

The Officers:

President:

Ken Myers
1911 Bradshaw Ct.
Walled Lake, MI 48390
phone: (810) 669-8124

Vice-President:

Richard Utkan
240 Cabinet
Milford, MI 48381
phone: (810) 685-1705

Secretary/Treasurer:

Debbie McNeely
4733 Crows Nest Ct.
Brighton, MI 48116
phone: (810) 220-2297

Board of Directors:

Keith Clark
2140 E. Highland Rd.
Howell, MI 4848843
phone: (517) 546-2462

Board of Directors:

Jeff Hauser
18200 Rosetta
Eastpointe, MI 48021
phone: (810) 772-2499

Ampeer Editor:

Ken Myers
1911 Bradshaw Ct.
Walled Lake, MI 48390
phone: (810) 669-8124

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The Next Meeting:

Date: Thursday, September 5, 1996
Place: Ken Myers's house, Time: 7:30



Complete, Ready to Fly Electric R/C

I've been in e-mail contact with Chia Hong Tsao (enjoycht@ms4.hinet.net) of the Enjoy Model Company of Taiwan. His company is producing a line of RTF electric models. They are being distributed in the States through Chicago Model International, PO Box 170, Deerfield, IL 60015; Tel.: 708-735-8500 and maintain a WEBSITE at: <http://www.xnet.com/~vmf/cmi>

CMI is offering four different models; 1 for 2 channel operation and 3 for 3 ch. operation. They all have a unique Crash Warranty that provides for 60 days from date of purchase.

I've not seen the plane fly, personally, but have seen the video. I've included a letter

from Chia that explains the conditions the plane was flying in on the video. I was impressed. I can make no claim for its fit and finish, but the tape showed it flying very well, especially when the "conditions" were taken into account.

CMI's WEBSITE has much more information (you can land mail too folks) and even a "slide" presentation of the plane in flight. The two channel version is available complete with radio and charger, everything you need except AA batteries for the Tx.

I've presented this information for you, as this just might make a great travel plane, especially if it "lives up to the video." Check it out.

The letter from Chia

Dear Ken,

I had asked CMI to mail you one of each of their Flight School and sell loop video for your reference. (*received sell loop - km*)

In fact, the flyer in CMI's video is me. It is a very interesting story.

Originally, Chip Hyde, was to have flown the plane for the video and shown to CMI's customer last May. But Chip was

What's in this issue?

New ARF - More News from ModelAir-Tech - N. Carolina Happenings - Skonk Works Reminder - Help find a pinion - Speed 400 Firewall - ElectricCalc program - Turbo 10+ review - Ashlar's Drawing Board - More on Covering with Micafilm

Ampeer

absent with some reason on the date.

Due to this big customer is very important to CMI, Mr. Bob S. Rubin the owner of CMI, did not want to give up. He asked me fly (take a plane, not by R/C!) to US urgently to take the place of Chip. I did and arrived within 72 hours after Bob's call. A heavy storm came too. Some local flights were canceled. We almost cannot go to see the customer by Southwest air line.

After we arrived at the town of the customer's office, it blowing 35MPH and with heavy rain. Nobody expected that I would like to fly or could make the plane fly. I said, "I must try, because I had spent 2 days and came from other side of the earth. I won't leave before I fly or crash my airplane! OK!" Every agreed to try any chance the next day.

Second day morning. The wind was still strong and we had some rain too. The people asked me to give up again. I wouldn't. By taking a 10 minute drive, we went to an AMA flying field nearby. After 10 minutes of preparation, I hand launched the first airplane into the air. It flew well and climbed up gently, eventhough the wind is 20-30 MPH. Sometimes it looked just like a kite. Once the airplane reached enough altitude, the show was started: looping, low passing, diving flight.....Every one was surprised with the performance.... Second item, third item..... 3 models in total 20 minutes. The demonstration was great, very successful.

The deal was done within 40 minutes after we arrived back at the hotel. Everyone was happy, and I won praise to fly in a such strong wind and a not bad order.

We arrived back in Chicago the same day and prepared to fly for the video next day. A camera man work with us from 6:00AM until 6 PM next day.

We flew in a park that was inside a forest, the weather was still not stable enough to make a good flying video, the wind would come from any direction, and changed within 15 seconds. It is a hard working day. The wind kept changing all the day. My small airplane was waving in the air.

After about 10 flights there was one damaged main wing was broken during a quick roll, the plane crashed from 150 ft. Suddenly, Bob and the camera man's face turned green. I got the airplane back and check all function and damage. We we're lucky, except the main wing, Nothing got hurt. The smiles came back to their face again. I spend one minutes to change the wing and we flew again ---- It is the section over the water in the video.

That is it!

By the way, I found the 400 (We call RS380) type motor is very popular in EP flight. *(It is getting more popular here, and I understand is VERY popular in Europe - km)* Is it? Do you know anything about 300 (RK370) type motor? I almost test all the 300 and 400 type motor as a power source for our airplane.

I found 400 type is cheaper and have longer circle life. But any regular (not modified) 300 type motor can always get more efficiency if used with gear down unit, and much more lighter (1 oz. or 30g less).

