Upcoming Skymasters’ Meet

On Saturday, June 14 the Skymasters R/C Club will be hosting their annual Electric Fly-In. It starts at 10:00 a.m. at their Bald Mountain Scripps Road Field. Electric Powered Aircraft Only. From slow flying ‘park flyers’ to full aerobatics and scale Come see what electric power can do today! Flying open to AMA members. 94dBa at 10 feet enforced. **No Landing Fee**! Pilots’ Prizes! Lots of Parking. Refreshments available at event. Flying field is located within the Bald mountain recreation Area, about 5 miles north of the Palace of Auburn Hills on Scripps Road between Lapeer Rd (M24) and Joslyn Rd. All cars need annual/daily State Park sticker – available at the event. For more information call Pete Foss 248-236-0676 or visit their website at www.skymasters.org.

**ALSO**

Don’t forget the Keith Shaw's Birthday Electric Fly-in on June 7 in Quincy (Coldwater area) MI. The CD is Dave Grife. For info email Dave at grifesd@yahoo.com, or phone 517-279-8445. If you’ve not been to this one, I highly recommend that you attend. Nice field and lots of relaxed flying!

RCadvisor.com Releases Calculator SE, Free Model Airplane Design Software

**Albuquerque, NM — May 14**— RCadvisor.com launched on January 1, 2008 with Calculator SE, an advanced free online calculator for model airplane building and design. Calculator SE features an electric power system optimizer, a virtual wind tunnel, a scale model sizing tool, and a real-time airfoil analyzer. **Running on multiple platforms,** it incorporates features distilled from the latest usability research. According to founder and lead developer Carlos Reyes, “Ease of use is the primary design goal, but accuracy has not been compromised.”

**Ease of Use is the Primary Design Goal**

Calculator SE uses ToolTips to provide help on highlighted entry fields, when it has advice to give, or to indicate an invalid entry. An online tutorial
guides the user through common tasks. Twenty-five interactive graphs highlight trends at a glance. Graphs and results are recalculated automatically with every data edit, encouraging experimentation and speeding up the learning process.

Designed as a set of workbenches, each component (motors, airfoils, etc.) can be analyzed independently. A consistent layout for each workbench makes knowledge transfer easy. More advanced workbenches for airplanes and power systems combine multiple components together.

**Accuracy has not been Compromised**

Dennis from Tracy, California says, “Wow, that’s a pretty nice calculator. I input my TwinJet at my altitude and average temperature, and the max speed (level flight) is almost exactly what I measured! Very nice, and Great Job!”

**Advanced Design and Features**

The calculator and extensive component database reside on fast server networks in the United States and Europe. The calculator is no larger than popular homepages and loads very quickly. The user's data is saved every three minutes to the same server networks to prevent data loss.

**The calculator requires no installation and runs on Windows, Linux and Mac OS X.** It is very fast - the power system optimizer can analyze 40,000 configurations every second.

**About RCadvisor.com**

RCadvisor's goal is to help individuals design and build better flying model aircraft through the use of an advanced free online model airplane calculator. Founding RCadvisor.com in 2007, Carlos Reyes has had lifelong love affairs with airplanes and computers. He holds a Private Pilot-Glider Certificate from the FAA and has enjoyed flying model airplanes for many years. A Computer Science degree from Columbia University and 25 years of experience prepared him well to tackle programming the calculator.

Contact: Carlos Reyes
2200 Elizabeth St NE
Albuquerque, NM 87112-3037
Web site: http://www.rcadvisor.com
Email: carlos@rcadvisor.com
Phone: 1-505-318-1885

Here are a few Screenshots:
The May EFO Flying Meeting

The Saturday, May 10, EFO flying meeting was excellent in every way. There was a lot of flying on the beautiful Michigan spring day, one of only a few we’ve had this year!

We had all types of planes flying; EDFs, Scale, sport, wings, little ones, big ones and more. Everyone was in great spirits. What an absolutely wonderful day and get-together!

EFO member James Maughan sent along a few photos from that day. Thanks Jim!

