<table>
<thead>
<tr>
<th>July</th>
<th>The EFO Officers 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>President:</strong></td>
<td>Vice-President:</td>
</tr>
<tr>
<td>Ken Myers</td>
<td>Richard Utkan</td>
</tr>
<tr>
<td>1911 Bradshaw Ct.</td>
<td>240 Cabinet</td>
</tr>
<tr>
<td>Commerce Twp, MI 48390</td>
<td>Milford, MI 48381</td>
</tr>
<tr>
<td>Phone: 248.669.8124</td>
<td>Phone: 248.685.1705</td>
</tr>
<tr>
<td><strong>Secretary/Treasurer:</strong></td>
<td></td>
</tr>
<tr>
<td>Rick Sawicki</td>
<td></td>
</tr>
<tr>
<td>5089 Ledgewood Ct. W. Commerce Twp., MI 48382</td>
<td></td>
</tr>
<tr>
<td>Phone: 248.685.7056</td>
<td></td>
</tr>
<tr>
<td><strong>Board of Director:</strong></td>
<td>Board of Director:</td>
</tr>
<tr>
<td>David Stacer</td>
<td>Arthur Deane</td>
</tr>
<tr>
<td>PO Box 75313</td>
<td>21690 Bedford Dr.</td>
</tr>
<tr>
<td>Salem, MI 48175</td>
<td>Northville, MI 48167</td>
</tr>
<tr>
<td>Phone: 313-318-3288</td>
<td>Phone: 248.348.2058</td>
</tr>
<tr>
<td><strong>Ampeer Editor:</strong></td>
<td></td>
</tr>
<tr>
<td>Ken Myers</td>
<td></td>
</tr>
<tr>
<td>1911 Bradshaw Ct.</td>
<td>1911 Bradshaw Ct.</td>
</tr>
<tr>
<td></td>
<td>Walled Lake, MI 48390</td>
</tr>
<tr>
<td></td>
<td>Phone: 248.669.8124</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No Mailed Ampeer Subscriptions</th>
<th>The Next Meeting:</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 13 &amp; 14 it’s the Mid-Am, 10 a.m., Midwest 7 Mi. Rd.</td>
<td></td>
</tr>
</tbody>
</table>

**What’s In This Issue:**

---

**BP Hobbies Closing Its Doors**
From BP Hobbies via email

*I have used BP Hobbies, for most of its 19 year existence, to purchase especially hard to find items that were not available elsewhere. I guess I just didn’t purchase enough from them.*

*I did notice that they were not at the Toledo RC Expo in April of this year, and I did wonder why. KM*

BP Hobbies Monthly Newsletter - 2019

**Notice:**
After 19 years of owning BP Hobbies, we’ve decided to put BP Hobbies on hold for a while. Thank you for you business. We hope to serve you again in the future.

The entire BP Hobbies catalog of remaining products has been put on special closeout pricing. Items that were already on closeout have been reduced 50% of the closeout price.

Orders will be filled on a first come first serve basis. If we run out of stock on any item in your order we will continue to ship you the remaining items in your remaining order.

Since we are selling everything at closeout pricing there will be no free-shipping or shipping discounts.

Please allow 7-10 days for us to complete your order. Since Jennifer may be starting a new job any day now orders may be filled on weekends instead of during the week.

Thank you for your support,
BP Staff

**Sometimes You Just Get Surprised! Don’t Let This Happen to You!**
By Ken Myers

I purchased the FMS SuperEZ trainer to be used as a club trainer in 2016.

The first part of my review of this plane is in the March 2018 *Ampeer*. [http://theampeer.org/ampeer/ampmar16/ampmar16.htm#SUPEREZ](http://theampeer.org/ampeer/ampmar16/ampmar16.htm#SUPEREZ)

I continued the review in the April 2016 *Ampeer*. [http://theampeer.org/ampeer/ampapr16/ampapr16.htm#SUPEREZ](http://theampeer.org/ampeer/ampapr16/ampapr16.htm#SUPEREZ)

Other articles regarding this excellent trainer followed.
1. A Change in the Stock ESC for the FMS SuperEZ (June 2017)
http://theampeer.org/ampeer/ampjun17/ampjun17.htm#SUPEREZ
2. The April EFO Meeting - Ken Myers describes how he converted his FMS SuperEZ trainer to A123 batteries (June 2017)
http://theampeer.org/ampeer/ampjun17/ampjun17.htm#MEET
3. More on the ESC Problem in the FMS SuperEZ (July 2017)
http://theampeer.org/ampeer/ampjul17/ampjul17.htm#ESC
4. Some FMS SuperEZ Models (November 2017)
http://theampeer.org/ampeer/ampnov17/ampnov17.htm#SUPER

In the April 2019 issue, I had an article titled, “FAA Reminder”.
http://theampeer.org/ampeer/ampapr19/ampapr19.htm#FAA

The photo shows the bottom of the SuperEZ to demonstrate where I am placing the required FAA number on my planes.