Best Regards,
C. H. Tsao

Thanks for sharing that story with us. And, yes, Chip Hyde's face and quote appear in CMI's print advertising. Check it out.

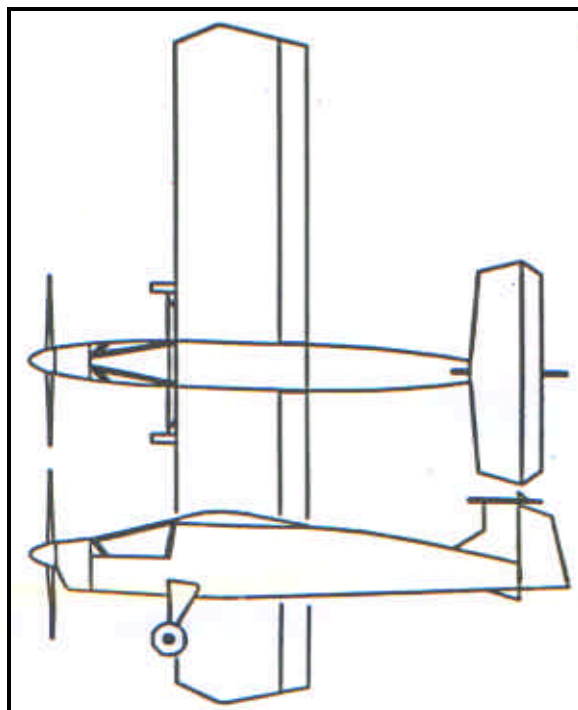
More Good News from ModelAir-Tech

R/C Model Aircraft Products and Engineering
P.O. Box 12033
Hauppauge, N.Y. 11788-0818
Phone: 516-979-1475

Introducing the **MIDIWATT**

Smaller than the MEGAWATT (16-21 cells)
Bigger than the DIMWATT (7-8 cell Speed 400)

Wing span; 52" Wing area: 510 sqin
Length: 39.5" Weight: 55-60 oz (10-14 cells)
Power: 11-500 belt drive and Astro 15 or Speed 600 (9.6v) or similar motors



The Midiwatt was designed as a medium sized, "stick built" sport aerobatic model for the electric model scratch builder. Only two formers in the whole model, the firewall and the landing gear bulkhead! The wing uses the "ribless" multi-spar construction found in the Dimwatt and Megawatt, so there are no wing ribs to cut out. The model can be

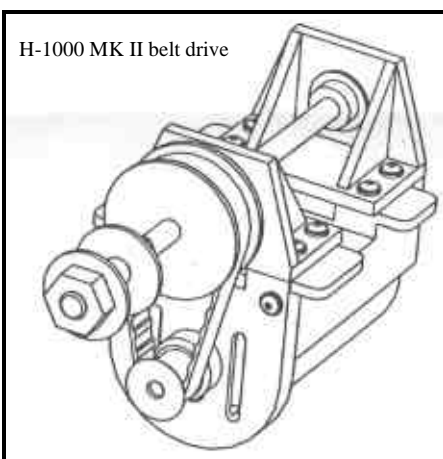
flown on rudder and elevator and throttle only, or ailerons can be installed on the wing. The "high" tail provides solid control during maneuvers and stalls. The landing gear is designed to accommodate 14" props easily. Larger props provide better climb rates and a more efficient cruise, allowing longer flights. A vacu-formed cowl to cover the powerplant is available. Use a 10 cell system for lazy flying or "supe" it up with 14 cells and tumble around the sky.

Plans: \$12.00 folded/\$15.00 rolled

New York state residents add appropriate sales tax

For a limited time only.... Free MIDIWATT plans (folded) with the purchase of an H-500 belt drive!!!!

MODELAIR-TECH H-1000/DeWalt Combo becoming popular with "larger" electric model flyers!!



H-1000 MK II belt drive

The mating of the DeWalt 14.4v power tool motor with the H-1000 belt drive is flying some mighty big models. The motors intended use, cordless power drills, has found it's way to screwing propellers through the air. The motor has replaceable brushes (huge

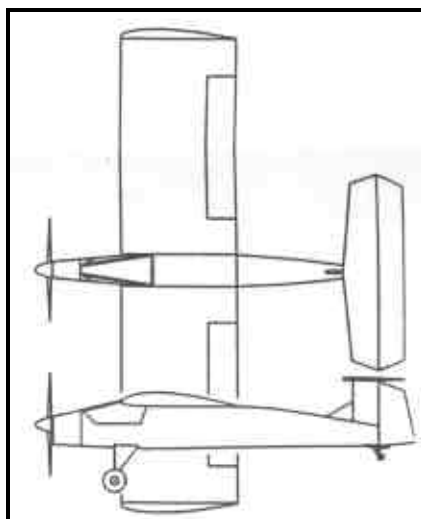
brushes!), a cooling fan, and a ball bearing supported shaft (output side). This makes this motor extremely efficient, and it's cheap too!! It can be had at most Black and Decker retail outlet stores for around \$38.00. Some modification to the motor (and to the drive, however, the modification to the drive will still allow the use of other motors at a later time) will be required before it can be flown. This is easy to do if you're handy and have some basic shop tools, or you can let Modelair-Tech do it for you!! (More about that later).

