

Flypaper 2019

**Official Newsletter of
The Flying Electrons of Menomonee Falls**

Our Mission: To advance the RC flying hobby by providing a safe and enjoyable environment for RC pilots of all skill levels.



President's Preflight



Who's At Fault?

I suspect that this headline got your attention?

A couple of months ago, during one of our club meetings, we had an open discussion about flight rules and who would be at fault during a mid-air collision. It seemed that there was some situational confusion about what is considered an accident and what constitutes liability for a member.



The conversation evolved to describe a number of scenarios that could lead to two pilots meeting in the air but it all comes down to who is following the club flight rules

See **FAULT** on Page 3.



What's Going on with those Meters?

With the recent upgrades made to our charging stations at the field, Electron members now have on-site charging capacity to handle virtually any practical need.

One can say that our system is once again, state-of-the-art, as it was when it was first designed and installed. As time has passed and more and more flyers adopt electrics, upgrades become necessary. With increased demand comes a need for increased power. I asked

Mark Polzin to explain some of the features of the new system since he was the primary architect of the upgrade. If you fly electrics, you'll find this information to be helpful.

(See page 6 for Mark's article.)

Issue Highlights

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Next Meeting

Possible Official Introduction of FPV to the Airfield and Review of FPV Field Rules.

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Club Meetings:
Second Sunday of Month
7:00pm
De Marini's Restaurant
N88 W15229 Main Street
Menomonee Falls, WI 53051

Flying Site:
N61 W17000 Kohler Lane
Menomonee Falls, WI
www.flyingelectronics.com

Please Note:

New Roller Derby Combat Schedule

A few weeks ago we established a roller derby combat schedule at the field. This schedule was established in part due to concerns other members had regarding possible damage to their aircraft due to a renegade Assassin.

We've had close calls in the past and the members are rightly concerned. So, what we want to do is ensure that no destruction occurs in the future.

Is that even possible?

No, it's not. Even when we're not flying combat things can happen and we all know that. What we are trying to do with this schedule is let weekday, evening and weekend flyers know when they can come to the field and park their big expensive air-

craft in public areas with out worrying that a delta wing might hit it.

Mondays	10:00AM to 2:00PM
Wednesdays	10:00AM to 2:00PM
Fridays	10:00AM to 2:00PM
Saturdays	10:00AM to 2:00PM

The schedule published below DOES NOT mean that you can't fly your other planes during these days and times. It

means that the combat might be there too.

All Combat participants always stand down for member flyers of any kind at the field, and they are attentive in seeing that everyone gets airspace.

If however, you want to bring out a big expensive aircraft during the Combat/Roller Derby schedule and you're concerned that it could get hit, please be prepared to park your treasure somewhere you consider safe.

Flypaper Contact Information

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The Flypaper welcomes for consideration articles of interest, recommended video links, letters and questions you may have about the club, meetings, newsletter, and events. Please direct those communications via email to tjacobs421@att.net. We will respond to all inquiries.

Next Club Meeting

Sunday, July 14th
7:00PM

De Marini's Restaurant

De Marini's Restaurant
N88 W15229 Main Street
Menomonee Falls, WI 53051

Bring a Friend or a Plane to Show & Tell

FAULT Continued from page 1

when a collision occurs to cast blame. Typically when one pilot is at fault during a collision, the pilot at fault should compensate the pilot that lost his aircraft.

Some pilots are very attentive to the flight rules while others, not so much. Here are some of the rules that should be strictly observed.

1. Do not take off from the taxi area. Taxi your plane to the runway and then take off. Hand launch aircraft six steps into the taxi area. This also applies to bungee launches.
2. Fly your aircraft from the pilot flight line, in close proximity to other pilots, not from behind or off to the end of the field. Other pilots need to be able to communicate with you for take-offs and landings, so you need to be at a clear audible distance.
3. Never land your aircraft in the taxi area. This area runs 25 feet out from the pilot flight line and should be used for taxiing and hand launches only. Land your aircraft on the runway and taxi it to the flight line. Hand launched aircraft should land on the runway as close to the 25 foot line as possible to be retrieved from the field.

Shared Airspace.

The sign at the airfield identifies types of aircraft that require some form of privacy in the air.

