the



May

The EFO Officers

2025

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EFO Flying Meetings Reminder

Please keep in mind that summer EFO flying meeting dates are <u>tentative</u> because of the weather.

Flying meetings are usually scheduled for a Saturday. Because of predicted winds or rain for the scheduled date, the actual date could be changed, even to the following Sunday.

Members are notified, via email, as to the correct time, date and place. Any changes are also immediately posted to the EFO Website.

Everyone is welcome and proof of current AMA membership is required to fly.

Spectators and visitors are always welcome.

The next EFO monthly flying meeting is scheduled for Saturday, May 10 at 10:00 a.m. at the Midwest RC Society 7 Mile Rd. Flying Field.

If the weather is not suitable on that date, the meeting will be postponed to a future date and members notified, via email, regarding any change in date and time. The change will also be published on the EFO Website.

An Innov8tive Designs Update by Ken Myers

I started purchasing brushless motors from Lucien Miller before he was Innovative Designs!

A vast majority of my planes are powered by Cobra brushless motors and electronic speed controls.

His in depth, real world, motor testing data has always kept me coming back.

I recently received an interesting email from Lucien.

Here is what he noted in his email.

"Innov8tive Designs / RC Dude Hobbies East Coast / West Coast Dealers

Since 2006, Innov8tive Designs and RC Dude Hobbies have provided the finest Electric Power System components available to the R/C Modeling Community. With three complete motor lines to choose from, a wide selection of Power System Accessories, and the best Customer Service available in the industry, you can rely on us for all of your R/C Electric Power System products.

Lucien Miller at Innov8tive Designs and Randy Moody from RC Dude Hobbies have teamed up to bring you the best Electric Power Systems available today. Working together, we cover the entire United States and the rest of the world, providing top quality products, knowledgeable customer service and fast shipping. With two locations to choose from, you can shop at the business closest to you to get the fastest possible shipping times for your order."

I was especially impressed with this since **Randy Moody**, RC Dude, has been another great source for my power systems and the great Emeter II!

Congratulations to both of these great gentlemen for offering such useful and usable items for our electric flight hobby!

That is a very special thank you so much from me!

Change of Email Address Requested By Ken Myers

A reminder for *Ampeer* subscribers. If you wish to continue receiving the monthly notice, please update your email address whenever you change it.

Thanks, Ken

Indoor Flying in Pontiac Info

The last day of indoor flying in Pontiac, MI at the United Wholesale Mortgage Sports Complex was on Tuesday, April 15, 2025.

Indoor Flying in Brighton Information

Indoor flying started at the Legacy Center on Wednesday October 9th. The flying time is 12:30 to 2:30 p.m. The Legacy Center Website is: legacycentermichigan.com Address: Legacy Center, 9299 Goble Dr, Brighton, MI 48116

The last day of indoor flying at the Legacy Center is Wednesday, April 24, 2025.

EFO Indoor Flying at the Legacy Center By Ken Myers

In the April 2025 issue of the *Ampeer*, I reviewed the DEERC RC Plane, 2.4GHZ Remote Control Airplane W/ 3 Batteries. https://theampeer.org/ampeer/ampapr25/ampapr25.htm#DEERC

On March 16, 2025, I decided to join the gang for some lunch and indoor flying at the Legacy Center, as I was once again itching to fly that fun little flyer.

After a very enjoyable lunch at Captain Joe's Grill, in Whitmore Lake, MI, we headed over to the dome for some fun flying.



Roger Wilfong set up his "hangar" and got right into flying.







EFO member, **Dave Stacer**, is also the head flight instructor at Midwest. He had one of his students, Joe Havens, with him at the dome for some beginning flight instruction before the outdoor season started. (Joe is on the left in the photos.)





Keith Shaw, on the left, discussed his plane with **Bill Brown**, Jr. just before take off.

It was great to get together for lunch and an afternoon of flying.

Even though we all had a great time, we are oh so ready for spring to actually arrive and return to the outdoor flying field.

Great day guys!

A side note on our wonderful southeastern Michigan weather.

This article was written on April 14. It is warm and sunny. The predicted high should be close to 70 degrees, but extremely WINDY!.

For tomorrow, "they" have predicted snow showers and a high of 44 degrees.

