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May		The EFO Officers	2022
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No Mailed Ampeer Subscriptions	The Next EFO Meeting: Saturday, May 7, 2022 Time: 10:00 a.m., Place: Midwest RC Flying Field		

**What's In This Issue:**  
 EFO Flying Meeting Reminder - Thoughts on Spotters - The March EFO Zoom Meeting - More On Keith Shaw's Klemm - Keith's "Other" Klemm - Ritinger's Kinner Sportster - What's Inside Your Transmitter? - A Note from Andrej Marinšek - New Motor Mounts - April 2022 Ampeer Was a Good One - Thoughts On Grouping Planes - Keith Shaw Birthday Party Electric Fly info - 38th Annual Mid-Am info - Upcoming Events

**EFO Flying Meeting Reminder**

Luis

Please keep in mind that all summer monthly EFO flying meeting dates are tentative and quite fluid depending on the predicted weather.

The meetings are usually on Saturdays, but may change to the following Sunday or even possibly a week or more later.

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

**Thoughts on Spotters**

From Luis Alvarez

What is your opinion on having spotters all the time if available?

When there is at least 1 more plane in the air I feel uncomfortable. I have to keep searching for them and is not a rewarding experience.

If there is the chance to ask someone at the field to do it for you, someone that is doing nothing, or if you bring someone with you, I think that this not only makes flying more relaxed, but safer.

I mean not only at events, but all the time.

*It certainly is not a bad idea to have a spotter, especially if it makes you feel comfortable.*

*Unfortunately, folks that you might bring, who are not RC fliers may not realize that it is there job to watch the other plane, or planes, and NOT yours and then report the other plane's position and heading. That's always a problem.*

*You should not fly if you are uncomfortable with the situation. Chat and wait and have fun. That's what this hobby is all about.*

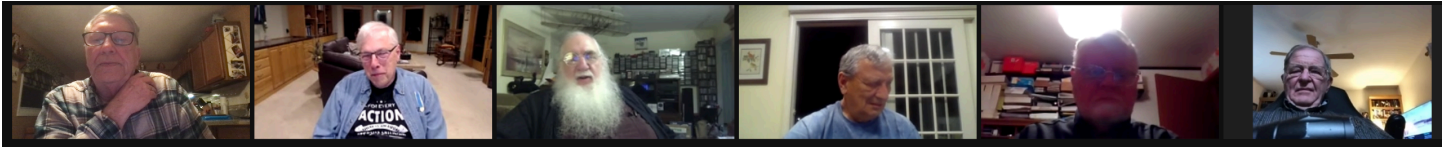
Ken

**The March 2022 EFO Zoom Meeting**

There were eight members present at the EFO March 9 Zoom meeting.

It was great to see **Steve LaButa** back! He lead off the meeting with his redesign and built of a Mach One pattern plane.

He uses a CNC router to cut out his parts.



His version weighs just over 5.5 lb. The original also use a .60-size glow, but his version, pulls about 45 amps at about 800 watt in.

*Right after the meeting, I received the following email from Steve. KM*

Hi Ken,

Here are the photos to my Mach 1 redesign and build.

The build is complete, but it has not been flown yet. I am using a 4S power system at about 800 watts in it. It weighs just over 5 and a half pounds, so it should be enough.

If it is not, there is room for a 6S battery, but that would require a new motor as well.

<https://flic.kr/s/aHsmXc1fab>

Steve Labuta



Photo from Steve's Linked Page

**Keith Shaw** shared some information on his 1/9-scale, 22 oz. Klemm L-33.

He built this one to this size and weight so that he could fly something that was capable of some aerobatics that could be flown locally in a neighborhood park.

The original was powered by 2-stroke inline engine.

It is covered with Aeronaut Airborne orange and silver and the silver is Oracover.

He also explained how he made the cowel.



During that discussion it was noted that ACE Hardware carries K&S products. It was also noted that Joanne usually has a nice selection of bass and balsa wood.



**Jim Pollock** shared the work that he's doing to bring a Fledgling back to life.



Keith told us the history of Sitka spruce and why there is almost none of this type of wood left in the world.

There was also some general discussion about the "old NiCad days". Keith noted that his largest NiCad pack contained 36 cells.

