale is 6.5' span, so we might be talking 05G outboard and 15G nose. This is one project that I might not finish this year, but someday!

Good flying anytime,
Dale

Sender: Terry M. McGill, h2ofly@transport.com
Subject: Float Planes - note h2o in e-mail address

Dear Ken:

I figured out how to download and print with Acrobat; have AmpJun96.pdf all printed, and read. And copied for my bud, Jerry Holcomb, since he is the one who enticed me into electric flight (this dates me: Back when the Wasp was the hottest item out there!)

Pix and stories: Will take the first pix tomorrow, print off some lies, and mail it to you. Flew the Cloud Dancer last

night - shouldn't have, but I did not think the wind was that bad. Took me half a charge to get it back down in one piece - and that's all I tried! Some things to fix: Rebalance it (The Ace Balance Point is forward of where it will fly controllably - fortunately for me. Motor pack got bounced so much that the velcro let go and re-attached, so I had a balance point some 3/4 inches back of the one that Ace prints on the plans. I will fly again tomorrow, in (pray for it) dead calm, and see what it is like.

The Rogochevsky: I still haven't mounted the geared 60 in it. I know that a geared 40 on 21 cells flies it, but I prefer some reserve. And, it is a 6# airframe (covered!); it certainly can handle the 60 motor and additional cells (All the details with the pix).

I dropped the Sig 4-40 into a soggy stream-side - in a cow-field. Then a few days later, I walked by where I have it hanging, and smelled it. Phew!

Pix and details on it; and the Stream Acro 25-E; and on water flying in general.

Incidentally: Thanks for the plug in the AmpJun96 for the Pine Hollow seaplane event. I started sponsoring the prizes for the electric-powered seaplanes in 1993 - this is the fourth year. Not too much response from the "regular" flyers, because they fly "Diamond Dust" funfly planes on floats, or 60 and 90 powered sea- and float-planes and are very competitive - I have too much to do to go into competition, so they haven't seen anything that will compete with their greasy kid stuff. We get 3-5 entries a year. I flew a Klemm 25 on floats last year; a "sea-dart" took off into me as I was landing before the contest even started!

If I can find it, I will send a pix of the first successful electric I built - it was a (much lightened) wing from an ARF; an expanded fuse of Mitch Poling's 15 seaplane; and a geared (stock) Astro 40 on 18 cells. It did climbing rolls, and amazed the "regulars" - until the PCM Rx glitched and I lost the expensive, heavy parts in the lake (and never found them).

That's more than enough for now - I need an editor.
Watch your mail - but don't hold your breath!

Terry (h2ofly) McGill

From: **Doug Ingraham**, 75116.473@compuserve.com
Reply to: **Johann Delago**, 1000031.1124@compuserve.com
Subject: Speed 400 data

John: Lemme comment a bit on Mini-Viper battery choices... you surely know this already, but others who read this might want to know. 7 x 500 is perfect for the first couple of flights but maybe a bit short on run time once you get "bitten". The top choice for the 6V motor is 7 x Sanyo

KR-600AE. The Big Fun combo is 10 x Sanyo N-500AR and the 7.2V motor!

Doug: Your big fun combo seemed outrageous so I punched the numbers into my program and let it grind on it. Here is what popped out for the 7.2 volt motor from 6 to 12 cells.

Graupner Speed 400 7.2V on 6 Sanyo 500AR cells.