On the day that I took the photo, I had completed an entire spring inspection.

Little did I know that I would not fly in the spring!

I physically went through the whole airframe and checked all of the nuts, bolts, surfaces, hinging and all of the normal inspection items. I double checked that the radio was still operating correctly and that the control surfaces were still operating in the proper directions.

It was probably the best “spring inspection” I’d ever done in my whole life.

After the photo was taken of the FAA number placement, I sat the plane in its Robart stand and waited for spring to arrive.

On Sunday, June 9, I finally had a chance to fly the plane. Skymasters’ CD Pete Foss was holding his electric fly-in on that day.

Even though the weather wasn’t that great, see the Skymasters’ electric fly-in write up in this issue, I decided that I did want to fly.

After charging the 4S A123 1000mAh pack, I installed it in the aircraft.

Before taking the plane to the flight line, I did a normal movable flight surface check with the radio.

The elevator did not move at all. The rudder, ailerons and throttle all worked.

Since it wasn’t the best flying weather, I chose to diagnose the problem right then and there.

I swapped out the rudder servo connection to the receiver and placed it in the elevator connection to the receiver. The elevator control stick, on the transmitter, moved the rudder just fine.

That demonstrated that the receiver and transmitter were working as they should and that the problem was the servo.

At home, I extricated the problem servo from the ARF airframe at home and then replaced it with a known good servo.

All is well, and the FMS SuperEZ should be ready to go, once the weather finally cooperates.

The point? You just never know when something is just going to stop working in your
radio system. Nothing had happened to that airframe, and yet, the servo died for no apparent reason. It could have happened on the next flight.

Let’s respect that flight line and fly safely out there!

The 2019 Skymasters’ Electric Fly-in & Bonus Keith Shaw Birthday Event

Unfortunately, Sunday, June 9, 2019 was not one of the best weather days to hold an electric fly-in event. CD Pete Foss had everything ready, and had previously hosted the night electric fly-in the previous evening.

The day was overcast with fairly high winds with some pretty good gusts. Of course the winds and gust were blowing across the runway.

There were a few occasional rain drops, but no real rain to dampen the participants or their spirits.

Folks continued to arrive through the morning until several planes were in the air at once, and there was almost continuous flying until lunch.

Lunch was great with a choice of hamburger or kielbasa. Donations for the lunch were gratefully accepted.

The lunch was topped off with a special birthday cake baked by Carolynn Foss for Keith Shaw. Delicious! Happy birthday Keith, you are now older than me. We’ll, at least for a month.

Keith received a birthday card with a hand-launch glider punch-out in it. Of course he had to assemble it right then and there.

The first photo shows him adjusting it for its maiden flight.

The next photo shows the plane ready for its first launch.

It was still a great day to be with friends!
Upcoming Flite Fest 2019
Via email from Flite Test

Flite Fest 2919
July 11 - 14
8050 Lee Rd.
Malvern, OH 44644

Flite Fest is a family-oriented event that focuses on bringing R/C aviation enthusiasts together for four days of fun-filled learning and adventure. The event is designed for everyone passionate about building and flying. Whether you’re an R/C beginner or an R/C expert, Flite Fest will have something to interest you.

Flite Test encourages members of the R/C community to share their passion with others by connecting people in an online community. Flite Fest is our way of bringing that community together and introducing those unfamiliar with R/C to the hobby we all love. This annual festival is designed to include the entire family.

Much more information about this event can be found at: https://www.flitefest.com/ohio?

Flightline Hobby For Sale
From Jennifer Duncan
Email: jduncan@wedgewoodrealtyservices.com

We are pleased to represent John Hoover with the announcement of the sale of his Hobby Shop business, Flightline Hobby. This is a great opportunity for someone to buy a well established and multifaceted business. Please see attachment for details.
Glenn Bianchini
Jennifer Duncan
Wedgewood Realty Services
Office Phone: 248-628-4818

Well Established Hobby Shop Business
For Sale
PRICE $ 249,900

Included: $150,000 In Inventory Point of Sale System Furniture & Fixtures

1200 square feet that is fully stocked with with inventory for all hobbyists, specializing in RC planes, cars, drones, boats plus trains & more!