### More On Keith Shaw's Klemm L33

From Keith Shaw via Email

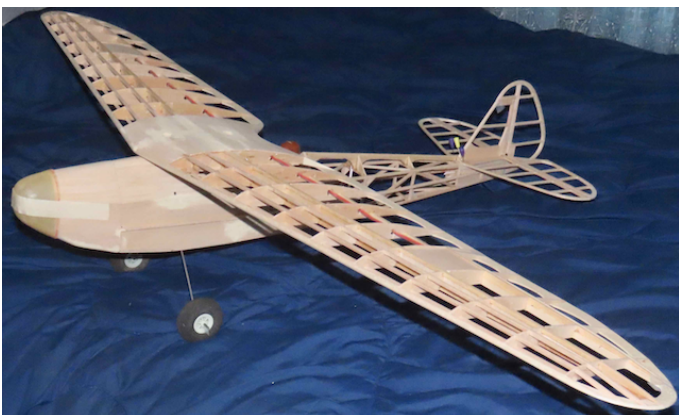
*Keith sent out several emails, with photos, regarding his neat little Klemm. They have been combined here. KM*

The rare Klemm L33 is ready for covering, so I thought I'd share a few "naked" shots.



As a reminder, this 1933 German design was the prototype for the sport aerobatic market, but it never went into production.

It has the notoriety of possibly being the only airplane to ever fly with an inverted, two-cylinder, inline, two-stroke engine! The wing sits on top of the fuselage and is supported by four short



outrigger struts. These are not in the photos as they will be added after everything is covered.

The pilot does **not** have a direct forward view, but a slight sideways tilt of the head would allow forward sight.

My model is about 1/9th scale at 47" span, and as you see it weighs 10.5oz with the four servos in place.

I am hoping for something like 20-22 oz ready-to-fly with a Scorpion 2208 and three 1100mAh A123 cells.

But first I need to shovel the 8+ inches of snow we got last night.

Hope all of your winter building projects are going well. Hint, hint...

Keith

After some last minute problem solving, I thought I'd show some photos of the now completed Klemm L33.



As a reminder, the Klemm L33 was a one-off 1932 prototype for the German sport aerobatic market, but never went into production.

There are only five B&W photos of it and a marginal outline 3-view, so it is only for fun flying. Finish color is unknown, so I went with orange, in hopes that I can see it better on hazy or overcast days.





At 55 oz. on the 73", 650 sq.in. wing, it has a 12 oz./sq.ft. wing loading and is VERY light on the controls. You just think about it and it happens.

My model is roughly 1/9th scale at 47" span, weighs 22 oz., and powered by a Scorpion 2208 on three 1100mAh A123 cells. The prop is yet to be determined, but I will start with an APC 8x6 and go from there. I think I will wait a few weeks for a test flight when the temps are warmer and winds calm.

After a couple of house projects are finished, I will start on the 37" span 1972-vintage Dreamer for which I drew the plans a couple of months ago. I always liked this small hotrod biplane and finally will build one. The inspiration came from finding a crumbling set of the GeeBee Dreamer kit plans at a swap shop.

I am changing the horrid airfoil to a NACA 1412, modifying it for bolt-on wings, and lightening up the structure, as the original plan showed a SuperTigre 40 for power! Power will be a Cobra 3520 on 5 A123 cells.

So many projects, so little time...

Keith

*Obviously, the March Zoom meeting capture colors are way off! KM*

### **Keith's "Other" Klemm**

From Keith Shaw via email

*Back in 2018, Keith built another Klemm, a Klemm L20. Here's his flight report. KM*

I am including a few photos of the Klemm L20.

It has been test flown and has had about 6 flights resolving some trim/throw/CG issues.



Originally I flew it on 4 big A123s and a 12x6E prop, but it was wildly overpowered, so dropped it back to three cells. I may even try dropping to a 11x5.5E prop. There is still plenty of power for scale-like flying and aerobatics.







With that huge wing it is reluctant to spin or snap roll, so just mild maneuvers like rolls, inside loops, and stall turns are available. But it looks GREAT on fly-bys and touch-and-goes, particularly with the wire wheels.

Keith

### Mark Rittinger's Kinner Sportster

From Mark Rittinger via Email

*While getting Keith's info on his Klemm L20, I also found this photo and info from Mark Rittinger that had been "hiding" in my email since June of 2018. It was in a reply to Keith's email and asked about Keith's covering. KM*



Hi Keith,

Nice looking ship!

What did you go with for covering? Looks like silkspan...

I finished my Flyline Kinner Sportster. It is 12 oz. ready to fly with a 2S 800mAh LiPo.

Coverite Coverlite covering is great stuff!