BEST	2.9 Amps	7.0 MTV	13339 RPM	14.2 Wo			
	69.0%	614 secs					
MAX	7.9 Amps	6.7 MTV	7966 RPM	25.9 Wo			
	48.8%	227 secs					
PROP	Mtv	Amps	RPM	Win	Wout	Effic	
Speed							
Duration							
GR 5.0x5.0	6.9	4.7	11446	32.3	21.0	64.8%	
	54 mph	383 sec					
GR 6.0x3.0	6.8	5.4	10727	36.7	22.8	62.1%	
	30 mph	336 sec					
RB 6.0x3.5	6.8	5.7	10320	39.2	23.6	60.3%	
	34 mph	313 sec					
APC 6.0x2.0	6.9	4.3	11907	29.5	19.6	66.4%	
	22 mph	422 sec					
APC 7.0x3.0	6.8	6.8	9226	45.7	25.2	55.3%	
	26 mph	266 sec					
APC 7.0x4.0	6.7	7.5	8443	50.2	25.8	51.3%	
	32 mph	240 sec					

Graupner Speed 400 7.2V on 7 Sanyo 500AR cells.

BEST	3.2 Amps	8.2 MTV	15774 RPM	18.3 Wo			
	71.1%	570 secs					
MAX	9.0 Amps	7.7 MTV	9325 RPM	34.9 Wo			
	49.8%	199 secs					
PROP	Mtv	Amps	RPM	Win	Wout	Effic	
Speed							
Duration							
GR 5.0x5.0	8.0	5.8	12877	46.3	29.9	64.6%	
	61 mph	310 sec					
GR 6.0x3.0	7.9	6.6	12014	52.2	32.0	61.4%	
	34 mph	273 sec					
RB 6.0x3.5	7.9	7.0	11522	55.5	33.0	59.4%	
	38 mph	255 sec					
APC 6.0x2.0	8.0	5.3	13446	42.3	28.1	66.4%	
	25 mph	340 sec					
APC 7.0x3.0	7.8	8.2	10243	64.0	34.5	54.0%	
	29 mph	219 sec					
APC 7.0x4.0	7.7	9.0	9336	69.9	34.9	49.9%	
	35 mph	199 sec					

Graupner Speed 400 7.2V on 8 Sanyo 500AR cells.

BEST	3.4 Amps	9.3 MTV	18222 RPM	22.8 Wo			
	72.8%	534 secs					
MAX	10.1 Amps	8.7 MTV	10694 RPM	45.0 Wo			
	50.8%	178 secs					

PROP	Mtv	Amps	RPM	Win	Wout	Effic	
Speed							
Duration							
GR 5.0x5.0	9.0	7.0	14218	62.8	40.2	64.0%	
	67 mph	258 sec					
GR 6.0x3.0	8.9	7.9	13205	70.4	42.5	60.4%	
	38 mph	228 sec					
RB 6.0x3.5	8.9	8.4	12637	74.6	43.5	58.4%	
	42 mph	215 sec					
APC 6.0x2.0	9.1	6.4	14875	57.8	38.2	66.1%	
	28 mph	282 sec					
APC 7.0x3.0	8.8	9.7	11178	85.2	44.9	52.7%	
	32 mph	186 sec					

Graupner Speed 400 7.2V on 9 Sanyo 500AR cells.

BEST	3.6 Amps	10.5 MTV	20672 RPM	27.7 Wo			
	74.2%	504 secs					
MAX	11.2 Amps	9.8 MTV	12064 RPM	56.2 Wo			
	51.6%	161 secs					

PROP	Mtv	Amps	RPM	Win	Wout	Effic	
Speed							
Duration							
GR 5.0x5.0	10.0	8.2	15472	81.9	51.7	63.2%	
	73 mph	221 sec					
GR 6.0x3.0	9.9	9.2	14326	91.2	54.2	59.5%	
	41 mph	196 sec					
RB 6.0x3.5	9.9	9.7	13680	96.3	55.2	57.3%	
	45 mph	185 sec					
APC 6.0x2.0	10.1	7.5	16232	75.6	49.5	65.5%	
	31 mph	240 sec					

Graupner Speed 400 7.2V on 10 Sanyo 500AR cells.