We posted this gentle reminder concerning shared airspace at the field last year and it would be wise for everyone to take an-



other look at it. It simply details the common courtesies for sharing airspace.

Non-Shared Airspace

- 3-D Pilots
- Pattern Pilots
- Heli/Rotary Pilots (Except under mutual agreement)
- Combat Team Pilots
- Jet Pilots (Except under mutual agreement)
- Pilots with other concerns (skill set issues or maiden flights)

Shared Airspace

- Training Pilots
- Sport Plane Pilots
- Warbird Pilots
- Small Foamie Pilots

Because the above airspace guidelines are just that, "guidelines," there are exceptions.

One should never go up under a non-shared airspace situation without permission from the current pilot in the air. A pilot that is flying a large 3D aircraft does not want to be surprised by an unknown aircraft in the air while flying maneuvers. This is also true for pattern, jet and heli aircraft occupying the main field airspace.

If you do go up without notice and a collision occurs, you're at fault and subject to possible hefty replacement expense to the offended pilot.

If you do go up and no collision occurs, you are still at fault for not observing safe flying practices and could be subject to a form of sanction or penalty for repeated occurrences.

What kind of penalty could be levied?

(See **FAULT** on page 8)

The 2019 Club Fun Fly



By Mike Batson

The day started out slowly, with thunderstorms and rain looming all around us. Eventually about 20 members showed up to enjoy what turned out to be a good day of flying.

Lots of combat flying was had while the threat of thunderstorms stayed with us most of the day. Aside from a little bit of rain around 11:00AM or so, we pretty much got lucky with the storms staying north and south of us, though we did get the occasional lightning and thunder display.

Greg Inkmann made an appearance with his nitro twin and his beautiful Super Buccaneer. Joe Burzinski made some perfect flights with his 10S pattern plane, and I finally got my Seagull Super Decathlon to fly after spending all last summer dealing with some nasty ground looping issues on takeoff.

The only mishap of the day was me, trying to maiden

my Freewing ME-262. She caught a gust of wind and cart-wheeled to the right during liftoff.

Good food was had thanks to Tom and his wife, along with some of us who relieved Tom when it was time to fly some combat.

Greg Inkmann handled the cooking this year and the concession took in nearly twice what it did last year. Mark Polzin showed up with a few of his larger helicopters and even one of our recent Builder's Workshop Students showed up to fly her newly won E-flite Apprentice.

Good conversation and good flying all day!

3D Printing Part II



After finishing assembly of my Creality Ender 5, I asked Bob Goldstein to stop by and take a look at it before I fired it up. Bob had warned me earlier that there may be a few adjustments I'd want to make before getting started, so we delved in to take a look.

First of all, my collection of wires needed to be organized and arranged so that the full travel of the print head could be managed without binding or conflicts. So we rerouted a few of the lines and made sure that they would be out of the way.

We checked the travel of the print head rails and noticed some rough spots. These are areas where the rails seemed to bump or stumble as they pass across the width and depth of the unit. What was needed here was some adjustment to the "eccentric" bushings that tighten or loosen the rollers guiding the

print head in the X and Y axis. After a little tweaking, the rollers seemed to function more smoothly and the head could be moved easily in both directions.

After this we noticed a problem; the print head nozzle didn't appear to be perpendicular to the "hot bed." After closer examination, it appeared to be bent in some way.

We disassembled the print nozzle assembly and found that one of the components had been cross threaded into the brass heating block. This was not good.



After messing around with it and trying to re-tap the block threads, the threaded tube broke down and cracked. Bob had a replacement unit, so we decided to swap mine out for the broken one.

The unit is fairly well made but there are a lot of moving parts that need to be examined and maintained. The good news is that most of these replacement parts are inexpensive and available on line. An entire inner print head assembly with wiring at-



Eccentric bushing

tached is only about \$18.00 on line and there are sites that carry a broad array of useful components. I ordered two assemblies; one to replace Bob's and another just to have on hand.

I replaced the head, reattached heating element and sensor. I rechecked the movement smoothness of the rails and everything seemed to be working fine.

One other thing Bob noticed was that the Z-axis could not be rotated manually so that the hot bed could be move up and down by hand.

I would never have know that it should be movable by hand but it raised a red flag for Bob. Bob adjusted a set screw at the base of the Z-Stepper and the hot bed was now movable.