Gotta love Michigan spring weather! :-(

Joe Hass Has Been a Busy Boy From Joe Hass via Emails

Joe has had several irons in the fire over this past winter.

I have reported on some of his projects since last November, but not others.

This is my attempt to get them into some kind of order, and some of this information may seem familiar, but bares repeating.

Back in September 2024, he filled me in on his Astro Mite Galloping Ghost project.





In January 2025, Joe sent the following.

"I am still working on the right prop. Then a range check (27MHz). I spent as much time trying to remember how I did things as I did actually doing them. I'll do a write up and better pictures. Feeling much better.

Joe"

the Ampeer



January 2025 photo

In February 2025, Joe shared some information on a plane holder that also had photos of the Astro Mite in the stand. "Chris and I bought a pair of these off of RC Groups. They have a deal when you buy 2. Had our names engraved.



https://www.rcgroups.com/forums/showthread.php? 4678149-Airplane-Stand-for-transport-build

They are very nice. I have used mine for everything from a 48 inch sport as shown in the pictures to a giant RYAN STA. Chris said it fits all of his turbine jets. Lots of adjustment and padding.

Joe Hass 248-321-7934"

April 13, 2025

"The Astro Mite flew a short flight today. Actually took off the paved runway at Pilgrims. Turns out you really need to extend the antenna on 27MHz. Repairable damage. Can't wait to try again.

The Ryan STA flew perfectly. Tweaking control throws. Might add a gyro for the rudder on the ground.

Chris flew his new thrust vectoring turbine. Unbelievable! Pictures later today.

Joe"

Back in November 2024, Joe picked up a Great Planes Giant Ryan STA at the Midwest RC Society Swap Shop.

He requested that I work up a power system for him. I did and sent that back to him via email.

The specs he gave me for that giant Great Planes Ryan STA ARF.

Specs:

82" span 1100 Sq. In 11 pounds with a glow 4 stroke

A scale prop diameter would be 16" to 17"

He also requested a power system from Lucien Miller, and Lucien sent him the info.

He went with Lucien's system, but more on that later.

In March 2025, he updated how his STA was coming along with a short note and photo.

"Thanks for your help.

It came in at 11 pounds 1 oz.

I'm using the Innov8tive BA-4520-470 driving an APC E 17 x 8 with 5 cell 5000MAH through a Castle 100 AMP ESC, 1000 watts.

I went with that combination based on the Innov8tive chart and available hardware in my shop.

Remember that I got it at the Midwest Swap Shop.

Joe Hass"



April 13, 2025

"Two great flights of my Great Planes giant Ryan STA occurred on Saturday April 12, 2025.

I horse traded 2 small airplanes and a little cash for the unfinished ARF at the Midwest RC swap shop last November. Bringing it to flying condition was an aeromodeling team effort.

The cowl had a number of cut outs for a gas engine. Scale modeler **Dave Asman** took the cowl, filled the missing sections and perfectly refinished it.

Ken Myers researched and explained why my first choice of a motor wouldn't work.

Chris Tucker of Electrodynamics donated the large switch that fit perfectly in the existing cut out.

Jeff Hayes of Elite Machining created the standoffs for the motor.

Scale champion **George Maiorana** created the windshield.

Ross Jones donated the pilot and cockpit coming.

The motor and spinner were recommended and purchased from Lucien Miller at Innov8tive Designs.

A battery compartment capable of holding two 5S 5000MAH li pos (only one was used) was created behind the firewall with an arming plug hidden in a lower cowl opening.

Here are the specs:

Wingspan: 82" Flying weight: 11 lb. 8 oz. Motor: BA-4520-470 (470Kv) Prop: 17 X 8 APC E Voltage: 19.8 Amps: 57 Watts: 1100 RPM: 7800

It takes off and flies easily at half throttle or less. Very realistic control inputs for every maneuver. I can easily get 2 flights off a single charge. Can't wait to do some formation flying with my son Chris flying my giant PT-19.

Joe Hass joehass@gmail.com 248-321-7934



Thank you for sharing all of this great info, Joe!



Darmstadt D-22 Almost Finished

From Keith Shaw via Email I needed to assemble the Darmstadt to find the frame CG without battery to let me locate the actual position of said battery.



I took some photos of the almost completed airplane.







I am still working on the pilot, and have yet to install a few minor details like the carb scoop.



