

the

# Ampeer

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<b>Ampeer subscriptions are \$10 a year US &amp; Canada and \$17 a year world wide.</b>	<b>The Next Meeting:</b> <b>Date:</b> Thursday, Nov. 7 <b>Time:</b> 7:30 p.m. <b>Place:</b> Ken's house: 1911 Bradshaw Ct., Walled Lake	

### What's In The November 2002 Issue:

Questions About E-Flight – More Planes from Walt Thyng – On the Four Star 40 – That Club Plane – Gee Bee – Electric Bipe – New Version of Profili – Ciao Ken – Great Advice – Tom Hunt's New T3D – Cutting Tools – Upcoming 36th Annual SOAR for FUN – UNI-DOME FLYING SCHEDULE – Robbe Starnax 40 Question – Oakland Yard Winter Flying – Charger Question

### Questions About E-Flight

From: David Byrd s.byrd@insightbb.com

Hi,

I am new to electric flight, and I have a problem. I have a VQ Macchi mc.205 ARF that I am in the process of converting to e-power. My problem is that my airframe, plane and retracts, weighs 63 ounces. My AF 625G and 16 Sanyo 2400 cells weigh 45.5 ounces. My radio gear including servos, retract servo, receiver, receiver battery and ESC weigh 14 ounces. That all comes to 122.5 ounces or 7.66 lbs. There is no info with the kit on wing area. I am guessing about 530 square inches. The plane is basically an Italian p-40. It has a 62 inch wing span. Is this too heavy?

*The short answer is yes. For many fliers, this wing loading will be uncomfortable to fly. You say that you figured approximately 530 sq.in. I went on the Internet and figured, based on the real plane and the wing span dimension, about 580 sq.in., if it is anywhere near to scale. At 530 sq.in. the wing loading would be, for me for this size plane, an uncomfortable 33.28 oz./sq.ft. If it is closer to 580 sq.in., then the wing loading would be 30.4 oz./sq.ft.*

How are you to get your airframe lighter than the motor and battery?

*In this instance, you're not going to be able to get it lighter. You are working with a pretty much "fixed" entity when you are working with an ARF.*

I have an AF40g as well, but that means more cells.

*Going to the AF40G is not the answer in this case. While it will add more potential power, it will add more weight. This plane doesn't need any more weight!*

I have figured that at this weight it will need about 75-80 watts per pound, if my info is right.

*Nothing wrong with trying for that range for a fighter type aircraft.*

Please give me more info and some insight. I am really excited about having an electric Warbird.

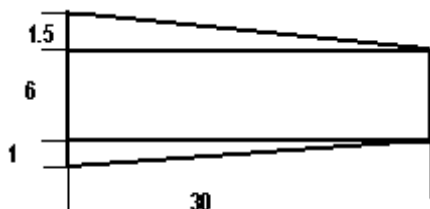
*While I personally would not try to convert this airframe to electric power, I would recommend that if you really, really want to do it, you should go brushless. You will need a motor, that on 16 cells, pulls about 35 amps static turning a prop no smaller than 13x9. I recommend that you give Tom Cimato a call at MaxCim (1-716-662-5651) or email him at maxcim\_motors@localnet.com and give him*

this information. You could also call Aveox (818.597.8915) or drop them an email to [neworders@aveox.com](mailto:neworders@aveox.com) with the information.

I am not real familiar on how to figure wing loading and how to figure wing area with only the dimensions I can get with a measuring tape.

Wing loading equals the total weight divided by the sq.ft. of the wing area. Square feet of the wing area equals square inches divided by 144. For your example of 122.5 oz. and 530 sq.in. of wing area:  $530 / 144 = 3.68$  sq.ft.  $122.5 / 3.68 = 33.29$  oz./sq.ft.

One fast and "dirty" method to get wing area on a tapered wing is to think of the area as two right triangles and a rectangle, sometimes the center section is another rectangle. Here is a diagram. The area of a rectangle is the length times the height. The area of a right triangle is the  $\frac{1}{2}$  the base times the height.



Half the wing is shown in the diagram.

The top triangle is  $1.5 * 30$ , the rectangle is  $6 * 30$  and the bottom triangle is  $1 * 30$ . Half the wing area is 255 sq.in.  $255 * 2 = 510$  sq.in. of wing area.

How is it that everyone says the airframe has to weigh less than the motor and battery, yet, about every plane that is a .40 size or larger model, the airframe is heavier? On the electric website where I found your address, Keith Shaw's 81" span Bearcat is said to weigh 15 lbs. From the motor he is using and battery pack, together they can only weigh about 4 1/2 pounds? So what gives? How does this formula work?