These are issues not covered in the minimal assembly guide as most people that purchase a 3D printers have some working knowledge of how they work.

As Ed Malec, Dave Schroeder and I have made visits to schools, we've noticed the increasing presence of 3D printers in the technology class rooms. More and more young students are adding 3D printing to their everyday knowledge base, so it's something to recognize as a technology that's here for the long term.

At this point, I still haven't fired up

See **PRINTER** on page 10

Charging Station Meters



What Do These Numbers Mean?

Electric aircraft are now available in all shapes and sizes and need power from small 1S or 2S to large 6S or 12S battery packs. We now have four charging stations at the club. Three 12-volt and one 24-volt stations, and they have the voltage labeled on the 60 amp circuit breaker box. This is the light grey outside outlet box that can be opened to allow for resetting of the circuit breaker.

This breaker is there to protect our 12-volt deep cycle batteries stored in the ceiling of the pavilion. The two west stations are powered by two new 12-volt deep cycle batteries purchased this year. The other 12-volt station is on the third pole



from the west and is powered by the two deep cycle batteries the club purchased two years ago.

On the east pole (closest to the concession) is a 24-volt charging station powered by two new deep cycle batteries wired in series. This station is intended for larger batteries like 4S and 6S packs. Although 12-volts works fine, these stations are not as efficient in charging these larger packs if the supply voltage is only 12-volts and they limit the current the charger can supply to the flight pack.

During the upgrade, we installed new solar panels and controllers that are more efficient and collect about 95% of the energy that the solar panels produce. Each solar panel can put out 100 watts of

(Continued next page)



energy. The controllers are located up in the rafters and have a display that can show lots of information. Right now they are set to show only the current in amperage that is flowing from the controller to its connected battery bank.

Each battery is capable of 100 amp hours of energy or 200 amp

hours when two batteries are wired in series. Now, to make the batteries last, we only want to discharge them to 50%, or take out 100 amp hours which should only bring the voltage down to just over 12-volts. Remember, this would be 12-volts in a steady state with no aircraft battery chargers attached, or any solar power being put back into the deep cells. The solar panels are always trying to recharge the batteries when the sun is out, so it is very hard to tell the current state of charge of the battery bank from the voltage alone. This is where the new meters come in.



There is a new meter by each charging station that will give some good information about what is going on with the battery bank. The first number is the voltage of the bank, this can drop below 12-volts or even 11-volts when the bank is under heavy load (when people are charging flight packs.) This is normal and OK.



Next is the measure of current that is being pulled

out the bank at one time when all chargers are connected. If the draw exceeds 60 amps the breaker in the outlet box will trip and need to be reset. **When choosing a charging station, make sure your charger won't push the amperage over this limit.** Just refer to how close the amperage level is to its maximum before you plug in. If it appears close, choose another station.

In the lower left corner of the meter is power in Watts (AMPs x Volts.) This reading is not significant in that it only provides the current power draw.

The final number is the most telling of what is happening to the energy in the bank. This is Energy or Watt Hours or the Amp hours x Volts. As I stated earlier, our 12-volt battery banks should only be discharged down to 100 amp hours for maximum life expectancy, so the Watt Hours would be 100 amps hours times 12-volts or 1200 Watt Hours. That is a lot of energy! The meter shows a cumulative amount so to see what has been used for the day you should look at this number in the morning and see how much more has gone out that day. I do reset this value every time I go to the field just to keep track.

The two west charging stations are powered by a single set of batteries, therefore you have to add the number of Watt Hours from the two west stations together to see how much has been taken out for that day.

Remember the solar panels are also restoring power back in as we are taking power out. I do not have meter on how much energy is replenished each day. The good news is we have never taken out the full 1200 Watt Hours to date to hit the 50% minimum in one given day. The bottom line is, we have plenty of

See **METERS** on page 8

METERS

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energy for our members to use.

Now, on the 24-volt station we have a 40 amp fuse on

the distribution panel and each charger is limited to 30, 20, or 10 amps (See label on fuse by connectors). That is still a lot of power at 24 volts and it provides a distribution of 480 watts for each charger. On the west 12-volt station we installed a fuse box inside the panel to limit each

charger to 20 amps also. So, if you go to charge and find that your charger is not working, it's likely that a fuse has blown. Just try one of the other plugs in that station. Be sure to leave me a note and regarding which plug set is not working and I'll replace the fuse. We installed fuses during the upgrade to protect everyone's charger from a short in someone else's system.