Ready to fly it weighs 60 oz, so right at my prediction.



I will have to get my reflexes up to speed before a test flight, so it won't be for a while yet.

Wind, weather and soggy driveways need to cooperate first.

Previous emails had all the specs of this rare German sport design.

Enjoy the photos. I'm already pondering the next project.

Keith

Dave Grife, **Martin Irvine** and I replied to Keith with the same question, "What did you use for hinges?"

Keith's reply:

They show up in all the photos, so I had to do something.

My solution was my favorite sewn hinge with button thread, but just two spaced the right distance apart. Then I carefully painted flat black inbetween, letting the thread be the boundary. You have to get really close to realize the nature of the "hinge".

I tried a whole bunch of new ideas on this model. Most worked, but a few will just have to be chalked up to technique-in-progress.

I still struggle to get windshields right.

But the one thing that did work remarkable well was the new idea for rivet highlighting. It is hard to come up with something that does not look overstated on rivets and panel edging.

A new try was to use a different brand white tape to edge panel lines, with just enough difference in the two whites to form a visual edge. Then I wiped the edge with a bit of dope thinner to activate the tape glue on the edge and rubbed a soft pencil on to it. Just enough of the graphite stuck to form a sorta shadow. It seems quite permanent.

I used canopy glue, dotted on with a toothpick, for the rivets.

The next morning the glue was still a bit rubbery and a little sticky, so rubbed the soft pencil on to them too, then rubbed with my finger. This made the edge of the rivet stand out more than the center creating a shadow effect. Several days later the rivets had shrunk to their final thickness and seem to have maintained the desired look.

Eventually I will figure everything out.

Keith

The April EFO Zoom Meeting

The April EFO Zoom Meeting was held on the evening of April 16, 2025.

Ken lead off the meeting with a couple of questions and comments regarding two recent articles in *Model Aviation*.

He noted that he really enjoyed the article "Americas Early Free-Flight Models" by C. David Gierke, pages 24-32, in the December 2024 issue.

He also said that he'd learned a lot about pioneering flight in the US.

After reading aloud the section titled, "Gyroscopic Precession", he had a question for the members regarding this sentence, "The same results could be realized on the lateral axis by using directcurrent electric motors that spun rotor-type gyroscopes - in this case, one for each interplane aileron".

Ken noted that it was unclear as to where the author got the idea presented and whether it was referring to a model or full-scale aircraft. He noted that he researched early 20th century batteries and that only lead acid types might be able to provide the power, but he thought that they would be too heavy in either type of aircraft.

A discussion of early battery types followed.

Next Ken noted Terry Dunn's Electrics column in the April 2025 issue of Model Aviation, starting on page 54. The column was titled, "Experimenting with Li-Ion Cells".

He noted that Terry had done a good job, in the opening paragraphs of the article, warning folks about doing these types of experiments.

Ken noted that the cylindrical cells, shown in the photo on page 55, were labeled as INR. These cells are Lithium Nickel Manganese Cobalt Oxide or NMC cells. Batteries made using this chemistry are used in high power applications such as electric vehicles.

He showed the members the photo of Terry's two "homemade" NMC packs along with a LiPo battery on page 56. He asked if anyone noticed anything "interesting" about Terry's NMC packs. Almost everyone replied, at the same time, they don't have balancing leads.

The discussion then turned to those of us using "A123" cells, which includes **Keith Shaw**, **Dave Stacer**, **Roger Wilfong** and **Ken Myers**.

"A123" cells are Lithium Iron Phosphate cells and also known as LiFe or IFR. We all uses the 18650 or 26650 size.

We all noted that we do have balance leads on our packs. It really is not necessary to balance them very often, as they remain pretty well balanced most of the time, but if the charger you have won't charge without the balance lead being connected, then it is okay, but no necessary, to always balance them.



Roger with his Hitec Glider Version

Roger Wilfong shared a new, much larger version of his converted Hitec Glider that he shared last month. It was loosely based gliders available from German grocery store named Lidl, that sells inexpensive foam gliders.