I'm not sure that everyone says that, but for really good flying electric planes, that is usually the case. To fly a heavier airframe requires more power. If you look at the data for Keith's Bearcat (<http://members.aol.com/kmyersefo/page37.htm>), you'll notice that he is using a FAI 60. This allows more power for take off and vertical. More power means a higher amp draw. The FAI 60 can handle quite large amp draws. It is a trade off of flight time verses performance. Since Keith uses the throttle very well, his flight times are acceptable for this big model.

To see how to build airframes that are strong and light, be sure to read Keith's talk to the EMFSO, links can be found at: <http://members.aol.com/kmyersefo/page3.htm> While you are there, also download and

read "Electric Sport Scale" and "Charging into Electric Flight; a primer from the master". These articles will help you to understand the basics of electric flight.



### More Planes from Walt Thyng

From: Walter Thyng [docwt@lightfirst.com](mailto:docwt@lightfirst.com)

The Commodore a 1938 Ben Shereshaw design redone in 1978 for R/C. Wing span is approximately 80", weight 6 lbs. with 16 2000 NiCads, Astro 25G, FX 35D ESC (still working great!), SonicTronics 13x7 folder (the yellow prop goes great with the green fuse). covering some ancient Solarfilm from a shop I bought out. Transparent orange and semi-transparent Metallic green. Absolutely gorgeous on a sunny day! Very rapid climb on this power system. Will loop, and stall turn, rolls require a stout constitution and a LOT of altitude. This bird's forte is leisurely gliding flight, touch and goes, chandelles and low slow fly-bys. Pull-pull control system.

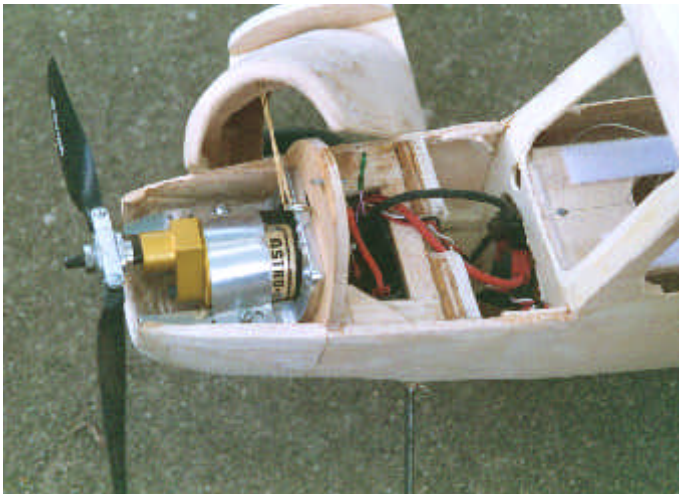


It uses a simple hatch system, note pin in firewall. motor mounting and battery access. (photo top of next page)

I think you showed my 1/4 scale Nosen Citabria in a Decathlon color scheme once before. Here's proof it flies. Astro 60G, 32 cells

The Hot Canary is a Top flight model that I planned to build just before I left the hobby in the 80's. I built it





down elevator. So far I haven't got it to spin. A fun plane! It is a BITSA built entirely from my parts and scrap bins. Monocote covering.

It has a high visibility top and bottom. Note the air intake and exhaust. The battery access is through hatc h which extends from spinner to top wing leading edge, including 1/2 of the canopy.



#### On the Four Star 40

From: Dereck Woodward [dwoodward@starpower.net](mailto:dwoodward@starpower.net)

Hi Ken,

Here are a couple of photos of my Four Star 40 - though clubmates occasionally refer to it as the "5\*16", after its latest round of alterations. She's on her fourth motor - MaxCim 13Y & 13D, Astro 25G and Hacker B50 13S / 5.2:1 gearbox, and is slated to test fly the same Hacker on 6.7:1 sometime later t his year. Cell counts flown are 14, 16 & 20.

The photo of the covered model shows her with the cowled in MaxCim - very easy to do, as the MaxCim mounts to the original glow firewall position. Right now, she's not as pretty as I am awaiting a better Hacke r mount that will allow me to build a decent cowling around that motor.