I hope this explanation was easy to follow and helps everyone understand the system better. If not just flag me down and I can try to help. We have lots of power ready and wait for the "ELECTRONS" members to come out and enjoy.



This month, Ed Malec offers up his Pizza Box build video from Flit Test. <https://www.flitetest.com/articles/flying-wing-made-from-a-cardboard-pizza-box>

SR-71 Blackbird Giant Remote Control Turbine Jet takes to the air https://www.youtube.com/watch?v=1YGUROZ_Pg

Builder's Workshop Simple Scout Maiden Flight and Performance Test <https://www.youtube.com/watch?v=994x4PQ3Fe0>

(FAULT Continued)

If it's determined that this is an ongoing problem, you could lose your right to fly at the field.

Flying the pattern

When multiple planes are in the air, some coordination needs to take place. This means "flying the pattern." If taking off from east to west, the pattern is clockwise. Taking off from west to east creates a counter-clockwise pattern or traffic flow. Following this rule totally eliminates head on collision situations.

If you want to perform some maneuvers, perform them in within the pattern. Just give yourself enough forward and aft airspace to handle the maneuver.

If you step out of the pattern and a collision occurs—guess what, you're at fault.

The takeaway from this article is; if you know the field flight rules, and follow the field flight rules, and you'll never be at fault.

What happens if fault is disputed?

I've noticed that most members are alerting other members to the flight rule violations when they see them, and that's a good thing. It keeps us all in mutual check.

However, when a collision occurs and there's dispute as to who is responsible, members need to bring the incident to the board.

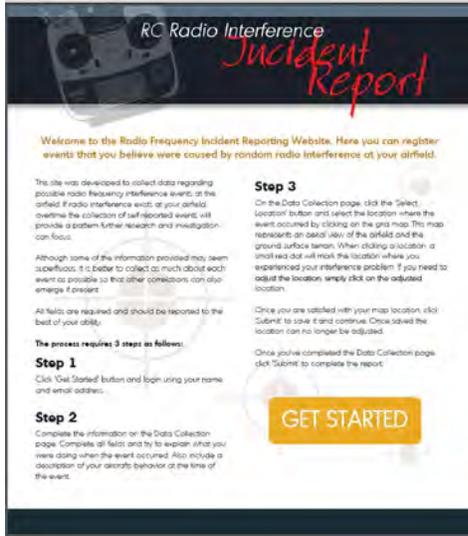
We'll hear out both sides and make a determination. If you see

a rule being constantly violated by a member after several reminders, the board needs to be made aware of that as well to take action. If you encounter ongoing safety violations, see our Safety Officer, Ed Malec to express your concerns. Ed will determine how it should be handled.

In closing, don't be afraid to remind your fellow members when you see a violation happening. We can all tell when a broken rule is accidental versus carelessness or laziness. Students in training are granted some experiential leeway, but seasoned pilots that cut corners make it more problematic for the rest of us.

Thanks for listening.

Incident Reporting System Now Online



This is just a gentle reminder that our "Incident Reporting System" is now on line and can be accessed by going to the club website and click on the "Contact." tab.

Full instructions are on the site to get your started.



FPV Update

The FPV committee has met over the last week and developed rules and guidelines for the introduction of FPV to the airfield.

We're hopeful that we will be able to present newly adopted field rules which will allow FPV aircraft at the field during our next club meeting.

The recommended guidelines have been sent to the board for approval and we are awaiting their decision.

-The FPV Committee

Hobby / Recreational Flying
What Can I Do With My Model Aircraft?

Having fun means flying safely! Hobby or recreational flying doesn't require FAA approval but you must follow safety guidelines. Any other use requires FAA authorization.