On 16 cells at 3.0:1 ratio this motor swings 15 x 8 props for only 25 amps of current draw. It will fly 6 ft Cubs and Senior Kadets or our own Megawatt for lazy Sunday flights. On 21 cells and 3.6:1 the same prop turns these models into aerobatic fools!!! At this level the combo produces more power than most other "expensive" made-for-model aircraft electric motors.

Because this motor has replaceable brushes, you can expect this investment to last quite a long time.

The H-1000/DeWalt Combo deal "ready to fly" including all mods to motor and drive, through Modelair-Tech, at either 3.0 or 3.6:1 ratio is \$112.95 +\$5.00 S+H (NY state

residents please include applicable sales tax).



MEGAWATT 80" span, 1300 sq.in. 7-8 lbs on 16-21 cells

For a limited time only.... add \$8.00 to your order and get MEGAWATT plans (folded, normally \$20.00) with the purchase of an H-1000/DeWalt belt drive!!!!

North Carolina Happenings



E-mail from: Greg Gimlick, 06-Jul-1996

Ken: I received a photo of you, and what I assume is your air force.

Greg: One photos that has about 12 planes in it that belong to John Kauk, Dana Gant, and me. The photos you got are from John Kauk. John has been around for some time in electrics, but travel has kept him lurking much of the last few months. He's a superb builder and flyer with a Mossy like Dave's in the works.

Ken: I'd like to use them in the Ampeer and put them on-line at the site.

Greg: Gee, we'd be honored :-) I know the details on mine, but the others will have to fill you in on theirs.

I assume you're seeing a picture John labeled hangar.jpg so I'll describe them from that. (*It is.km*)



The white twin in the foreground is a SIG Hummer I converted to using two Salt Creek Special 400 motors spinning 6x4 props on 14 KR600AE cells in series. I've just finished testing it and have not done any trim colors yet or installed the canopy. Weight is 32 ounces on a wingspan of 34", area of 212sq in, w/l is about 22oz/ft. It's a bit heavy because I used what I had on hand, Astro 210 ESC, 270mAh rx pack, RCD535 rx and micro servos (elev & aileron only) Four minutes of good aerobatic time and hand launches with little effort.

Directly behind that are two E-Hots, the one on the left is mine. Astro 15 direct on 10 1700's, 8x6 APC prop, 270 mah rx pack and RCD535 rec, LPSC-1 ESC (the best ESC around in my opinion). I test flew it and have not flown the whole pack so don't know duration yet, but static draw is around 23 amps and the plane weighs 48oz. Too much aileron and elev throw so I need to tone it down before it's fun to fly.

Behind that to the left is my Lazy Bee. Pretty much like all the others except I used full sized equipment including a 500 mAh rx pack, Astro 210 ESC, Astro 05G and 11x7APC prop on 7 cells.

In the back on the far right is a Hanger Nine Easy Fly 40 ARF. I did no alterations and use it for a test bed for motors and to keep me semi-proficient. I've flown it with an Astro 40G, FAI25G, 15G, and AmpAir twin 540 setup all on 14 cells. The 40 needed more cells to be optimum. but it was an experiment and surprisingly flew extremely well on only 14 cells with a 14x6-10 prop for almost 7 minutes. The AmpAir 540 system was a bit over taxed, but flew it well with a hand toss for 5 minutes. The FAI25G was very spirited and is more than enough motor but the duration is down to around 4.5 minutes and it sucked around 42 amps. Surprisingly, to me, the best motor so far has been the common Astro 15G on 14 cells with a 12x8 MAS electric prop. Flights of 7 - 8 minutes are possible doing training work in the pattern. The motor does get a might warm, but has lasted two seasons without problems. All standard radio

gear and Astro 204 controller, so the plane is pretty hefty at 6.5 lbs. Very stable flyer. I think if someone is looking for an ARF trainer and put a brushless motor in it they'd have a great setup for minimal time and money.

Others in the picture:

1. Yellow and orange Hots (deceased) belonged to Dana Gant.
2. Directly behind it is his Freedom 20. A great trainer with the 15G and 12 cells.
3. Left of that is John kauk's Mini Viper (7.2v).
4. John's Wonder (15 direct/10cells)
5. Behind that is John's Tiger Kitten.
6. Next to that is his Revolt.

They'll have to fill you in on the details beyond that. I hoped this helps a bit.

There are now 6 of us in the area flying electrics not counting Doug Holland and John McCormack who don't venture out beyond the AULD competition area yet. We're working on a name and then will charter as a club. Take care,

Greg

(Thank you Greg for sharing with all of us. km)

Electric Round the Pole Flying

from Pat March

Yes, you saw some of this in the June issue, but with the winter approaching us here in the northern climes, I thought you might need a bit of a reminder, as this would make a wonderful "indoor" activity for your club. You could also use it with your children and as a community or educational activity. Try it!

From Skonk Works 1996 Catalog - \$2

(Ya gotta get this thing!)

WELCOME TO ELECTRIC ROUND THE PYLON FLIGHT!