His new, larger version is based on the Good RC Albatross Model Glider Series that he purchased through Amazon and then highly modified it. <u>https://www.amazon.com/HXBER-FX707S-Airplane-Launch-Aircraft/dp/B0DF71PY9D/ref=sr 1 2?</u> crid=20P3YAMD9U1JD&dib=eyJ2IjoiMSJ9.hi-2r7ZHv8II6C zLGN35kCSciD7n8sb1m0r2_VFOjJgHeONdvsBydyEX3vf8 RBbzrRInuYmQEsYg4KhtHYPQA3Wv_RLP84QihJc6W7n NEwDT2nUfzX7sYEDwmo8uYBwOc0nNSNGUQOj4OFHh oVoWiM8WOL7a-XrcAY-WyX4Pu6npBMcdvVx9G2w2YctNz_N6 sdp1vMknJEWtEen

WvY4Pu6poBMcdyVx9G2w2YctNz_N6.sdpIvMknJFWtFen S9crUrVwcyujy_vcbQnKErBIWDG0&dib_tag=se&keywords =FX707S&qid=1744908221&sprefix=fx707s%2Caps%2C134 &sr=8-2

(I also found it here, KM) https://windcatcherrc.com/product/120cm-1200mm-wingspanfx707s-albatross-glider-molded-for-rc/?gQT=2 His modifications included changing it to a twin boom pusher configuration, just as he'd done to the Hitec Glider. He did note that it was an easier conversion as hinge lines and servo pockets are molded in and that the canopy is removable.



Roger points out the moulding lines.

His new version uses a 3S 1000mAh LiPo with a 1500Kv outrunner using an 8" prop. It draws about 15 amps and flies under power for about 17 minutes.

He said that he'll be experimenting with a 1300Kv motor and different props to extend the flight time.



The twin boom mod is clearly seen here. Jim Cross was present with some sad news. He can no longer fly RC and is giving away all of his equipment. Ken asked Jim for a list of what he still has and it will be emailed to EFO and Midwest RC Society club members.

Keith Shaw shared the details of his new Darmstadt D-22 including a bit of its history.

Keith talked about this project while Ken shard the photos previously shown in this issue.

The plane was of German design and designed and built by a glider club to finance the building of their gliders. It was a 1930/1931 version with only 2 built.

Other things that Keith noted were that the suspension works and the translucent covering is good ole Micafilm.

He's in the process of painting the pilot now.

We are looking forward to returning to outdoor flying soon.



The Upcoming Keith Shaw Birthday Party Electric Fly-in 2025

The Balsa Butchers are hosting the "Keith Shaw Birthday Party Electric Fly-In", for the 23rd year, at their field near Coldwater, MI. The event takes place on Saturday, **May 31, 2025**. It is a one day event.

The event consists of Open Electric Flying with a "Special Guest of Honor Theme", Happy Birthday Keith Shaw [June 6].

Enjoy a day with the "Pioneering Master of Electric R/C Flight". 9 a.m. - 4 p.m., Saturday. NO LANDING FEE! Donations for field maintenance and lunch appreciated.

For additional information contact; Contest Director: Dave Grife - E-mail: grifesd@yahoo.com or Phone: 517-677-9978 Please e-mail or call with any questions.

The field will be open for guests to fly on Sunday as well.

May 2025

41st Annual Mid-America Electric Flies 2025 & FREE Open Air Swap Meet

(See Swap Meet Note at the end of this announcement.)

AMA Sanctioned Event (Proof of AMA membership required to fly - Sorry MAAC membership is no longer accepted)

Saturday, July 12 & Sunday, July 13, 2025 Hosted by the:

Ann Arbor Falcons, Electric Flyers Only and The Midwest RC Society

The 7 Mile Rd. Flying Site, Salem Twp., MI, is Provided by the:

Midwest R/C Society

Contest Directors are: **Ken Myers** phone (248) 669-8124 or email kmyersefo@mac.org

Website for updates:

http://www.theampeer.org for updates & info Keith Shaw (734) 973-6309 Flying both days is at the Midwest R/C Society Flying Field - 7 Mile Rd., Salem Twp., MI

Registration: 9 A.M. Saturday

Event Flying from 10 A.M. to 4 P.M. Saturday Open Flying 10 A.M. Until You Leave Sunday

(Open Flying Saturday after the Event & All Day Sunday There are NO SCHEDULED EVENTS on Sunday, just open electric flying)

No Pilot Landing Fee

Donations will be gladly accepted

No Parking Donation Will Be Requested from Spectators or Those Participating in the Open Air Swap Shop Donations to Midwest will be gladly accepted from Spectators and Open Air Swappers

Awards on Saturday Only!