Though I mentioned some of the modifications

from original plans. The weight 4.5 lbs. with 12 CP - 1700s, Aveox 1010/2Y with Planeta 4.4:1 gearbox, L160 ESC, APCe 12x8 prop, wing span 40" and approximately 650 sq.in. Modifications include adding lower wing ailerons and increasing all surfaces by 25%. Takeoffs are a little squirrely and require a surprising distance (well over 100 ft. on grass). Landings are easy, but require planning as the glide ratio is somewhat rock - like. Flying is a joy. Loops of whatever size you want inside or outside, crisp rolls in both directions, knife-edge and four pointers solid, inverted flight requires almost no

recently, here's the full list for anyone who likes this excellent design but also fancies "tinkering" some.

#### **From the sharp end:**

Full motor cowling.

Motor mounted on 1/8" firewall, vice 1/4" kit unit.

Second former back (F2) and fuselage doublers cut down to just over wing aperture, to allow 1/16" birch ply battery tray to sit just above wing.

Hatch from 1.5" aft of firewall to just ahead of canopy.

You can see it on the 'uncovered' photo (on next page) – it's that "scruffy balsa" finished piece of the front, top decking.

Canopy moved back 2".

1/16" ply fuselage bottom from firewall to F2, slotted to cool floor mounted ESC.

2" taller UC (British made composite moulded unit) bolted to short lengths of 1/2" alloy "L" angle stock, from hardware store. Alloy L pieces epoxied to ply doublers.

Wing mounted aileron servos - the standard central servo/ torque rods are right where the battery needs to go! You can just see one of them in the 'uncovered' shot, mounted in the rib at the end of the centre sheeting.

Wing span reduced by one bay (each side!) to approx. 53". This increased the wing loading to all of 26 oz./sq. ft., with no noticeable deterioration in her excellent low speed handling, and a much faster roll rate. Ailerons 1/4" wider chord, same taper.

Rudder/ele servos and receiver are immediately behind the wing aperture, accessed through an uncovered bay in the bottom of the fuselage.

Tailplane - 1" wider chord on tailplane, 1/2" wider chord on elevators. TP now mounted as low on fuse as possible, parallel to original angle - set by top edge of fuselage. Elevator horn is now on topside of surface.

This is the 'vital' mod to allow a slightly more aft CG, better 'locking' into straight and level flight, and reduce pulling to the canopy in knife edge. It also makes spins and snap rolls easier to enter, and more precise on exits. Fin - unchanged!

Rudder - approx. 50% larger area, eyeballed to look something like a CAP 232 rudder! Helps in spin, snap roll and knife edge components.

Commercial steerable tailwheel screwed to ply plate under tailplane.

When first built, equipped with 20 cells and covered in Micafilm, she weighed just over 6 lb. RTF. She is now at 5.75 lb. on 16 cells, due to repairs, alterations, and recovering in Monokote. Whereas most Four Star 40s are built with considerable wood

replacement, this one came pretty much out of the kit box. I replaced the Liteply aft fuselage bottom sheet with balsa stick cross members though, and cut down the fuselage doublers considerably though. The wing is pretty much 'stock' framework, bar the wing mounted servos. These are mounted inside the wing - I have this "thing" about controls being inside. Go to a modern airfield and see how many aircraft have control elements on the outside!

The latest addition to the electronics is an "Ultimate BEC", or "UBEC", from <http://www.koolflightsystems.com/index.htm>. This does a great job of replacing the receiver battery and offers BEC on up to 29 cells, or they also sell a 45V 'special' version. The UBEC takes its power directly from the flight pack - mine is soldered to the ESC's input wiring, and is designed so that if you're still flying when your flight pack hits 5.5V, the UBEC goes into a 'bypass' mode allowing what's left in the flight pack to be fed straight to the receiver.

This model is now four years old! She's been fairly badly 'bent' twice and I'm starting to think of a replacement. However, a Four Star 40 is one of those aircraft like a Cub or C47 - their only replacement is another one! So, perhaps this winter, I'll take all the mods above, doodle them on my old kit plan and start cutting lighter wood. I want to try one of those 'fat' symmetrical sectioned stabs that have always been popular in the pattern community, for one thing.

But I've figured out a wing section that will squeeze some more performance out of the model, and I really prefer a D box wing frame with ailerons that are part of, and match the wing section, rather than just having 1/4" un-tapered sheet tagging along behind the TE.