In the late '60s, I thought I had invented ERTP. But the English had beat me to it. They had a twin engine Vikers Viking, with landing lights, running lights, retractable landing gear and working flaps flying at an RAF charity function as early as 1945. This machine used home made AC motors!

You need not make your own motors. We have a variety of good low voltage dc motors for you to use. Pylons have come a long way, too. Skonk Works provides one that allows you to operate elevators on your models. Many multi engine models have been flown. Ducted fans are practical, and we have two for you to choose from.

The educational value of ERTP is incalculable. Novices learn not only practical skills in making their models, they also get a painless introduction to electrical theory and

practice, as well as solid knowledge of geometry, some math, and physics. Participation in ERTTP modeling has led to solid careers in engineering and toolmaking. All this while having fun!

We invite you to get our catalog and look through it while letting your imagination run free. You will think of odd possibilities that you just have to try out!

We want to hear of your successes with ERTTP. We are also concerned when something does not work to your expectations. New ideas are welcome, but don't be surprised if I suggest that you do the development work! This can be rewarding or extremely frustrating. Most developments exhibit both aspects. Phone calls are welcome. You can usually get me from 7 to 7 (Eastern), 7 days a week. I love to talk modeling. **Don't forget the 10% for a club order.**

Some of my customers communicate by E-Mail. This is quick and economical. I check my computer at least once a day, and will respond to any inquiries or thoughts that you send me.

NOTE Pat's NEW E-Mail Address!

You can find me at insideman@worldnet.att.net - Happy Modeling!

or

SKONK WORKS
1890 Forestdale Ave.
Beavercreek, OH 45432
Phone 513-429-2411

I Need Help with Smaller Pinion for an AF 05

From Dereck Woodward - dwmstw@aol.com
Can anyone of you real electric fliers help?

Dear Ken

Me again - since writing last, I sneaked up on the unsuspecting Electric Lazy Bee, fitted a 40" wing instead of the floatin' around 48" ditto, slapped an Astro 05 Cobalt geardrive on the front and got down to some serious fun.

On seven cells (1700's) she is a blast, on eight 1000's it is more like my beloved old gas Bee but I don't have to keep cleaning her off. Prop is a Master Airscrew 10 x 8, current is 25A flat out and a prop speed of around 6K. The next improvement was a motor that I brought over from England with me - a 540 can job with adjustable timing, hefty replaceable brushes and capable of 25A without getting sweaty. We retimed the beast to go backwards and screwed it to an old Graupner 3:1 FG3 'box. On a Master 10 x 6 electric wood fan, it makes the Bee even more so - and at around 20A for the same prop revs! The motor looks a close cousin to what Graupner are selling with the FG3 box from Hobby Lobby, but when it comes down to it, the main difference is the gearing - the 3:1 is way better than the

Astro.

Does anyone out there know of a way of fitting a smaller pinion on to the Astro's oddball shaft size? Without a major machine shop as backup, that is. I'm sure I've heard of it being done, but didn't take notes and feel that the Astro will perform better for a 3:1'ish ratio than the present low reduction it comes with.

As an aside, I suspect that the current Hobby Lobby / Graupner motor and gearbox could be a \$40.00 sizzle package for the Bee and many of the old timers that sport fly on that kind of unit.

See y'all at KRC.

Yours in modelling,
Dereck Woodward

Motor Mounts for Speed 400 Type Motors

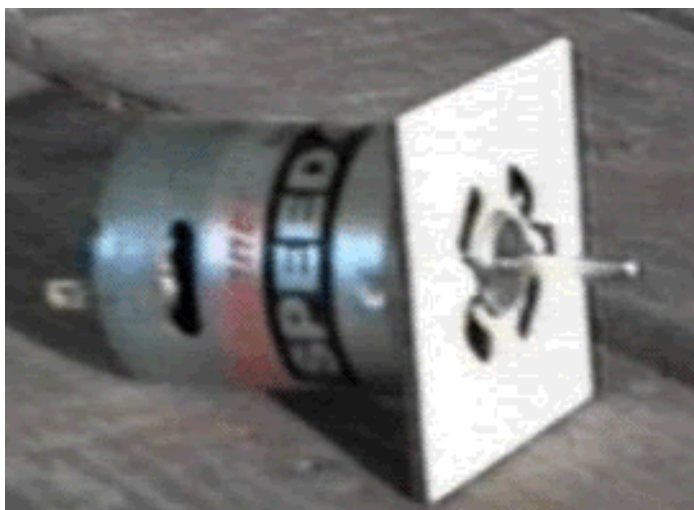
from Tim McDonough's Home Page

<http://www.inw.net/~tpm>

New Product Announcement!

Many of you know me as "the T-shirt guy" and proudly wear one of my two "No Noise" electric flight designs. Well I actually do build and fly these things too and have added a new product that I hope you kit builders and kit bashers will find useful...

Pictured below is my new Speed 400 motor mount. It is laser cut from 1/16 plywood and provides a solid, easy to use firewall motor mount and unrestricted airflow through the front of the motor. These mounts come three (3) to a package and include metric mounting screws for the Graupner, Robbe, or similar Mabuchi 380 size ferrite motors.