LOCATION: Orion Township MI
High Traffic Area in Strip Mall with two National Brand Anchor Stores

There are more positive facets that are best seen by interested buyers. To arrange an opportunity to see and discuss all aspects of this business call: Glenn Bianchini 248-496-2017 or Jennifer Duncan 248-495-6415
The January 2018 EFO Meeting

The meeting was held at Ken Myers’ house on Wednesday, January 10, 2018. The attendance was very good, and the sharing was absolutely excellent!

Keith Shaw lead off the evening by sharing his recently completed Sig 1910 Deperdussin. http://sigmfg.com/cgi-bin/dpsmart.exe/IndexAircraftF.html?E+Sig

The plane has a wingspan of 49.5” and wing area of 479.8 sq.in. Keith has it powered by a 2S A123 1100mAh pack and a Cobra 2204 outrunner. As always, Keith had add his oven special touches to it including its own special carrying case.
EFO vice-president, Richard Utkan, shared his Flite Test Nutball.

https://www.flitetest.com/articles/nutball_scratch_build

He painted it. It is outfitted with a “Blue Wonder” type outrunner and 2S 1300mAh LiPo. It has been flying indoors this indoor season, and it flies fine. Especially notable were the wheels made from wine corks and pool “noodles” foam.

Hank Wildman shared one of the most unique things I’ve seen in my long RC career. He created a launch vehicle for his new Twister with a 70mm fan. The launch vehicle is made mostly of PVC pipe and parts from the RC car world. The vehicle is powered by two old motors from past Twisters. The vehicle is driven and steered by another person, as the plane, flown by the pilot, flies off of it. It took a lot of unsuccessful tries to get it right, but it IS working now. I’d love to see it in action!

Denny Sumner shared that he was just finishing up his Pharaoh low-wing sport plane. The plane is a Mark Rittinger design, and Denny built his plane from the plans he’d purchased.

Denny’s build thread can be found on RC Groups.

Owen Morgan brought two planes to share.


Owen Morgan brought two planes to share.  He built a new hatch for it and also changed the rigging. It uses the stock motor and has an air entrance under the prop and air exit, cover by part of plastic spoon on the bottom. He’s also added flaps. He noted that it flies very nicely.

He also showed off his first FPV flying wing. It is the Recruit from Ready Made RC. It does fly with a stabilizer onboard.

I forgot to get a photo, so here is one from Ready Made RC’s Web site.

Roger Wilfong shared a piece of “remade” RC history with us. He reconfigured a Kraft “Brick” to accept a 6-channel Tactic TR624 receiver and
'stole' the guts from some old Hitec servos he had lying about.

I asked Roger for some photos, as I’d forgotten to take any of this really cool ‘update’. He sent along some photos, as well as the following.

Here are the photos and a little how-to.

Rummaging through my junk box (er, basement) this fall, I came across a Kraft 2 channel brick on an old, 72 mHz frequency - I have no idea where the transmitter is. I got to thinking that it would be easy to swap out the guts for a modern 2.4 GHz receiver and servo electronics. I figured it would be an interesting afternoon project.

Briefly for those not familiar with it, the Kraft brick was a 2 channel airborne radio system, ca. 1972-4. While some might think it is a predecessor to today's UMX bricks, it was actually a reincarnation of Hal deBolt's Live Wire planes radio installation from the 1950's. All the Live Wire planes had boxy fuselages with a common size radio compartment that accepted a tray that held the tube type receiver, batteries and actuator. The tray was suspended in the radio compartment by rubber bands and could be quickly (relatively) moved from one plane to another. The idea came back in the early '70s with a proportional brick containing a receiver and two servos. It was usually teamed up with a 2 channel transmitter for an inexpensive radio system. And, you could do the quick swap between planes by just removing 4 screws and disconnecting a couple of push rods.

For the conversion/update, all that was retained was the case, servo gear trains, motors and feedback pots. I removed the two Kraft circuit boards; the smaller receiver RF section, and the larger decoder and servo drivers. I cut wires to the motors and pots close to the board and tagged them.

I took a Tactic TR624 receiver out of its case, located it on the end of the bottom of the brick's case and drilled a hole for the antenna in the side of the case, next to where the antenna attached to the TR624's board. Conveniently, the length of the TR624's board got attached to the case with a patch of servo mounting tape.