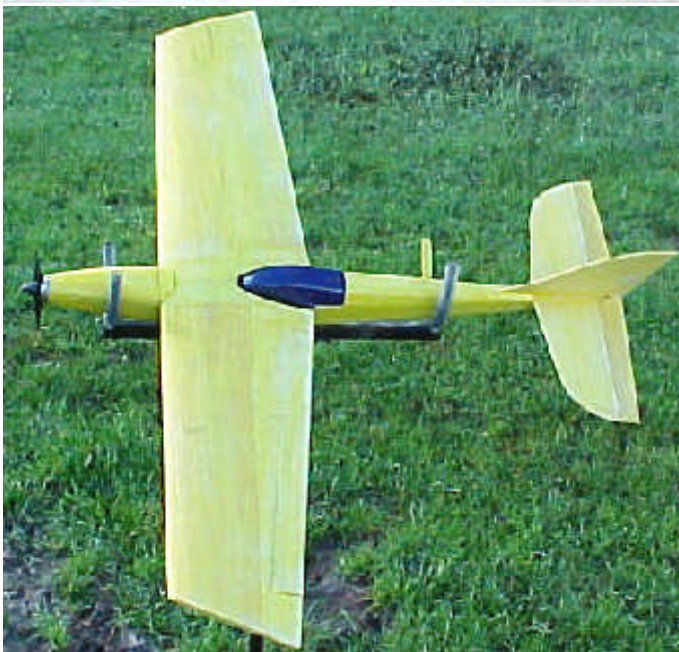
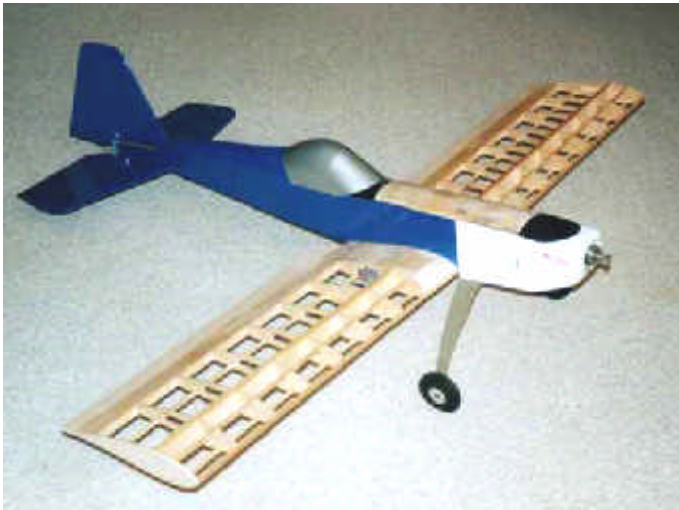
Usual long list of disclaimers - closed driver on a professional course, too many burgers makes you fat. Take this ride at your own risk. Did he make it better, or is it such a good design, even he can't mess it up? At what point will it stop being a Four Star 40?

Yours in modelling

Dereck

**Please Send Ampeer Subscriptions or Renewals to:**  
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Walled Lake, MI 48390





**That Club Plane**

From: Lex Davidson [lex.davidson@paradise.net.nz](mailto:lex.davidson@paradise.net.nz)

Hi Ken,

It has been a while since I have written to you. But have been reading your stuff every month.

I thought you might be interested in our clubs wee project.

TCP—"That Club Plane"

A group got together with the idea of specifying then building a "Club Model". We started off with wanting an easy to build S400 model--like the Sport 400 that is available off Ezone. The idea was everyone would build the same thing, same power system (6v S 400) and fly fun pylon and club pattern. Along the way those doing would learn about foam cutting, balsa hacking, etc.

Well it all worked. The model is no trainer -but it wasn't meant to be. The training was in the building. All

those involved were reasonable pilots —BUT some had never built from scratch.

Lots of photos on our club web site and some descriptive stuff there too.

[www.acehobby.co.nz/ossb2/club/nsmac/club/index.html](http://www.acehobby.co.nz/ossb2/club/nsmac/club/index.html)

All the best,  
Lex D



**Gee Bee**

From: Tim Knowles [DTKNOWLES@aol.com](mailto:DTKNOWLES@aol.com)

Ken,

A couple years ago I started a Gee Bee from Cris C.'s plans on your website. I think I sent you a link at the time with pictures of the almost completed, test flown model. The model is now completed with new scale covering and trim and wheel pants. It flies great on a geared Astro 020 brushless with 8 ea. 600 AE cells and a 10x6 APC electric prop. I said it flies great, but I do have a problem landing as it always noses over. A few static and in flight pictures are in my Ezone gallery and I have more.

Thanks again,  
Tim Knowles



Learn about this plane on Page 6!

**Electric Bipe**

From: Bud Carlson flicka5@madbbs.com

Ken:

Thanks for your prompt responses for my requests for Ampeer back editions. I have attached some pictures of my 13 oz. electric bipe, which I have recently started to fly. It was originally a gas job designed and built back in the 1970's by one of our deceased club members. He specialized in 1/2 A gas designs or smaller. This design was originally flown with a Cox .02 but not much, as it still like new.