Retail Price: \$5.00 per package

Email me at tpm@inw.net for details on ordering and availability, or write to 127 South Oaklane Rd., Springfield IL 62707; Tel.: 12171 523-8625

New Computer Program

Greg Gimlick

76342.2271@compuserve.com

Most of you have heard of AeroComp and ElectroFlight Design, but Sid Kauffamn has just released a new program that is said to be "better" by many of the folks on ModelNet Electric Forum. It is said to be very open in adding info to the data bases used to do the calculations. I've ordered a copy, and if time and space permits there will be a review in this issue. It is available from the following sources:

Aveox (818) 597-8915 or 102252.401@compuserve.com
 Hobby Lobby (615) 377-6948 or 74164.2423@compuserve.com
 MaxCim Motors (716) 662-5651 or 76331.3712@compuserve.com
 New Creations (409) 856-4630 or 76221.2446@compuserve.com
 SR Batteries (516) 286-0079 or 74167.751@compuserve.com

The introductory cost is \$30US plus shipping.

The following information was taken from the ElectriCalc homepage! The homepage is located at:

<http://ourworld.compuserve.com/homepages/electricalc>

ElectriCalc was designed to take a lot of the mystery out of choosing the right "stuff" for your electric-powered models. ElectriCalc is user-friendly software that allows you to simulate an electric flight system for your model airplane with a battery pack, electronic speed control, motor, gearbox, and propeller. It requires Windows 3.1 or higher or Windows 95. We have given ElectriCalc a low introductory price so that anyone can afford it - \$30! The suggested retail price is only \$39.95 and the introductory price is good through September 1996.

If you're not quite convinced that ElectriCalc is the greatest thing since electricity, you can download the ElectriCalc to get a feel for what the program can do for you. The help file also includes a recipe for shoo-fly pie (Sid is from North Carolina!), the official food of electric flyers.

One of the reasons ElectriCalc was created was to encourage the exchange of information in the electric modeling community. To this end, ElectriCalc was designed with databases that are written as ASCII text, easily accessible and expandable. There are four databases for; cells, motors, props, and planes.

Feel free to comment or send us your own contributions to ElectriCalc.

Fly Quietly!

Please Note that the following are views expressed by the author on his use and experience of the following product. It is presented here to help give you background as to how you may best use this product. km

Thoughts on Using the Model Electronics Corp. Motor
 posted to the CompuServe Electric Forum by:

Okay, okay, after a few evenings of careful thought I'm "out of the closet" with my MEC experience. I fought this thing long enough and after getting it in writing from Tom Miles that he wouldn't quote me or mis-quote me in any shape, form, or fashion I said I would try one of the MEC Turbo 10+ motors that he was so willing to send. There are a couple other folks out there who I know received them too and will let them tell their stories on their own.

To preface this analysis let me say I have continued to believe what many of us have said time and time again; that this motor/gearbox setup is a good unit and performs well in the correct application. I think most of us have agreed with this and with that in mind I was neither surprised nor disappointed when I tried it, it performed as I expected it to under the conditions presented.

I told Tom that the only thing I could try it in at this time, while trying to get ready for KRC, would be my Hanger 9 Easy Fly 40 ARF that I use as a trainer/test-bed. I've used Astro 15G, 40G, FAI25G, Ampair twin 540, and now the MEC Turbo 10+ in it. He talked to Pete and they decided the + motor would be the best choice rather than the GT version. I received a motor and gearbox in the mail shortly after and last week I went to work installing it.

The normal setup for this plane has been the 15G on 14 cells spinning a 12x8 MAS electric prop. It has been the best combination for performance and duration with training in mind. I set my timer for 6:30 and once it goes off I begin to set up for landing knowing I usually have another full minute of power. That's 7 1/2 minutes of closed traffic work with possibly a loop thrown in for good measure. It takes off with good vigour from the grass and static full throttle current is about 34 amps.

I put the MEC Turbo 10+ in the ARF. I was not optimistic after 'modeling it' in the computer, but of course we know that's all just smoke and mirrors...."fly it and watch it" as the mechanics used to tell me. Well, in this case the computer was very close on take off projections and a bit optimistic in the cruise guesstimates. The plane ended up at 96.5 ounces instead of the 106 with the Astro and 14 cells. With the 12x8 it flew okay but definitely less authority than the Astro and for a full two minutes less. Static draw was 32 amps opposed to 15G's 34. With the MEC is was VERY obvious I was about to land and when I checked the clock it had been 5:30 and there was nothing left. No loops or rolls possible as with the 15G....I didn't try unlimited vertical :-)) I then tried the 13x8 which is more what MEC suggests and the static is now 44 amps. Lots of gusto on takeoff and loops without a problem. Throttle quite a ways back to

cruise, but all done at just over 4 minutes. I know this isn't what they recommend as plane of choice but it is similar to the trainers they say it's good for.

Well my uneducated guess is that Sid's program (*ElectriCalc - km*) was very close on projections and I'll be putting the 15G back in the first chance I get. It flies fine, but who wants 4 minutes. Someday I'll stuff it in a foamie or something similar since I think it will be good in a 4lb plane and 5 minutes of gusto is all I can take anyway. For a 6 lb trainer I wouldn't recommend it because of duration. With the 13x8 fixed wood prop it has plenty of power, but 4 minutes just isn't long enough for training.