Next, two old Hitec 300 standard size servos were fished out of the junk box. One was functional, but the other had a stripped output gear. I pulled the boards out of each, and connected each of the brick's motor/pot leads to where the motor and pot leads had been connected on each servo board. Then I shortened the servo connector leads so they'd just reach the TR624. The boards were mounted to the top piece of the Kraft brick's case with servo tape.

I set the brick up in a 2 or 3 channel configuration by plugging the servos into the aileron and elevator channels on the TR624, and adding a 3" servo extension plugged into the throttle channel for connecting a flight battery or an external, BEC equipped ESC. It would be easy to configure it for 4 channels (with either 1 or 2 servos) by simply moving the connector currently on the TR624's aileron channel to the rudder channel, and adding 1 (or 2) servo extensions to the aileron (and 2nd aileron) channel to reach external aileron servo(s) - there's enough room in the hole in the bricks case to get the extra wires through.

One of the neat features of the Kraft servo mechanics is that the nylon output gear is press fit to the feedback pot's shaft. The servo output shaft's end is square instead of the multiple spline ends of modern servos. The end of the pot shaft has a threaded hole to accept the servo horn's retaining screw. But, there is also a slot across the end of the shaft. This slot allows you to infinitely adjust the centering of the servo. All you do is turn on the radio, stick a small screw driver in the slot and twist right or left - the servo output will rotate in the opposite direction until you release pressure on the screw driver.

It took a little over an hour to make the conversion. Now I need to build a period model to mount it in; Ken Willard's Top Dawg comes to mind (Mark Rittinger did an electrified update to it a couple of years ago), or maybe I'll do that Preying Mantis I got the plans for almost 50 years ago.

Roger

(Photos on next page)
Ken Myers shared information on his new Hitec X1 PRO PROFESSIONAL BALANCE CHARGER/DISCHARGER and Hitec POWERBOX 17A SWITCHING DC POWER SUPPLY. The charger was reviewed in the February 2018 Ampeer. http://theampeer.org/ampeer/ampfeb18/ampfeb18.htm#CHARGER

He noted that it works very well, and that it is an extremely good value. He showed a sheet where he compared many different stated watts out to their cost per watt out, and this charger rated as an excellent value. It is a far better value than the typical 50W - 80W AC/DC chargers that most beginners end up purchasing. It is even priced lower than some of those lower watt chargers!

Charging at higher than 1C was also discussed by the group.

Ken had recently done some charge tests at 1C, 3C and 5C.

After the sharing session was over, snacks were laid out, and everyone had a good time munching and continuing great conversations.

35th Annual Mid-America Electric Flies 2019
AMA Sanctioned Event
(Proof of AMA membership required to fly)
Saturday, July 13 & Sunday, July 14
Hosted by the:
Ann Arbor Falcons and Electric Flyers Only

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
kmyersefo@theampeer.org
http://www.theampeer.org for updates & info
Keith Shaw (734) 973-6309

Flying both days at the Midwest R/C Society Flying Field - 7 Mile Rd., Salem Twp., MI

Registration: 9 A.M. both days
Flying from 10 A.M. to 4 P.M. Sat. & 10 A.M. to 3 P.M. Sunday

Pilot Entry Fee: 18 and over, $15 Sat. - $10, Sunday, (ask about the family rate), Under 18, FREE

Parking Donation Requested from Spectators

Saturday’s Awards
Best Scale
Most Beautiful
Best Ducted Fan
Best Sport Plane
New Foam Flurry for NCM Aircraft
CD’s Choice

Sunday’s Awards
Best Scale
Most Beautiful
Best Mini-Electric
Best Multi-motor
New Most Unique NCM Aircraft
CD’s Choice

Planes Must Fly To Be Considered for Any Award
Saturday’s & Sunday’s Awards:
Plaques for 1st in each category

Open Flying Possible on Friday
Night Flying Possible, Weather Permitting,
Friday & Saturday Nights
Refreshments 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!

Merchandise drawing for ALL entrants

Special Events Again this year for NCM (Not
Conventional Materials) aircraft
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.

Most Unique NCM Aircraft Award: An award will be given
on Sunday to an aircraft in the NCM category that is judged as
'most unique' by the Mid-Am panel of judges.

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.

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, Salem Twp., MI 48167 -
numbers are on the fence.

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 northwest 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

July 13 & 14, Saturday and Sunday, 35th Annual Mid-America Electric Flies, details in this issue

August 23 (Friday) & 24 (Saturday), CARDS Electric Fly-in (more details in the next issue)

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

The Next Monthly Meeting:
Date: July 13 & 14 the Mid-Am Time: 10:00 a.m.
Place: Midwest RC Society 7 Mi. Rd. Flying Field