I installed a GWS D motor and gear drive, same as powers their Tiger Moth. I am using 8 AAA Nickel hydride cells bought in camera department at Wal-Mart. I have split the cells into two packs wired together which enables me to shove three cells all the way forward toward the fire wall with the speed control and Rx. Five cells are positioned on top of the lower wing in the fuse toward the front. In this way, I have been able to achieve proper balance without adding any lead. I had four successful flights at our club field yesterday AM (dead calm). I really need all the power available to sustain flight and climb. But, I have flown 7 to 8 min. at full power and land early to prevent trouble like lacking power for a go-around or having to land dead stick. Still experimenting with this design. Not an electric guru or have much electric experience, but interested. Plan to build the DARE Wright flyer this winter. Also, just acquired a DeWalt 18 volt and looking for a larger electric project this building season (winter).

Thanks again for your transmission of those many Ampeer editions.

Bud Carlson, Jamestown, NY

**New Version of Profili**

From: Stefano Duranti durone@libero.it

I send you this message to inform you that a new major version of Profili, 2.0, has been released.

Here are some of the new features:

- Drawing of leading edge, trailing edge, spars etc.
- Drawing of the foam cutting template
- One shot drawing of all the ribs of a trapezoidal or elliptical wing
- advanced filtering of the airfoils by thickness, camber etc.
- 500 more airfoils added to the database (more than 2,200 now)

- 20 preprocessed polars for every airfoil in the database (20 different Re from 30,000 to 500,000), more than 500 hours of processing for my PC
- automatic process of the polars for new airfoils or Re
- New function to generate a new airfoil as a mix of two, you can also specify the mixing ratio. So you can generate all the airfoil you will find in a wing with different root and tips ones. Then you can verify the aerodynamics of your wing by generating the polars for the new airfoils...
- Airfoil libraries managing
- import export from-to .DAT file
- and more....

Visit the new web site of Profili

<http://utenti.lycos.it/profili2/>

where you can obtain more info and download your version or order a CD-ROM.

Best regards,  
Stefano

Stefano Duranti  
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32032 - Foen di Feltre  
(BL)  
E-mail durone@libero.it  
Tel. 043931032

**Ciao Ken**

From: Bisi Gian Paolo cig1961@iperbole.bologna.it

Hi Ken.

If you remember, I'm from Bologna, Italy.  
Congratulation for your review.

In Bologna a lot of R/C modelers are switching to electrics like the Multiplex Twinjet multiplex or Scorpio Focke Wulf 190 in depron. Depron is a new material for this, but it is good for light weight and look very good.

Now I build only electric planes because is clean, quiet and easy.

The picture is about a competition held on May 12. My group had reach the second place on soaring. I'm under my model like Alpina white yellow and red in the middle of the picture.

*(Unfortunately, we couldn't get the picture to come through with several tries. Sorry. KM)*

**Great Advice**

From: Ray Williams rwilliams@campac.net.au

Hi Ken,

I took your advice in regard to the 480 size motor. For the last 4 years I have been flying a v-tailed aircraft called a "Yorkee" it came as a free plan in Silent Flight October 1996.

The motor had approximately 200 flights and was a little tired so, I replaced it with a 480 complete with gauss ring. This necessitated removal of the engine mount on the nose and enlarging the motor hole to enable the gauss ring to fit. I shortened the nose block by 5/16" to help with the balance. This proved to be a good move as the batteries only needed moving rearward by 1/2" [12 mm]

The aircraft has used 8 x 600AEs cell pack for some time and a check of the weight revealed that the extra ounce of the motor bought the aircraft up its recommended flying weight of 19 oz.

The amps with the mandatory Gunther push on prop were 10 as opposed to 7 with the standard 400. The gain in revs was 1400 [13,300 to 14,700].

When the amperage was lowered to 7 amps the revs were 13,500 so a slight gain for no extra amps.

The first flight was very enlightening as I was flying about 3 feet behind the entire flight. The extra 1400 revs made an amazing difference. It has now had 10 flights and it has been re-christened "Ray's Rocket ship", I now have a new toy to play to take out to play.

Even with the throttle set to draw approximately 7 amps, the aircraft flies better and seems to have more grunt, the flight time has not been appreciably shortened.