BEST	3.8 Amps	11.6 MTV	23126 RPM	32.9 Wo			
	75.4%	479 secs					
MAX	12.1 Amps	10.8 MTV	13437 RPM	68.4 Wo			
	52.3%	148 secs					



PROP	Mtv	Amps	RPM	Win	Wout	Effic
Speed						
Duration						
GR 5.0x5.0	11.0	9.4	16659	103.4	64.5	62.4%
79 mph	192 sec					
GR 6.0x3.0	10.9	10.5	15366	114.6	67.0	58.5%
44 mph	172 sec					
RB 6.0x3.5	10.9	11.1	14661	120.5	67.8	56.3%
48 mph	162 sec					
APC 6.0x2.0	11.1	8.6	17514	95.9	62.1	64.8%
33 mph	209 sec					

Graupner Speed 400 7.2V on 11 Sanyo 500AR cells.

BEST	3.9 Amps	12.8 MTV	25595 RPM	38.4 Wo
	76.5%	458 secs		
MAX	13.1 Amps	11.7 MTV	14805 RPM	81.6 Wo
	53.0%	137 secs		

PROP	Mtv	Amps	RPM	Win	Wout	Effic
Speed						
Duration						
GR 5.0x5.0	12.0	10.6	17773	127.3	78.3	61.5%
84 mph	170 sec					
GR 6.0x3.0	11.9	11.8	16351	140.2	80.7	57.5%
46 mph	153 sec					
RB 6.0x3.5	11.8	12.4	15575	147.2	81.3	55.3%
52 mph	144 sec					
APC 6.0x2.0	12.1	9.8	18713	118.5	75.9	64.0%
35 mph	184 sec					

Graupner Speed 400 7.2V on 12 Sanyo 500AR cells.

BEST	4.1 Amps	13.9 MTV	28058 RPM	44.1 Wo
	77.4%	439 secs		
MAX	14.0 Amps	12.7 MTV	16170 RPM	95.6 Wo
	53.6%	128 secs		

PROP	Mtv	Amps	RPM	Win	Wout	Effic
Speed						
Duration						
GR 5.0x5.0	13.0	11.8	18825	153.4	93.1	60.7%
89 mph	152 sec					
GR 6.0x3.0	12.8	13.1	17282	168.2	95.2	56.6%
49 mph	137 sec					
RB 6.0x3.5	12.7	13.8	16433	176.1	95.6	54.3%
54 mph	130 sec					
APC 6.0x2.0	13.1	10.9	19865	143.3	90.7	63.3%
38 mph	164 sec					

I would think some adventuresome individual would go to

12 cells if they can be made to fit. Amp draw is still reasonable but look at the watts out!!!! Of course the waste heat is excessive even on 10 cell operation. The motors seem to handle 30 watts waste pretty well. I should stick the APC and other Graupner pylon props into the table. A few more props would pop up if I did this. Thanks for pointing out 10 cell operation.

Johann: Dunno much about the SR 500 cells - how do they compare to the N-500AR? From your stated pack weight, they should be quite similar <g>.

Doug: Hard to say how they compare since I don't have any 500AR's to try. Seem to run the motor fine though.

SR at KRC

from Larry Sribnick via ModelNet on CIS

Hi Everyone...

Boy, it's hard to believe how much can change in only one year. Please be sure to read this information entirely because the KRC Electric Fly has moved, the SR Electric Flight Symposium has moved, we're going to have an SR Indoor Fly at KRC, and WE CAN SAVE YOU UP TO \$50 PER NIGHT ON YOUR MOTEL OR HOTEL ROOM!

If you haven't already heard, the annual KRC Electric Fly has been moved from Quakertown, PA to Allentown, PA. More specifically, KRC has been moved to the Queen City Airport in Allentown on Saturday and Sunday, September 21 and 22, 1996. That's right, an airport. We're going to be taking over an airport for the weekend!

The Queen City Airport is only about a 20 minute drive north of the old Quakertown flying site. The KRC club felt that the popularity of the KRC Electric Fly had grown beyond the ability of the old site to handle the number of people who attended. As a result, they put in a lot of time and effort and came up with this really great new site. I won't go into all the details about the KRC Electric Fly itself because the KRC club will be mailing out separate information to everyone who has attended in the past. My purpose here is to bring you up to date on the SR Electric Flight Symposium '96.