The instructions mention being able to use up to 14 cells, but I didn't try it since what we've been discussing (*in the Electric Forum - km*) has been referring to 10 cells. I also didn't test for all the constants because I wanted to avoid any possible scenario where I might be told I had ruined the motor in testing. I installed it and flew it.

Sooooooooo, what do I think? It's a good motor system when used in the right application....which is what most of us have said all along. Am I unhappy with the system? No, but I would have been very disappointed if I had bought it expecting several minutes in a 6lb trainer. No surprises yet, eh? I will probably try it in a foam plane one of these days and I can pretty confidently assume it will do fine once I throw it in a plane weighing 3 - 4 pounds, but so would an Astro 15.

What has been missing in all the reports we've heard has been current draw and duration numbers. Once I loaded it with the 13x8 the performance was fine, for four minutes and 44 amps. BTW, the pack I used for this flight had 1905 mAh according to the Robbe charger so the flight actually works out to an average of 26.58 amps for the 4.3 minute flight. Take offs this day were on a paved runway only because that's what was available.

A couple of years ago I almost bought into a sales pitch heaped with hype and was reminded by Larry that "watts is watts" and he was right. Some systems get more efficiency out of their power setups than others but there is no magic here.

So, what do I say about the MEC motor when asked? It's a good motor for the right application. What do I say about most other motors? The same thing :-)

No one here who has followed this MEC odyssey (*this is a very weird and continuing saga in the forum - km*) and read the messages is surprised by any of this I'm sure, because I'm not saying anything someone else hasn't said. The only thing here is that no motor, by any manufacturer, can expect to live up to the advertising hype Tom Miles has given it. That's not the motor's fault, it's the adman's error. I'm sold on brushless motors, but even they don't expect to

be the one cure all solution to power needs, if they did, there wouldn't be so many variations of them either.

I can't speak about ongoing maintenance because I've only put a couple flights on it so far. I know the Astro 15G has two years and tons of flights on it so that will be the standard by which I'll judge, time will tell the rest. If there is overwhelming desire for me to leave the WEP motor in it for KRC I'd be willing to do it and you can judge.

Hopefully I've been clear enough that no mistakes can be made of what I've said. Feel free to ask what you will and I'll try to answer it. Also, so there is no mistake, I wrote up my impressions a few days ago and sent them to Tom so nothing will be considered to be blindsiding. I also had another electric flyer with me to observe who has seen the



The Connecticut Meet

from Ron Torrito
1625 Main Street
East Hanford, CT 06198
July 4, 1996

The Ninth Annual Northern Connecticut Radio Control Club's Electric FunFly was a wonderful event this year. It was held on the 29th of June and the weather was in the 70's with nothing but light zephyrs blowing across the runway. Events such as 610, 612, and 618 were abandoned this year for a fun-fly format of open flying and we were awarded with some really unique planes that we could not have been seen had we kept to the usual contest regimen. The fliers and the Chuck Wagon trickled in from the start of the event at 8 AM with most pilots arriving before 10:30 or so, including Larry Sribnick, who flew into the airport at Hartford despite a busy family schedule.

The hourly raffle called the flier who held a numbered ticket obtained at registration to the club pavilion for the prize drawing when our three or four very young attendees drew the ticket from the entry box. In all, \$600-\$700 worth of promotional prizes etc. were generously donated by 22 of the country's leading R/C manufacturers to promote their products to the people who won the drawings. Cox, Astro



Another shot of the pit area/flight line at the Connecticut meet, mostly Bob Aberle and Tom Hunt's planes in the foreground.

Flight, Futaba, Hobby Lobby, Omni, Midwest, Sig, Master Airscrew, Carl Goldberg, U.S. R&D, Du-Bro, Sullivan, SR Batteries (technical Merit Award.), Great Planes, Airtronics, Coverite, Easy Built, Sermos R/C, and New Creations R/C were most generous. A local hobby shop, Davis Hobbies of Glastonbury, CT donated \$200.00 of electric kits and related items--a most considerate supporter of our event at the NCRCC!

One of the NCRCC club members flew two passes with smoke trailers over the field and did a "victory roll" for us in his flill scale aircraft!

The theme of the flun-fly was the pioneering flight of the Wright brothers. To underscore this, name badges featuring a cartoon of the Wright airplane, by Don Bousquet, were printed, also a scale model of the Wright flier built by my wife, Renee, was to be awarded to the most innovative pilot/plane in the event. The Astro Flight 90 powered Spitfire and Taylor Craft planes by Mike Stewart won this award. Mike's flight of the Spitfire was especially impressive--fast and very maneuverable. The Technical Merit award by SR Batteries was won by Bob Aberle and Tom Hunt for their wondertul display and flight of the many planes from ModelAir-Tech. Dave Baron and Russ Pribanic flew their twin Islander, Blue Flame Blaster, and Diamond Dust planes (as well as several others) in demonstrations. Dave also flew his heli in aerobatic display while Russ flew the Mini Micro with CETO transmitter. Everett Rubendunst had a simply beautifully modified "Goldberg Sailplane" covered in red Monocote. Clyde Geist brought the Apache and the Recruit planes to fly. The Recruit was powered with his AMP-AIR dual motor drive and had two "Green Monster" motors in the drive unit. Howard Ogushwitz and George Myers were there, I could go on and on--The SEFLI folks were wondertul to watch and really there were so many great planes from the New York club and local areas piloted



by talented fliers. I wish all of you could have been there. We had a great time. Best of Regards, Ron & Renee



Upper: Pat watches Mike fly with his great Spitfire in the background. Mike brought this one to the Nats in Muncie - really impressive!