You’ll want to check this one out soon. KM

Specifications for the finished and flying Son of Swallow Mk II

Wing area: ~415 sq.in.
RTF weight: 1171.95g or 41.34 oz.
Wing Loading: 14.34 oz./sq.ft.
CWL: 8.45 oz./cu.ft.
Power System: Wrong Kv (1200) Hyperion Z3019-10, Castle 45 low timing, 3S1P A123 Systems 2300mAh pack, Master Airscrew 10x7 standard wood prop
Averages for 5 data captures on Hyperion Emeter 5 seconds apart on freshly charged pack.
Volts: 8.5
Amps: 33.9
Watts in: ~288
RPM: ~8500
Watts in per pound: 111.5
Theoretical pitch speed: 56 mph
Theoretical stall speed: 14 mph
Pitch speed to Stall speed ratio: 4:1
Performance Factor: 3.51 (see the May 2008 Ampeer for description of this term - http://homepage.mac.com/kmyersefo/ampmay08.pdf)

Ken’s dragging the SOS Mk II in low and slow

A couple of the previous photos give an idea of what the field looks like for those planning to attend the 2008 Mid-Am on July 12 and 13.

Keith and I flew at this field the week before the EFO Flying meeting. He said that he would have no problem flying any of his planes there, so you can expect to see some of his “best” at the Mid-Am.

When we were flying, he could not stop praising the new Cellpro 10s from FMA Direct! He honestly feels that is great and highly recommends it. That is good enough for me! He’s also replacing the NiCads in his planes many with the 26650 M1 cells from A 123 Systems, Inc. That’s another “vote” for these outstanding cells.

Here are a few more photos of the Midwest RC Society 7 Mile Rd. Flying Field taken a few weeks before the flying meeting.

The next EFO Flying Meeting will be held at the Midwest 7 Mile Rd. Field on Saturday, June 21.
This will allow members to attend The Keith Shaw Birthday Party Fly-in and the Skymasters’ meet the first two weekends of June.

**Smitty Gets the Shaft!**  
From Sterling Smith smitty559@comcast.net

Friend and EFO member, Sterling Smith, sent along the following info and photos of his new Shaft from Steven’s AeroModel.  

Check out my new electric model (Shaft). It’s a great kit. It is all laser cut and goes together just like putting an interlocking puzzle together. The kit is by Stevens AeroModel.
Wing Span: 39"
Length: 35"
Area: 340 sq. in.
Weight: 17.5 ounces ready to fly
Wing Loading: 7.41 oz./ sq.ft.
Motor: Hacker A20-20L

**Miss Texas**  
From Dan Bono DBono99@aol.com

_Dan and I have been exchanging emails on the Swallow/Son of Swallow and various power systems. He’s completed a Miss Texas, which is similar in size to the SOS, and here is the info he sent. KM_

Hi Ken,
Your SOS looks really good. When do you get to fly it?
I’m sending you some pictures of the almost finished Miss Texas. I haven't run the motor yet, so I don't have any numbers. It will be awhile before I get to fly the Miss Texas.

The wingspan is 46-inches and it has a wing area of 365 sq.in. That gives it a wing loading 16.6 oz./ sq.ft. with an all up weight (AUW) of 42 oz. The motor is a Hyperion Z3013-16 with a Titan 50 amp ESC. The APC 10x7E or 11x7E will pull the amps from a Grayson 3S1P 4100mAh Battery.

Prop: APC 10x4.7SF
Battery: Thunder Power 1320 mAh Li-Po
Dan
PS I had it out in backward yesterday and it kept on tipping over. I did manage to break two of the stringers in the turtledock already. I will deal with THEM after the 1st flight.

And in a follow-up email
Here are the numbers I got with the Hyperion Z3013-16 and Titan 50 amp ESC. All batteries are 3s4000, different discharge rates

**APC 10x5E**
- 21 amps/217 watts—Skyshark 10/c
- 21 amps/239 watts—Grayson 12/c
- 25 amps/280 watts—MaxAmps 20/c

**APC 10x7E**
- 25 amps/240 watts—Skyshark
- 27 amps/280 watts—Grayson
- 30 amps/335 watts—MaxAmps

I first tried an APC 11x7E, but it was drawing way too many amps for the Z3013-16.