Thank you once again for the sound advise

Happy Landings  
Ray Williams

**Tom Hunt's New T3D**

From: Tom Reilly tomr@formats-unlimited.com

Hi Ken,

I have e-mailed you before. I am a member of SEFLI, and worked the NEAT fair the last couple of years. I wanted you to know that Tom Hunt recently designed an E3D plane (called the T3D). He produced a small number of "short" kits. This plane is beautiful! It goes together quickly and produces an excellent plane. (Small geared servo on 10, 1300's) makes it affordable, easy to transport and an above average flyer! I am at work and forget the exact dimensions. ANYway if you

like Larry's planes, you'll flip when you see this one!

**Cutting Tools**

From: Ed Moore emoore@worldnet.att.net

Hi Ken,

I have been reading the Ampeer for many years now. It's great, keep up the good work, and I'm sure it is work.

In October's issue there was an article about making wing dowel holes using brass tubing.

I have found that if you take an old steel "stepped" golf club shaft and cut each section at the step, you will have many sizes of steel tubing. Now all you have to do is cut the teeth.

I use the ones I made a lot.

"Do something nice for someone every day"

Regards,

Ed Moore

Port St. Lucie, FL

[Http://www.geocities.com/emoore62135/index.html](http://www.geocities.com/emoore62135/index.html)

**Upcoming 36th Annual SOAR for FUN**

The 36th Annual SOAR for FUN will be held on scenic Mount Knobbly in West Virginia near Cumberland, MD on 2-3 Nov 2002. It will be two fun-filled days of camaraderie and scenery that only mountain-top soaring in the Autumn can bring you! (weather permitting!) All are welcome, AMA required for pilots.

Usually, both slope and thermal conditions are experienced. **Electric self-launching/flying OK**, wet power aircraft for piggy-back or aerotow launching permitted. DUE TO LOCAL PAGER ACTIVITY, USE OF CH 23, 24, 31 & 32 NOT RECOMMENDED!!

HQ Motel is the Braddock Best Western Motor Inn, La Vale, MD. Ph 1-800-296-6006, ask for Group reservations, identify yourself as attending the Soar for Fun for discount. Other motels: Super 8 1-800-8000 local (301) 729-6265 Scottish Inn (301) 729-2880 Diplomat Motel (301) 729-2311 Continental Motor Inn (301) 729-2201 Oak Tree Inn (301) 729-6700

No food concession at the field. As in the past, edible and potable contributions to the "free lunch" table are welcome! (usually plenty to eat!) Flyer/map available on request. in pdf (adobe acrobat reader) format as e-mail attachment, or send postal address for hard copy. GOOD LIFT! Skip Schow AMA 143, LSF 166(V #46) Vienna, VA - Raschow@aol.com

**UNI-DOME FLYING SCHEDULE**

From: Bob Nelson bobsrc@forbin.net

Hello indoor flyers of all sorts,

The University of Northern Iowa in Cedar Falls and Bob's R/C Hobby Store have reached an agreement to use the Uni-Dome covered football stadium for indoor flying this season. We will have an open fly-in on Sunday, Dec.1, 2002, from 11a m to 5 pm. Then on the weekend of March 1 & 2, 2003 we will have a 2 day event starting at 6 pm Saturday evening until 11 pm, and Sunday from 7am to 4pm.

We are in the process of scheduling events for the March date and plan to have R/C scale, some ff scale, and other events to be announced. If you have any suggestions or are willing to run an event, please get back to me ASAP as we need to get an agenda drawn up and submitted to AMA for sanction.

Pass the word around and get back to me at bobsrc@forbin.net, Mike Gretz at Sig Mfg. Co., or Bob Wilder at rjwmaw5@attbi.com.

Bob Nelson  
Bob's R/C Hobby Store  
Cedar Falls, Ia.  
319-277-0211  
bobsrc@forbin.net

**RX Problem Solved**

From: Bob Larson Larson7067@aol.com

*(A while back Bob was having trouble with this receiver and posted a question about it in the Ampeer. This is a follow-up. In the October issue, Bob noted replacing the receiver helped, but he then followed up with this. KM)*

Hi Ken,

Thought I would let you know I finally solved the interference problem I was having with the FMA Quantum RX. I recently read an article, I think the author was Bob Boucher (*probably Bob Kopski KM*), he suggested cutting an aileron extension cable and placing a 10 Micro Henry choke in each lead between the receiver and ESC. I gave it a try and it solved my problem. I have since flown the Rx with both a Kraft and JR transmitter.