Lower: Mike Stewart holds his "special" trophy, mentioned in the article.

I had a chance to meet Mike, Pat and family at the E-Nats. What a small world e-flight is. Really great folks. I still haven't lost the few extra pounds I put on eating some of Mike's birthday cake! Wow, the E-nats and a birthday, all at the same time!

Ashlar DrawingBoard - a Mini-Review Ken Myers - August 1996

For many scratch builders, drawing model plans is an unnecessary waste of time. Yes, I said unnecessary! All a scratch builder really needs is the wing airfoil to cut the ribs from and a sketch with rough dimensions on it. The rest of the plane can just go together on the building board. This is the way most of my designs have evolved, as well as my good friend Keith Shaw. The problem arises when someone asks, "Do you have the plans for that?" and my answer, "Well, not exactly."

The last plane I designed, I decided to "draw" the plans using ModelCad. I'd played with it a bit, and did come up with a decent set of plans that could be used by others.

DIRECTOR! - dward79207@aol.com

ModelCad was not the easiest program to use though, so I was looking for something better.

In the July and September issues of *Model Aviation*, in the "RADIO CONTROL SLOPE SOARING" column by Wil Byers, Ashlar's DrawingBoard was touted as being the best 2-D CAD (computer aided design) for the modeller. I went to the MCE WEBSITE (MCE distributes the program) and downloaded the demo.

(<http://www.mceng.com/software>)

Immediately after viewing the demo, I called MCE and told them I had seen the ad in Model Aviation. The nice lady on the other end then said, "Oh, then you want the program for \$135." I said yes.

They advertise it as \$110 off the retail price, well sort of. Tiger Direct sells it for \$179.95, so \$135 is a deal - ACTUALLY A GREAT DEAL.

The following day I received my MAN, and Bill Griggs (yes the same one that designed my Rocket) had a review of the DrawingBoard program. Now I was really anxious! The next day it arrived!

It loaded easily onto my Windows '95 machine. It comes in Windows 3.1/95 or Mac. After working through the tutorial, I immediately started drawing some airplane parts, servos, motors, accessories, and the plan for my "latest and greatest. EASY. This is the one folks. It is just about intuitive, with a very shallow learning curve. If you want to try CAD - get this one!

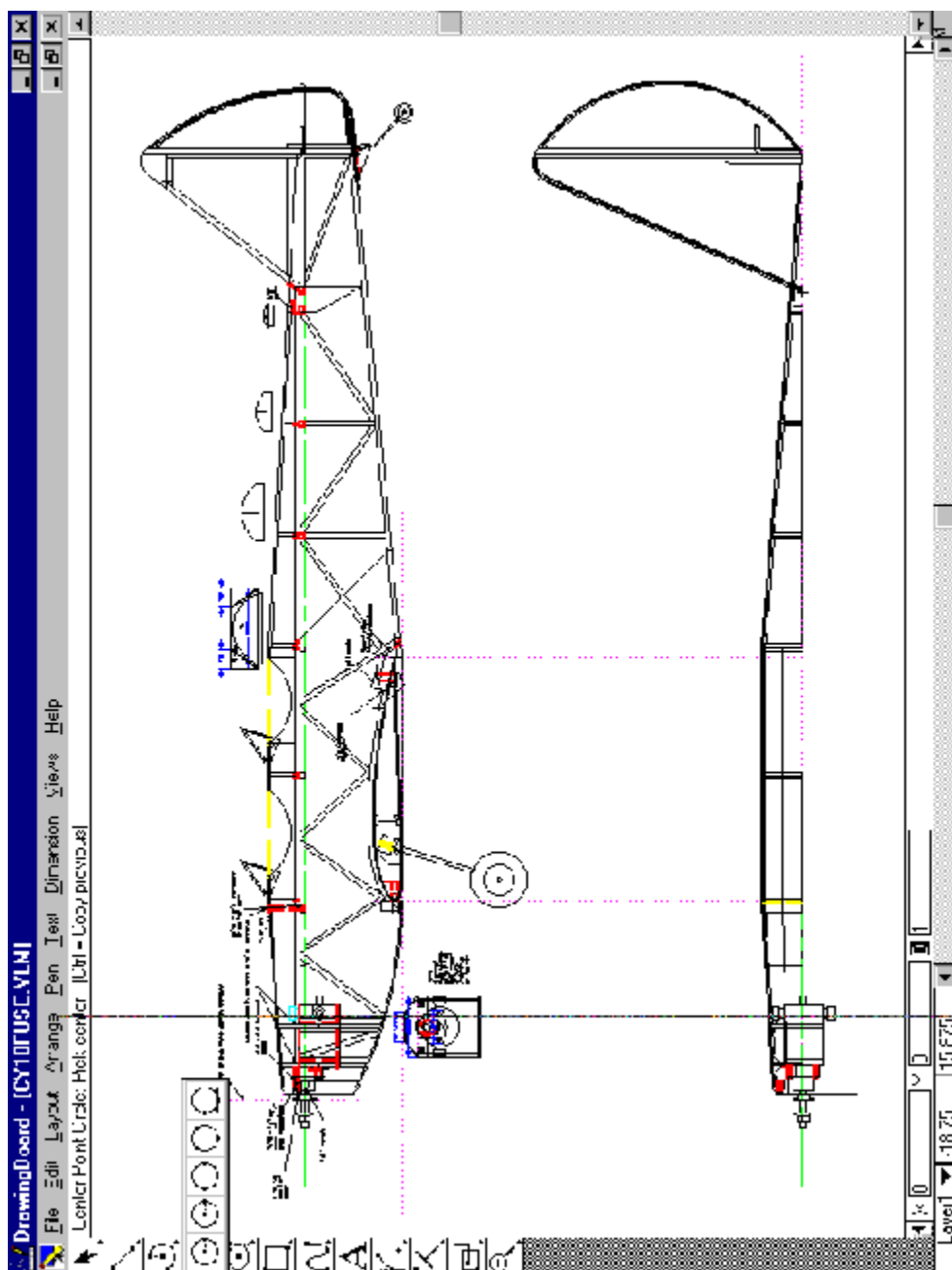
For features check out the articles mentioned above. If you have a computer and desire to "draw" plans, this program is highly recommended. I especially liked the splining feature to import airfoils. I downloaded the airfoil I'm using as a text file from the Selig WEBSITE and Drawing Board to turn the text file into a drawing. It did, neat as pin! I've now worked with this program well over a month and still enjoy every session. I've even had to "redraw" some parts of my plan, but it is not a painful process at all. Did I mention that this is a good one?!?