More on the FMA CellPro 10S

![Graphic from the FMADirect Web site](image)

Earlier in this issue I noted how much Keith Shaw really likes this charger. On May 1, 2008 I received an email from Bob Aberle that his review had been posted. Here’s what Bob had to say. KM

Ken,
http://www.masportaviator.com/ah.asp?CatID=7&ID=202 is my online review of the new FMA/Revolectrix 10S Charger that was just posted to the SPORT AVIATOR Web site. This has to be the best charger there is on the market.

The best features include charging up to two 5-cell packs at the same time and charging up to a 3C (20 minute) rate. Also, something that is right up your alley, there are all kinds of download capabilities.

Bob
To whet your appetite to follow up by reading this article, here are two quotes from his summary on the Web site mentioned. KM

“The FMA Direct CellPro 10S is certainly the state-of-the-art (2008) in lithium battery charging. If you haven’t as yet bought a lithium battery charger, you should consider the 10S for your first and only charger. If you already own a CellPro 4A, there is still rationale for purchasing the new CellPro 10S charger. The higher charge current, larger number of cells, the ability to charge two packs simultaneously, to charge at up to a 3C rate in twenty minutes and to establish pre-set charging conditions make this charger one of the best offerings to date.”

“But if you want the best and want it all, the new CellPro 10S (Catalog No. LC10S10ADC) at $189.95 (plus the optional $19.95 PC interface cable) makes even more sense. In my case, this is now my primary lithium battery charger.”

Large Electrics from California
From Don Hofeldt bladerunner1955@verizon.net

Thanks for your great Web site and information. I always like to see it in my inbox.

Here are a few of our larger electrics that a couple buddies and myself are flying these days thanks to the AXI motors. I'll stick a couple address you can copy and paste to view.
P-51
http://www.youtube.com/watch?v=KWs8ZfS7xbg
AT-6 & P-47
http://www.youtube.com/watch?v=RNTAhicEtBU
Hangar 9 Pawnee
http://www.youtube.com/watch?v=mQ0WnGHiEdY
FW 190
http://www.youtube.com/watch?v=m3pRFtBAWVE
Stinson
http://www.youtube.com/watch?v=8x0mFuR_Nz8
Let me know how ya like these.
Don Hofeldt the electric guy from Huntington Beach California

I liked the videos and planes a lot! Maybe you could send the info and some stills of them to share with others. 😊 KM

A Miss Kitty
From Randy Smithhisler
Randy.Smithhisler@PACCAR.com
June 2008

Ken,

Thanks for passing along the newsletters. They have really come in handy.

I just purchased my first Lithium battery pack of any kind. It's a 6-cell A123 type pack from Pete Peterson (Model Electronics). I have charged it only once (on a new Astro Flight A123 charger) and did some balance and taxi tests. I will be installing it in my "Miss Kitty" (Bob Benjamin design) and flying it at the Celebration of Silent Flight event on May 3rd and 4th.

I was previously using a 20-cell NiMH pack. The model now is 28 oz lighter. I'll let you know how it goes.

Best regards,
Randy Smithhisler

Hi Ken.

Always a pleasure to hear from you and your fine magazine. Hope your Mid-Am goes well.

Here is my latest indoor, an SE5 for the Minium electronics. It came well at 20.4g and 4.2Dm³. I send you a photo and a video. More photos on http://fotos.sapo.pt/chispas and the video is also at http://br.youtube.com/watch?v=rmLR7cAFK4o

Best regards.
Paulo Faustino

An Indoor SE5a
From Paulo Faustino chispas@sapo.pt

Hi Ken,

The latest Ampeer was interesting. I spend most of the day on rcgroups following the A123 charge thread. Isn't this reverting back to the early days of electric with the windup chargers before the peak detector stuff came out? (I'd say so, but to me it is pure and simple KISS. ☺ KM)

I finally got the Astro 19 flying in a plane. It gets really hot but doesn't seem to hurt it. I read somewhere that the cobalt magnets are good for 200 degrees C.