This year's SR Electric Flight Symposium will be held on Friday, September 20, 1996 at the Allentown Hilton from 9 AM to 5 PM. The fee for the Symposium will be \$20. We'll be covering everything from Flying Wings, to Soldering, to Speed 400 Pylon Racers, to the Care and Feeding of Nickel Cadmium Battery Packs. Here's a tentative list of topics and speakers which, as usual, might change a little by September but will still give you a good idea of what we have planned.

Keith Shaw (Flying Wings 2), Larry Sribnick (Care and feeding of Rx, Tx, and Electric Flight battery packs), Clyde

Geist (A Unique Project, the Curtiss XP-55), Larry Sribnick (Soldering for Electric Flight), Bill Griggs (Speed 400 Pylon Racing), Tom Hunt (Stall Prevention), Dave Palombo (Brushless Motors), Bob Kopski (To Be Announced), Martin Euredjian (Electronic Speed Controls 2), plus a What's new section, Raffle, and Wrap up for the day.

Following your suggestions we've tried to come up with a good mix of both the practical and theoretical. We've also given several of the topics more time because you have indicated a real interest in particular areas. Rather than a rigid 25 minutes per topic, the time allotted to each section will vary from 35 minutes to 90 minutes. I'm sure there will be something for everyone from beginner to expert.

SAVE UP TO \$50 PER NIGHT ON YOUR MOTEL OR HOTEL ROOM EVEN IF YOU'RE NOT ATTENDING THE SYMPOSIUM!

In trying to find a good location near the Queen City Airport, I made several trips to Allentown and visited many of the motels and hotels in the area. The Econolodge and Days Inn are within a mile of the airport. Both quoted room rates of \$50 to \$55 per night. The Econolodge isn't impressive but the Days Inn doesn't look too bad. My concern with both motels is their location. They are both in an industrial area. As most of us leave a lot of stuff in our cars overnight, I'm concerned about security.

The Comfort Suite, which is eight or nine miles from the airport is very nice. The problem is that they are directly across the street from Dorney Park and the Wild Water Kingdom, both major amusement parks. As a result their room rate is \$100 per night and they wouldn't budge on the price because people come from long distances to go to Dorney Park.

The Days Inn Conference Center and the Holiday Inn Conference Center are near each other and are about nine or ten miles from the airport. Both are nice but the best I could do on the room rate was \$75 per night.

Which brings me to the Allentown Hilton. The Hilton is two miles from the airport. It is everything you would expect a Hilton to be. The rooms are beautiful with a coffee maker in every room. They have a Fitness Center, exercise rooms, sauna, an indoor pool, and non-smoking rooms! They are in a fully restored area of downtown Allentown with Shopping Areas, Restaurants, Museums, and Historical Sites all around. If you're bringing the family, there will be plenty for them to do while you're at the field.

Probably the best part is the parking. Parking for the Hilton is immediately across the street in a gated, fully lit, 24 hour a day guarded above ground parking garage. I know I'm going to feel a lot better about leaving my aircraft in my

car overnight. And, if you'd like to take your aircraft to your room, you can just pull up at the front door and drop your things in the lobby. The Hilton will keep an eye on everything while you park your car. If you need it, there's even help available to bring everything up to your room.

Now the best part! The usual room rate at the Hilton is between \$105 and \$126 per night, double occupancy. But, because so many of us are coming, I've negotiated a special room rate of only \$69 per night with up to four people in the room!

At first I was going to make this special room rate available only to Symposium attendees but I decided that wouldn't be right **SO THIS SPECIAL ROOM RATE IS AVAILABLE TO ANYONE GOING TO KRC** whether you're going to the SR Electric Flight Symposium or not. All you have to do to get the special rate is call or write to us here at SR and ask us for a special registration number. Then, when you call the Hilton to make your reservation, just mention that you want the special SR Batteries room rate and give them the registration number we either gave you on the phone or mailed to you. It's that easy.