More on Covering with Micafilm
from Doug Ward - New NEAC

I promised to write a few words on the subject of Micafilm, probably my favorite covering other than silk and dope. What I am about to comment on relates to an article by Vladimir Buble and Fred H. Dippel which was originally published in Silents Please of June, 1996.

The two authors admittedly found out early the virtue of applying Balsarite to all parts of the framework which the covering will contact. I agree, since it adds rigidity to the framework, and, in the case of flying surfaces, aids in controlling flutter. If you don't want the covering to stick in a particular place, however, just don't use adhesive.

Judging from their procedure in doing the initial fastening of the covering, I suggest using a fairly cool iron. This is in the "tack down" stage before any sealing around the edge actually



takes place. When it comes to shrinking, Micafilm will accept a rather high temperature so long as the iron is used with a light pressure as it moves over the surface. Excessive pressure from the heavy-handed ironer will cause a creased appearance in the finished product created by the edges of the sole plate. Should this happen, the reuse of the iron--very lightly this time--will generally remove these unwanted contours.

I have found edge trimming to be easy with the round blade cutters that are sold in fabric shops. I have used only one blade in the last two years. They seem to hold up almost forever. These are much quicker and easier than scissors, and with the help of a good straightedge, the covering can be trimmed to allow just the right amount to fold around a trailing edge without looking sloppy.

As for solvents, Ironex works superbly well, but at a steep price. Buy a gallon of Toluol at a paint store and you will have an adequate brush cleaner and thinner at many bucks less. It will clean off any excess Balsarite from the finished covering without discoloration or damage to the covering.

Instead of applying Balsarite to the top surface of the covering where there is to be an overlap, apply it to the bottom of the overlapping piece and let it dry. Then lay the piece with the dry adhesive on top of the existing covering and iron away. No adhesive gets on the iron that way. Don't worry if the adhesive you applied to the underside shows. It will disappear in time.

This same technique is used for patching--put Balsarite on the underside of the patch and let it dry before applying. I usually coat a moderate size piece of the covering I am using just for later patching. All you need is a pair of scissors and an iron to apply the pre-coated patch..

One final item: "transparent" Micafilm. This product is translucent at best, sort of a cloudy white. It is very light and strong and accepts virtually any kind of paint. There is no excuse for not getting the color you want, a light spraying over the transparent white will do the job.

Doug Ward - NEAC Director

Upcoming Events:

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

Oct. 5/6 DEAF Fly-In, LMR events & All Up/Last Down, highest RC, weight lifting, Dallas RC Club field, Seagoville, TX, Greg Judy (817) 468-0962

October 26/27 8th Annual Gulf States Electric Fly-In, Stan John (504) 386-1478, P.O.Box 0990, Madisonville, LA

To Reach Ken Myers, you can land mail to the address on the front page. My E-mail address is:

102575.3410@compuserve.com

WEBSITE: <http://members.gnn.com/KenMyers/homepage.htm>



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

**Next Meeting: Thursday, Sept. 5
7:30 - at Ken Myers's House
for info: 810 - 669 - 8124 or e-mail me**