I had the speed control cutoff set at 9 volts as I was using both 3-cell LiPo and 4-cell A123 packs. When the A123s reach that voltage there is nothing left! Usually one can stretch the glide by throttling back and creeping up on the power after a shutoff (Castle Creations control) but not in this case. Didn't even have enough to taxi after landing. When I charged the battery the Astro 109 put 2.3 amp hours into the 2.2 AH battery!

Soon as I get the Eagle Tree software installed on my new computer I'll record a flight and see how hot the motor really gets, and the current draw.

Astro Flight says 25 amps max but I'm sure it's closer to 30 with an APC 9x4.5E on 4 A123 cells.

Electricalc predicts that the climb rate with a 10x5 on 3 Li-Pos is about the same as a 9x4.5 on 4 A123s, but the top speed is slower, which is about what I have found out in flight tests. The plane is a high wing old-timer type with a thick wing; I like the fact that Electricalc takes the airfoil type and drag into account when calculating top speed. I think some other programs seem to give pitch speed only, without

And More on the 26650 M1 Cells from A123 Systems, Inc.
From John Riese jriese@hotmail.com

Hi Ken,

The latest Ampeer was interesting. I spend most of the day on rcgroups following the A123 charge thread. Isn't this reverting back to the early days of electric with the windup chargers before the peak detector stuff came out? (I'd say so, but to me it is pure and simple KISS. ☺ KM)

I finally got the Astro 19 flying in a plane. It gets really hot but doesn't seem to hurt it. I read somewhere that the cobalt magnets are good for 200 degrees C.

I had the speed control cutoff set at 9 volts as I was using both 3-cell LiPo and 4-cell A123 packs. When the A123s reach that voltage there is nothing left! Usually one can stretch the glide by throttling back and creeping up on the power after a shutoff (Castle Creations control) but not in this case. Didn't even have enough to taxi after landing. When I charged the battery the Astro 109 put 2.3 amp hours into the 2.2 AH battery!

Soon as I get the Eagle Tree software installed on my new computer I'll record a flight and see how hot the motor really gets, and the current draw.

Astro Flight says 25 amps max but I'm sure it's closer to 30 with an APC 9x4.5E on 4 A123 cells.

Electricalc predicts that the climb rate with a 10x5 on 3 Li-Pos is about the same as a 9x4.5 on 4 A123s, but the top speed is slower, which is about what I have found out in flight tests. The plane is a high wing old-timer type with a thick wing; I like the fact that Electricalc takes the airfoil type and drag into account when calculating top speed. I think some other programs seem to give pitch speed only, without
taking the model characteristics into consideration, but I may be wrong.

The extra voltage of the A123's made up for the higher wing loading. They weigh twice as much as the 2100 ThunderPower Li-Pos but they seem to be more tolerant of abuse.

BTW, Electricalc also says that the Astro brushed 035 geared has about the same performance, but with higher efficiency. I have one that I might try to see if that is true. They say that the big breakthrough has been the brushless motors but I think it's the lightweight low internal resistance batteries. Maybe if one compares cheap brushed motors to brushless... Then I hear that the cheap brushless motors are not very efficient. Can't keep up with all the info.

I took the plane to a meeting of my R/C club thinking it would generate interest. They were more concerned about how much of a discount the local hobby shops give club members on ARFS than building their own planes. Thirty years ago "ARF" was what Orphan Annie's dog said.

I'm still looking at putting the motor in a flying boat. Now that I see how hot in gets I'll probably just leave the motor exposed with maybe a tail cone to enclose the wires.