There is a small parking fee because the parking garage is run by the City of Allentown, not the Hilton. Here's how the parking will work. If you are going to the Symposium but you are not going to stay at the Hilton, parking on Friday will be \$4 for the day. However, when you register for the Symposium, SR will send you a coupon worth \$2 towards your parking for the day so your parking for the day will only cost \$2. In addition, if, when we break for lunch, you decide to eat at one of the Hilton's restaurants, the Hilton will give you an additional \$2 off parking for the day so your parking will become free for the Symposium!

Next, let's assume you're going to the Symposium, you're going to stay at the Hilton, and you're going to arrive on Thursday, the 19th. Parking from Thursday to Friday is \$5.75. However, SR will give you \$2 off and the Hilton will give you an additional \$2 off if you eat there so it will only cost \$1.75 to park from Thursday to Friday.

Finally, for those of you who are not going to attend the Symposium but are going to stay at the Hilton and will arrive on Friday, the 20th. Each 24 hour period from Friday to Saturday and Saturday to Sunday is \$2.50. Even if you are attending the Symposium the parking fee from Friday to Saturday and Saturday to Sunday is \$2.50.

If you're confused by any of this, just remember that the SR Electric Flight Symposium is \$20 this year and the special room rate at the Hilton is \$69 per night with up to four people in the room if you mention SR Batteries and give them your special registration number when you call the Hilton to make a reservation. You have to contact SR for the special registration number whether you're going to the

Symposium or not.

If you already have a reservation somewhere else or even at the Hilton, cancel the old reservation and make a new one to save a lot of money!

THE SR INDOOR FLY!

In past years, SR held a Night Fly on Friday evening at the KRC field. We're not yet sure if this will be possible at the Queen City Airport so here's what we're going to do instead. SR has arranged for a large room with high ceilings at the Hilton for Friday evening from 7:30 to 9:00 PM. A large room and high ceilings means indoor flying! Because we haven't done it before and we don't want to do anything to get the Hilton mad, I discussed the program with Clyde Geist and he suggested that we put some restrictions on the program for this year. If you're going to fly Electric Power, you must use either of the two Kenway electric motors, you must use no more than three, 50mah cells, and multi motor designs will not be allowed. If you are going to fly rubber power or hand toss, the aircraft must not weigh more than 1 ounce. Clyde and I reserve the right to ask any flyer not to fly, if, in our opinion, there might be a safety hazard associated with a particular aircraft.

You don't have to attend the SR Electric Flight Symposium in order to come to and fly at the SR Indoor Fly and the program is free of charge! I think this SR Indoor Fly is going to be a blast. The best part is that there is plenty of room to expand the program in future years if there's enough interest.

IT'S UP TO YOU!

If you'd like to register for the Symposium or arrange for the special room rates at the Hilton, just give us a call by phone or Email or write to us at the address listed below.

HERE ARE DRIVING DIRECTIONS:

To The Queen City Airport: I-78 Exit 18-A onto Lehigh Street. Turn left on Vultee Street to the airport.

From The Airport To Allentown Hilton: Vultee Street to Lehigh Street, make a left. Look for sign on left to make a left for 15th Street. Follow 15th Street to Hamilton Street and make a right. Take Hamilton Street to 9th Street and make a right to the Hilton entrance and parking.

HERE'S HOW TO CONTACT US:

SR Batteries, Inc. Box 287, Bellport, New York 11713
Phone: 516-286-0079 Fax: 516-286-0901 CompuServe:

74167,751 Internet: 74167.751@compuserve.com

Let me know if you have any questions or there is any way we can help.