*(Chokes are very useful with long extensions. Check out some of Bob Kopski's columns on them in past issues of Model Aviation. KM)*

**Robbe Starmax 40 Question**

From: Tony Ives tony\_ives@yahoo.com

Hi Ken,

I received the attached e-mail from Stephano Duranti in Italy informing me of his updated Profili program. (*Same email I received. KM*) You may not have this info already so I thought you might like to check it out. I reckon it will be a real competitor to Compufoil and it's still free. (*With a pay more features available in the pay for version. KM*)

Whilst I'm online I don't suppose you know of a direct or close replacement for a Robbe Starmax 40, as Robbe no longer stock them. I've tried to do some comparisons from the published data that I've found but with no success. I used the one that I had for years in a sailplane that I designed and it is a super motor swinging a 15" x 12" folder on a 3:1 gear box and hardly gets warm at 11 amps from an 8 cell pack. Just bought a 10 cell pack of CP 1300's to try out. Will send some photos sometime. Keep up the good work.

Regards from deep dark Dorset, just up the road from Barry Wilson who I see sent some photos in the October Ampeer.

*(Obviously, you should look for a motor with the same specs and weight as the Robbe. Maybe some of our readers can help you with this one. KM)*

**Oakland Yard Winter Flying**

Information from their Web site:

[http://www.oaklandyard.com/model\\_aviation.htm](http://www.oaklandyard.com/model_aviation.htm)

It may be cold outside, but in the dome the weather is always perfect for flying. For our fourth season, Oakland Yard Athletics director David Dobrin will be running our Model Aviation Club on Saturday nights. All participants will use our 72,000 square foot dome. Both radio control and free flight models are permitted as long as the model is not powered by anything combustible. Our members fly a wide variety of planes ranging from delicate rubber powered free flight airplanes that weigh less than a penny to radio controlled full combat airplanes.

Pilots interested in becoming a member will save money and will receive an "Oakland Yard Aviation Member" shirt. Pilots don't need to be members to fly. Spectators are always welcome.

**\$1 per visit.**



2002/2003 Oakland Yard Aviation Memberships

Returning Membership: \$130 Includes all 11

Saturday nights, 3rd annual 'Reindeer Fun Fly' and a member sweat shirt. New Members: \$150 Includes all 11 Saturday nights, 3rd annual 'Reindeer Fun Fly' and a member sweat shirt. Individual Nights: \$15

Winter Schedule 2002/2003

Saturday, November 2nd - 9:00 pm to 1:00 am

Saturday, November 16th - 9:00 pm to 1:00 am

Saturday, December 7th - 9:00 pm to 1:00 am

**Thursday, December 27th - 6:00 pm to 11:00 pm - 'Reindeer Fun Fly III'**

Saturday, January 11th - 9:00 pm to 1:00 am

Saturday, January 25th - 9:00 pm to 1:00 am

Saturday, February 8th - 9:00 pm to 1:00 am

Saturday, February 22nd - 9:00 pm to 1:00 am

Saturday, March 8th - 9:00 pm to 1:00 am

Saturday, March 22nd - 9:00 pm to 1:00 am

Saturday, April 5th - 9:00 pm to 1:00 am

Saturday, April 19th - 9:00 pm to 1:00 am

**3rd Annual 'Reindeer Fun Fly'**

**Thursday, December 27**

Bring out your new holiday toys for their first flight! Aviation Director, David Dobrin, will organize the festivities with the 'free flight' models from 6:00 to 8:00 pm. From 8:00 to 11:00 pm, the electric R/C planes will take to the sky. The first 40 children will receive their own hand-launched glider to build, fly and keep. The kids' flying time will run from 7:00 to 8:00 p.m. After the 'free flight' portion of the evening, children are welcome to stay to watch the radio control planes. As featured last year, the R/C Zagi's will be dog fighting around 9:00 p.m. Children 'free flight' (Limited to the 1st 40 kids) \$5 7:00-8:00 p.m. Adult 'free flight' \$10 6:00-8:00 p.m. Adult 'R/C' \$15 8:00-11:00 p.m.

You can contact Dave Dobrin at david@oaklandyard.com or

Oakland Yard.

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### Charger Question

From: Kent Williby kwilliby@yahoo.com

Ken,

I am somewhat new to Electric flight. I have flown glow planes for about two years and guys around here

were very biased to glow planes. EP was put down a lot and surely not promoted. I stumbled my way into EP planes while looking for something to train my 12 year old son on that could be flown in a park etc. Somehow I ended up buying a GP Spectra electric sailplane. My son is still more interested in computer games but I fell in love with the Spectra!!! I have sold all of my old glow planes and equipment so I can buy more EP planes! Quiet, clean and convenient makes it perfect for me.