Thanks again for the good info,
John in Kalifornia

---

Ken Myers phone (248) 669-8124 or KMyersEFO@aol.com – http://members.aol.com/kmyersefo/
Keith Shaw (734) 973-6309
Flying both days is at the Midwest R/C Society Flying Field - 7 Mile Rd., Northville Twp., MI
(see map on map-hotels flyer)

Registration: 9 A.M. both days
Flying from 10 A.M. to 5 P.M. Sat. & 10 A.M. to 3 P.M. Sunday

Pilot Entry Fee $15 a day or $25 both days - - - -
Parking Donation Requested from Spectators

Saturday’s Events
All Up - Last Down
(No Li ion, Li-Po, etc.– NiCads or NiMH only in AULD – any size motor)
Best Scale
Most Beautiful
Best Ducted Fan
Best Sport Plane
CD’s Choice

Sunday’s Events
Best Scale
Most Beautiful
Best Mini-Electric
Best Multi-motor
CD’s Choice

Planes Must Fly To Be Considered for Any Award

Open Flying Possible on Friday
Night Flying Possible, Weather Permitting, Friday & Saturday Nights
Refreshments will be available at the field both days.

Potluck picnic at the field on Saturday evening.

Come and join us for two days of fun and relaxed electric flying.

Come, Look, Listen, Learn - Fly Electric - Fly the Future!
Saturday’s & Sunday’s Awards:
Plaques for 1st in each category
Merchandise drawing for ALL entrants
To locate the Midwest R/C Society 7 Mile Rd. flying field, site of the 2008 Mid-America Electric Flies, look near top left corner, where the star marks the spot, near Seven Mile Road and Currie Rd. The field entrance is on the north side of Seven Mile Road about 1.6 Miles west of Currie Rd.

**Address:** 7419 Seven Mile Road, Northville Twp, MI 48167-9126 - numbers on the fence

**Mid-America Flies Hotel List – 2008** Please call the hotels for current rates

---

**Novi Hilton**
21111 Haggerty Rd.
236 rooms
800-445-8667
248-349-4000

**Sheraton Oaks**
27000 Sheraton Dr.
206 rooms
248-348-5000

**Travelodge Detroit**
21100 Haggerty Rd.
124 rooms
800-578-7878

**Detroit Marriott Livonia**
17100 Laurel Park Dr. N.
227 rooms
800-228-9290

**Hampton Inn Northville**
20600 Haggerty Rd.
125 rooms
800-426-7866
313-462-1119

**Wyndham Garden Hotel**
42100 Crescent Blvd.
152 rooms
800-222-4200
248-344-8800

**Holiday Inn Livonia**
17123 Laurel Park Dr. N.
225 rooms
800-465-4329
313-464-1300

**Hotel Baronette**
27790 Novi Rd.
149 rooms
248-349-7800

**Days Inn Livonia**
36655 Plymouth Rd.
72 rooms
800-325-2525
313-427-1300

**Comfort Inn Livonia**
29235 Buckingham Ave.
112 rooms
800-221-2222
313-458-7111
Ampeer Paper Subscriber Reminder

When subscribing to or renewing the paper version of the Ampeer, please make the check payable to Ken Myers. We do not have a DBA for the Ampeer or EFO. Thanks, Ken

Upcoming E-vents:


June 7 & 8 Keith Shaw’s Birthday Electric Fly-in, Quincy (Coldwater area) MI, CD Dave Grife, for info email Dave at grifesd@yahoo.com, or phone 517-279-8445

June 14 Skymasters R/C Club Electric Fly, Bald Mountain Scripps Road Field, 10 a.m., No Landing Fee, For more info Pete Foss 248-236-0676 or visit www.skymasters.org

June 21 EFO Flying meeting, 10:00 a.m., Midwest RC Society 7 Mile Rd. Flying Field (EFO meeting)

July 5 5th Annual Norm Hils Memorial Electric Fly-In hosted by the Jersey Coast Sport Fliers (AMA 1265), Dorbrook Park, in Colts Neck, NJ. info on the fly-in, including directions at www.jcsportfliers.org. CD Rob Kallok, phone: 732-263-1561 or rob.kallok@comcast.net

Balsa Bashers Flying Site – map not to scale

Lots of Fun for Everyone. 😊

The Next Flying Meeting:
Date: Saturday, June 21  Time: 10:00 a.m.
Place: Midwest RC Society 7 Mile Rd. Flying Field
Please NOTE the PLACE!