Thanks,
Larry

The Mid-America Electric Flies - 1996

Saturday, 7:10 a.m., the field in Saline, MI, is quiet as the brown Suburban creeps onto the field. The sun is shining brightly as Ken looks around. He's wondering what the day will bring, as he unloads all the "stuff" that supports this type of event. Yep, the Porta-Potties are here - great. Keith's wagon, loaded with his air force, pulls in. Two sleepy-eyed CDs greet each other and prepare for the day. Set up, set up, get ready - anxious. Impound and food tents set up. Helpers arriving. Getting ready. Soon the guest fliers arrive and all the work and planning start to pay off.

55 entrants registered and flew under perfect weather conditions. Although the afternoon became a little windy, the sun shone brightly and temperatures were mild. There were many spectators, and at one time parking disappeared!

46 entrants registered and flew under less-than-perfect conditions. It was cold, windy and rainy early in the day. Kirk Massey set up his New Creations traveling store under the shelter of Keith Shaw's big canopy, and the time was not wasted. Several fliers flew between the rain drops. About noon, the weather broke, and the sun came out. Although very windy the rest of the day, the meet went on, thanks to the bold pilots.

The Planes

There was an interesting mix of planes this year. For the past few years, there have been fewer and fewer gliders, but about 50% of the planes may have been glider types this year. The difference was the power. Many of these gliders were really rockets in disguise. There were many scale-like planes and sport planes. The power systems are getting larger and smaller. Interesting! At least 1/4 of the planes would "look at home" at glow fields. You couldn't tell from their size or power that they were electric. There were many Speed 400 types, including 3 racers. These little power systems move the racers at a quick pace, as Doug, Don and Ralph demonstrated.

The Pilots

The pilots came from all over the U.S. and Canada. We appreciate all of you coming and sharing your wonderful creations with us. Folks from Michigan, Illinois, Indiana, Wisconsin, Ohio, South Dakota, Iowa, Minnesota, Kentucky, New York, Ontario - Canada and France joined in the fun and friendship. It is marvelous to see what so many people in different geographic locations are doing.

One very interesting happening was how much sharing of information was going on. Because of all the sharing, getting flight time was extremely easy this year! I noticed very few times where anyone had to wait for a pin. This was partly due to the new frequency system that we used, but mostly due to the "laid back" atmosphere that runs through this meet. Of course there was plenty of flying, with hundreds of sorties flown through out the weekend. Mishaps were few, and most not of a serious nature. The piloting skills have increased, as well as the building skills. Overall, the quality of the planes has taken a GIANT leap over the past few years. More and more modellers are reaching the "super" level of aircraft, that were the domain of Keith Shaw, only five years ago. Of course, he continues to "show us the way", but it's great to see so many following! I believe the 1700SCRCs, combined with getting away from the 05 type plane and brought electric flight to a new level, and these pilots proved it! Plenty of power and duration that does not have to be apologized for.

The Help

You've heard it all before, but it still has to be said. A meet like this cannot be put on without super help. The Ann Arbor Falcons and EFO did a wonderful job of seeing that our guests were well taken care of. We all tried very hard to meet the needs of all, as they arose.

Certain people need some special recognition. Warren Plohr set up, worked at and kept straight the frequency control. Jim McNeely ran the transmitter impound all Saturday. Jeff and Michele Hauser honchoed the food tent all Saturday, while Debbie and Amy McNeely pitched in. Dave Grife pitched in when and where needed. Bob provided the grill both days. Jack Laird provided the programs. Dave Hare set up and was chef for the annual picnic. Many Falcons and EFOers pitched in when and where needed, including parking. Thanks folks.

Thanking people for Sunday is a bit harder, since Sunday just sorta happened! But to all of those who did their share and more, a serious thank you. Yes, I even did some grilling on Sunday. All around kinda guy.

The Picnic

Dave Hare set up the picnic and was ready when folks started arriving at the park. The Falcons and EFO provided the steak sandwiches, while club members and pilots provided the potluck. The food was excellent, and Don Belfort's cake of appreciation to the Falcons and EFO was enjoyed by all. Thank you Don!