Mark

### What's Inside Your Transmitter?

From Keith Shaw via Email

Many of you know that I love old radio control units and have quite a collection.

Recently I helped a friend go through an estate packed with modeling equipment. I was mostly there to identify various planes by name, and confirm which wing went with what fuselage. The planes were all of the 1960s-80s vintage, so not an ARF in sight. :-) I have acquired a few to be restored and flown in the owner's memory, as I did meet him at several contests long ago.

Among other things I have added to my collection is an unknown transmitter from the 60s, an E&L unit. I have to admit that I had never heard of the brand, so couldn't wait to get it home and analyzed.

After opening, I surmise it is either a Galloping Ghost unit or maybe high rate Kickin' Duck. I won't know until I get it powered up.

Of interest is that it has a transistorized RF section (on the right wall) powered by the large 9 volt battery in the lower left of the case, and a separate pulser in the upper left powered by a 22.5 volt battery. The link between boards is a reed relay in the far upper left corner of the pulser board.

When flying you would hear a faint click-click-click that would vary depending on the controls you were giving at the time. Note that the transmitter has a homemade open gimbal joystick, so there is just a punch out on the front of the case for the stick.

The real laugh came when I opened the transmitter. A lot of debris fell out, and I originally thought it was remnants of dead batteries.

As I pulled the case apart I found it was stuffed full of fiberglass insulation, and the debris was pieces of nut shells! Apparently some little mouse found it a safe cozy lodge, going in through the gimbal opening. LOL...

Enjoy the photos.

Keith



## A Note from Andrej Marinšek

From Andrej Marinšek via Email

*Andrej was the author of the “Scaling and Comparing Performances of Aircraft Models (2D/3D Wing Loading)” article in the April 2022 Ampeer. KM*

I have just noticed that my article, regarding the 2D/3D Wing Loading, was published in the *Ampeer*.

I thank you for that due to several reasons.

The first one is that many magazines for modelling nowadays publish mostly non-technical contents and are reluctant to publish some more technical texts, especially very long ones (like in my case). In that respect, your publication is a fine mix which covers evenly many aspects of modelling.

The second one is that you assigned almost the entire space (should I say sacrifice?) in the April issue to my article, which was probably not an easy decision on your side.

And the third one is that you really devoted your attention to the subject of my article in several aspects. You ironed out some stylistic and grammatical errors and added several clarifications and explanations to make my text more clear (especially regarding the measuring units, which are less common in your environment) and generally made it more understandable.

I noticed that the introductory paragraph to the Table 3 was omitted. This is probably because my article is really very long. Anyway, I assume that this should not pose a problem to a more interested reader which can, by himself, connect the numbers in this table with the equations in the Table 2.

So thank you again and I look forward to read new issues of your publication.

Best regards,  
Andrej Marinšek

*When I went to add the paragraph that you mentioned to the online, HTML, version, it was already there. It appears to only be missing in the PDF version. KM*



## New Motor Mounts from Innov8tive Designs

From Gary Gullikson via Email

There is a new type of motor mounts, in various lengths and sizes, to fit most brushless motors that are being sold by Innov8tive Designs, Lucien Miller.

These should make converting IC powered model plane designs to brushless motor power much easier. Sets include spacers for fine tuning lengths to fit cowls.

Gary Gullikson, Garden Grove, CA

*The 3D Printed Mounts can be found here:*

<https://innov8tivedesigns.com/products/motor-mounts/3d-printed-motor-mounts.html>



*The photo represents a typical mount in the series. The photo is from the Innov8tive Designs Website. KM*

## April 2022 Ampeer Was a Good One

From Scott McKie via Email

Hi Ken,

This (April 2022) is one of the very best issues you've sent out.

Thank you for it, as those of us that are scratch builders, especially with Depron, will really use the info in it.

Also, when I was growing up, my father owned a Mooney Mite (which he used instead of spending three out the four weeks a month driving between states in the Midwest, and it was also the first single seat plane that I ever flew after he taught me how to fly.

It was a great plane, and one that you don't see too often anymore.

That's a really good looking model of it.

Scott McKie -- scotsman7@comcast.net

## Thoughts On Grouping Planes

From Paulo Scheidegger via Email

Hello Ken!

I've been a long time silent and grounded, all my planes getting dust and no construction either. But there is one thing I still do each and every month: take a time to read the *Ampeer*! It makes me feel connected to the hobby even when not active.