Best Scale Most Beautiful Best Mini-Electric Best Multi-motor Best Sport Plane Foam Flurry for NCM aircraft CDs' Choice

Planes Must Fly To Be Considered for Any Award Plaques for the winner in each category

The Field is Open for Open Flying All Day Friday Night Flying Possible, Weather Permitting, Friday & Saturday Nights

Field Lunch is provided to pilots and friends (hot dogs, chips, water or pop) Available on Saturday Field Dinner is provided (Burgers, Brats on Saturday evening for Pilots & Their Guests)

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

The NCM (Not Conventional Materials) Event

Traditionally, model aircraft airframes have been mostly constructed from balsa wood, plywood, spruce, and fiberglass. For the purposes of this meet, NCM airframes are mostly constructed from not conventional materials i.e.; sheet foam, foam board, cardboard, block foam, foam insulation material, etc.

Foam Flurry for NCM aircraft: This is a true event. It is based upon the all up/last down event of early electric meets. Any NCM aircraft may be used (no ARF types). Power systems are limited to a maximum of 3S (no paralleling) LiPo batteries or 4S maximum, no paralleling, for A123 packs. All planes qualifying for this event will launch at the same time, and the last one to land will be declared the winner.

VERY IMPORTANT REMINDER FOR 2025 -THE FLYING FIELD ENTRANCE TO THE MIDWEST FLYING FIELD CHANGED FIVE YEARS AGO!

The old entrance to the Midwest RC Society flying field is **permanently closed**!!! **DO NOT ATTEMPT TO USE IT!!!**

This is what the flying field entrance looks like. Please Drive SAFELY



The field entrance is on the north side of Seven Mile Road about 1.5 Miles west of Currie Rd. entrance is on the north side of Seven Mile Road about 1.6 Miles west of Currie Rd.



The address is 7621 Seven Mile Road, Northville, MI 48167. The entrance is through a private residence drive and out past the barn.

How to enter the flying field, by going past the farm buildings, is shown in the following photo.

Directions from Google Maps to the flying field https://www.google.com/maps/place/ MIDWEST+R%2FC+SOCIETY/@42.422025,-83.6170775,805m/ data=!3m111e3!4m13!1m7!3m6! 1s0x8823559bdf962b57:0xd100df97d9dcebf1!2s7419+7+Mile+Rd, +Northville,+MI+48167!3b1!8m2!3d42.4187058!4d-83.6190072!

3m4!1s0x882355a2c9e29cb5:0xaaf592068692b984!8m2! 3d42.422025!4d-83.6148888?hl=en

To locate the Midwest R/C Society 7 Mile Rd. flying field, site of the Mid-America Electric Flies, use the link for the map above.

Because of their convenient location and the easy drive to the flying field, the Comfort Suites and Holiday Inn Express in Wixom, MI have been added to the hotels' listing. They are only 10 miles northeast of the field and located near I-96 and Wixom Road. See the map-hotel .pdf for more details.

http://www.theampeer.org/map-hotels.pdf

Open Air Swap Meet

There is a designated area for swappers. Please check-in at the event registration table before setting up. Someone from registration will point out where you may set up. Bring your own table(s) and chair(s).

There is no swap meet fee. A donation to the Midwest RC Society, for the use of their flying field, would be greatly appreciated.

Upcoming E-vents Indoor Flying in Brighton on Wednesdays (info in this issue)	Saturday, May 31, Keith Shaw Birthday Party Electric Fly-in 2025, Near Coldwater, MI. (see info in this issue)
Indoor Flying in Pontiac on Tuesdays (info in this issue)	Saturday & Sunday, July 12 & 13, the 41st Annual Mid-America Electric Flies, Salem Township, MI. (see info in this issue)
Saturday, May 10, 10 a.m. EFO Flying See note in this issue regarding Late Spring, Summer and Early Fall flying meetings. Everyone is WELCOME. Proof of AMA membership is required to fly.	



The Ampeer/Ken Myers 1911 Bradshaw Ct. Commerce Twp., MI 48390 http://www.theampeer.org

Upcoming May Flying Meeting: Date: Saturday, May 10 Time: 10 a.m. Place: Midwest RC Society 7 Mile Rd. Flying Field