I have a Multiplex TwinStar that is fun, but I like the sailplanes the best. I saw a reference to your website in a model magazine. Since you are very experienced with Electrics I was hoping for a little help.

I am looking for a good charger/cycler since my chargers for glow fuel weren't suited for the larger NiCads in my Spectra. I also don't want to buy something cheap and have to replace it 1 or 2 years down the road. (*Great Thinking! KM*) I have found that paying for a good, quality charger is worth it in the long run. I have been searching the web and looked through what seems like hundreds of articles on Ezonemag and rcuniverse. I found out quickly many other's have had a hard time choosing the 'perfect' charger without spending mega \$\$\$\$.

I fly with seven cell NiCads of 1700-2400 mAh. I don't see myself getting into big 3D type of planes etc. I like the slower flying stuff like sailplanes etc. I would like to keep the price around \$175-\$225 if I can. I have found the following chargers to be very popular and they appear to be of high quality.

1. Graupner Ultra Duo 30 (somewhat new and I believe made by Schulze)
2. Ginzel
3. Schulze 6-330
4. Orbit v6.0

The Ginzel is not available because of parts shortage so I guess it's out. The new Graupner Duo 30 looks very nice. It has a 2nd port for up to 8 cells which would be great for xmtr packs. The Schulze 6-330 and Orbit v6.0 also look very good. These two have a PC interface and software that I don't think the new Graupner has.

Do you have any input that would favor one of these? Is the PC software on the Schulze and Orbit worth more than the 2nd port on the Graupner?

(*Really, only you can determine that. None of my chargers are "smart" enough to hook up to a computer. KM*)

I sure could use some help. I'm trying to learn all I can about EP and love it. I just don't all of the ins and

outs quite yet, but I'm learning! Any help would be GREATLY appreciated.

*I responded to Kent that all of the chargers that he mentioned are good ones. It is really up to him to determine which one has the features that he wants and would most likely use. I also told him that if I had a need to purchase a new charger right now, I'd get the **Astro Flight 110Deluxe**. I really love this charger because it is totally a KISS product. Doug had the prototype at the Mid-Am. Keith is now using one. It is simple and easy to use. For me, the most important thing is that it can now charge at up to 8 amps. Specs from the Astro Flight site are:*

Charges 1 cell to 24 cell Nicad or Nimh battery packs.  
Charges any cell capacity from 50 mahr to 10,000 mahr.  
Charge current adjusts from 50 milliamps to 8 amps.  
Charge Mode has Auto-Peak and 10 hour time limit.  
Discharges 1 to 24 cell Nicad or Nimh battery packs.  
Discharges at 1.25 amps and has Auto-Turn off.  
Digital Display of Charging Amps from 50ma to 8 amps.  
Digital Display of Nicad Voltage from 500 mv to 40 volts.  
Digital Display of charge/discharge time, hrs, min. and sec.  
Digital Display of total mahr of charge into or out of battery.  
Digital Display of maximum voltage reached (voltage peak).  
Charger works with any 12 Volt automobile or truck battery.

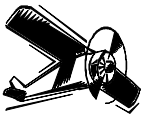
Charger works with Astro Model 120, 13.8V power supply.  
Protected from reverse polraity on both input and output

### Up Coming Events

**Nov. 2-3** 36th Annual SOAR for FUN  
Mount Knobbly in West Virginia near Cumberland, MD. All are welcome, AMA required for pilots.  
Usually, both slope and thermal conditions are experienced.  
**Electric self-launching/flying OK**  
DUE TO LOCAL PAGER ACTIVITY, USE OF CH 23, 24, 31 & 32 NOT RECOMMENDED!!  
Skip Schow AMA 143, LSF 166(V #46) Vienna, VA -  
Raschow@aol.com

**Nov. 7 - Thursday** EFO meeting at Ken Myers's house, 1911 Bradshaw Ct., Walled Lake, MI 7:30 p.m. Everyone who can make it is welcome, not just EFO members.

**Dec. 7 - Saturday** EFO meeting starting at Ken Myers's house for light refreshments, 1911 Bradshaw Ct., Walled Lake, MI 7:30 p.m. Everyone who can make it is welcome, not just EFO members. Moving to Oakland Yard for some indoor flying about 9:00.



The Ampeer/Ken Myers  
1911 Bradshaw Ct.  
Walled Lake, MI 48390  
<http://members.aol.com/KMyersEFO>

#### The Next Meeting:

**Date:** Thursday, Nov. 7 **Time:** 7:30 p.m.

**Place:** Ken Myers's house: 1911 Bradshaw Ct., Walled Lake, MI  
All interested folks are welcome to join us