Since the February 2022 edition I felt curious about the 12 planes quiz. I do have many different models with very different flight characteristics and I know what the idea of grouping them by those characteristics may help when comparing one plane among the others.

One of the reasons I have been absent is my present occupation in data analytics. And sure enough, there are some analytic models we use precisely to accomplish the task of grouping seemingly diverse and incomparable things into groups whose elements are comparable within the group at the same time that each group is very different from the others.

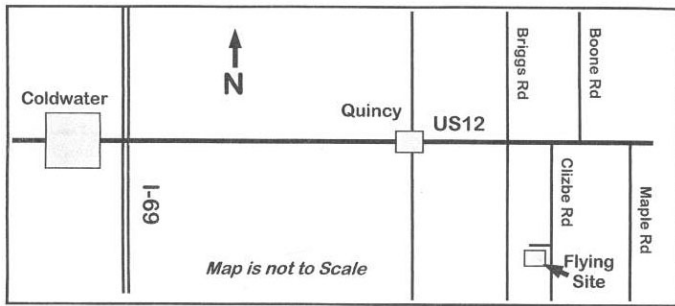
One very common example is when a retail chain ask us to plan revenue for all their stores across the country. You can imagine there are many sizes of stores, with different local markets, competition exposure and many other factors that affect their revenue. It is not a good idea to rely on a single factor to try grouping them. Instead we use mathematical models that consider all factors simultaneously.

How about trying such approach for grouping hundreds of different planes? The only thing I would need is an Excel sheet with one row per plane and as many columns as factor we want to compare. What do you think about it?

Keep going your amazing work that brings us so much useful information every month!

With my best regards,  
Paulo Scheidegger

*I think that's a very interesting idea. Maybe some Ampeer Readers might come up with a list of characteristics. What do you think folks? KM*



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)**

### **The Upcoming Keith Shaw Birthday Party Electric Fly-in 2022**

The Balsa Butchers are hosting the "Keith Shaw Birthday Party Electric Fly-In", for the 20th year, at their field near Coldwater, MI. The event takes place on **Saturday, June 4, 2022**. It is a one day event again this year.

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". 8 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:  
grifed@yahoo.com or Phone: 517-279-8445  
Please e-mail or call with any questions.

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

### **38th Annual Mid-America Electric Flies 2022**

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

**Saturday, July 9 & Sunday, July 10, 2022**

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.com –

**Website for updates:**

<http://www.theampeer.org> for updates & info

**Keith Shaw** (734) 973-6309

### **No Pilot Landing Fee**

Donations will be gladly accepted

**No Parking Donation Will Be Requested from Spectators**

Donations will be gladly accepted

### **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 2022 -  
THE FLYING FIELD ENTRANCE TO THE  
MIDWEST FLYING FIELD CHANGED  
THREE YEARS AGO!**

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



**This 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.

**Directions from Google Maps to the flying field**

<https://www.google.com/maps/place/MIDWEST+R%2FC+SOCIETY/@42.422025,-83.6170775,805m/data=!3m1!1e3!4m13!1m7!3m6!1s0x8823559bd962b57:0xd100df97d9dceb112s7419+7+Mile+Rd,+Northville,+MI+48167!3b1!8m2!3d42.4187058!4d-83.6190072!3m4!1s0x882355a2c9e29cb5:0xaaaf592068692b984!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, look near top left corner of the map, where the star marks the spot, near Seven Mile Road and Currie Rd.

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>

### Upcoming E-vents

**May 7, Saturday, 10:00 a.m., EFO Flying Meeting**, Midwest RC Society 7 Mile Rd. flying field - watch the Website for possible changes due to weather and flying field conditions.

**June 4, Saturday, 8 a.m., Keith Shaw Birthday Electric Fly-in**, Near Coldwater, MI (Details in this issue.)

**July 9 & 10, Saturday and Sunday, 38th Annual Mid-America Electric Flies**, 10 a.m. both days (Details in this issue.)

**Attention:** To the family of Mr. Willie McMath. He was a warm and friendly guy and he will be much missed at the flying field.

<https://www.legacy.com/us/obituaries/name/willie-mcmath-obituary?id=33809710>

Thanks you so much for the link Mr. Ken Sulkowski.



The Ampeer/Ken Myers  
1911 Bradshaw Ct.  
Commerce Twp., MI 48390

<http://www.theampeer.org>

### March Monthly Meeting:

**Date:** Sat., May, 7, 2022 **Time:** 10:00 a.m.

**Place:** Midwest RC Society 7 Mi. Rd. Flying Field