The Awards

Yes, there were special awards, as usual. This year the Falcons and EFO gave Dr. John Mountjoy the annual Charlie Spear Memorial award. This is a perpetual award for outstanding service to the e-flight community. His name

has been added to the perpetual award, and he was given his own plaque to commemorate this occasion.

The awards for Saturday: **Dick Fleming** - Best Multimotor (a French twin-engined bomber), **Dave Grife** - Best Scale (1/4 scale Mystery Ship), **Jim Young** - Most Beautiful (original pattern ship - Ellipse), **Les Garber** - CD's Choice (Speed 400 Flying Flea), **Ken Bates** - Longest Timed Flight and All Up/Last Down.

The awards for Sunday: **Don Belfort** - CD's Choice (V-1) & Best Mini-Electric (Screamer ducted fan), **Dick Fleming** - Best Scale (Hellcat), **Dave Grife** - Most Beautiful (ElectroStreak), **Les Garber** - Longest Timed Flight (His wing thing) & All Up/Last Down.

Congratulations to all the award winners, and all of the other participants. You really were all winners. You made me feel that it is all worthwhile.



The Charlie Spear Award Goes to Dr. John Mountjoy!

The Sponsors

We appreciate all of these firms and individuals supplying us with wonderful support, and we highly suggest that you support them with your hobby dollars.

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An interesting note: I had the wonderful ModelAir-Tech Speed 400 plans just setting in a box outside the food tent

and many folks asked if they were for sale. They drew a lot of comments and attention, and 36 folks went home with sets of these plans. Thanks Bob and Tom! They were a hit.

A Final Note:

To all of my club members, the Falcons, pilots and spectators a very warm and sincere thank you. It was a wonderful time. For those of you who couldn't join us, why don't you drop by next year. We can't guarantee the weather, but we can good friendship and a good time. See ya then!

More pictures next month. If you have any photos you'd like to share from this meet, I'd love to use them. Thanks.

Upcoming Events:

June 29, 9th Annual NCRCC Electric Fun-Fly, Ron Torrito, (203) 528-2227 Hartford, CT area

June 29/30, 14th Annual Electric R/C Fly-In, Boeing Kent Space Center Field, S 196th St. & 68th Ave. S., Kent, WA, Bernard Cawley (206) 839-9157 or 75613.2621@compuserve.com

July 12, EFO meeting/picnic/fly-in, Midwest R/C field, 5 Mi. Rd, 4:00 - dusk; AMA REQUIRED to fly; Ken Myers for info; Rain date Friday, July 26 same time & place.

July 13/14, Pinehollow '96 Northwest R/C Seaplane Champs, Pinehollow Reservoir near Wamic, OR, special electric-powered category, Jim Weaver (503) 760-4558

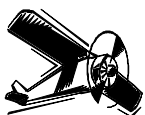
July 13/14, Voltaires annual Fun Fly (Syracuse, NY area) Garret Wikoff (wikoff@ibm.net), 9494 Pendergast Lane, Phoenix, NY 13135 or Bruce Budelmann (budelman@ix.netcom.com)

July 20-22 Electric Nationals, AMA Headquarters Site, contact Ken Myers

Aug. 17 SEFLI 3rd Annual Mountain Fly Inn, Cooper Hill Inn, East Dover, VT, contact Tom Hunt, (516) 981-2012 THunt95147@aol.com or Don Mott (516) 924-3385.

Aug. 24 Greater Detroit Soaring and Hiking Society Electric Glider/Old Timer/Floater get together, Addison Oaks Park, North of Rochester, MI Hutch Hutchings, (810) 335-0844

Sept. 20/22, KRC Electric Fly-in, Quakertown, Pa.



The Ampeer
Ken Myers
1911 Bradshaw Ct.
Walled Lake, MI 48390

Next Meeting: is a picnic/fly-in at the Midwest RC field on Friday July 12, All e-fliers Welcome - 4:00 thru dusk