AVOID DOING ANYTHING HAZARDOUS TO OTHER AIRPLANES OR PEOPLE AND PROPERTY ON THE GROUND

- ✔ **DO** fly a model aircraft/UAS at the local model aircraft club
- ✔ **DO** take lessons and learn to fly safely
- ✔ **DO** contact the airport or control tower when flying within 5 miles of the airport
- ✔ **DO** fly a model aircraft for personal enjoyment

- ❌ **DON'T** fly near manned aircraft
- ❌ **DON'T** fly beyond line of sight of the operator
- ❌ **DON'T** fly an aircraft weighing more than 55 lbs unless it's certified by an aeromodelling community-based organization
- ❌ **DON'T** fly contrary to your aeromodelling community-based safety guidelines
- ❌ **DON'T** fly model aircraft for payment or commercial purposes

For more information about safety training and guidelines, visit www.knowbeforeyoufly.org

For more information, visit www.faa.gov/uas

Be Prepared for Emergencies!

Emergencies at the field can require a quick response. Be informed so you can give authorities the information they need to respond.

Tamarack Field

N61 W17000 Kohler Lane

FIRST AID BOX

(Located on the North Side of the Building)

Contact Police or Fire by Dialing 911

Community Memorial Hospital

W180 N8085 Town Hall Road
Menomonee Falls
262.251.1000

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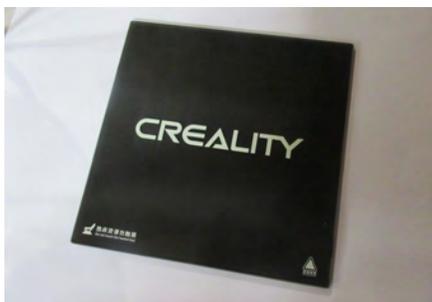
the printer. There are just a few more adjustments and observations to make.

Several components will be suspect if your printed parts don't come out perfectly. One has to do with the hot bed surface.

Although the surface provided is adequate for initial experimentation and testing, when you get to producing final parts every minor variation in the bed will affect quality.

The provided hot bed surface is made of aluminum and prone to warping. This is just the nature of soft metal. When you're dealing with laying down microns of plastic across several inches of space, you'll want the surface to be as perfectly even as possible otherwise the layering of plastic is uneven and the part is inferior.

One solution is to add a plate glass surface to the hot bed. These can be cut yourself or purchased for about \$20.00 online. The plate glass surface is not only extremely level, it's also extremely smooth which resolves the warping problem normally associated



with the original equipment.

Bob also recommended picking up a metal "Extrusion Mechanism." This unit feeds the filament from the roll into and through the tube to the print nozzle. Bob says that the plastic one that comes with the unit is OK to start



with as is the supplied bed but you may want to invest in one that will hold up over the long term, so I did. Again, this replacement part only cost about \$20.00.

One last preliminary recommendation from Bob was this; replace the supplied Micro SD card with a quality one. Apparently the micro SD supplied with the unit is not reliable so it's advisable to get one that is of good quality.

The 3D printer runs off an 8GB SD card. The card stores instruction for the printer as generated by the output program (more on this later.) You plug the SD card

into the Ender 5, start up the machine and it's supposed to follow all the instructions downloaded the card. Sometimes the Ender 5 gets lost and the production of the part fails. Many production failures have been narrowed down to the supplied SD card, and replacing it has seemed to resolve those problems.

Next Steps

Next time, we'll take time to level the hot bed and adjust the machine for optimal operation. At the writing of this newsletter, I've not seen one production part. So, what I need to do next is familiarize myself "Tinker CAD" and "Simplify 3D." These are the two software programs I'll use to create parts. Tinker CAD for design, and Simplify 3D for slicing

and driving the 3D printer.

I've been looking at these two programs and trying to get my head around how they work. There are a lot of tutorials out there for anyone that wants to learn and I'll list those with that topic.

Bob Goldstein also recently alerted me to a handy program available on Tinker CAD that will help in leveling my hot bed. I'll try that before my glass platen arrives.

Thanks Bob.

Until next month.

2019 Electric Event



Four rounds of Combat/Roller Derby involved at least ten pilots. The first three rounds resulted in little contact, but the last round littered the airfield with downed aircraft with only two remaining in the air at the end.



Most fun was the competition for fastest aircraft. There were six contestants in the speed contest. The fastest overall speed won an additional raffle ticket. Here's how it worked.

Before the event took place, Steve mapped out a distance the aircraft would travel and set the track for a speed competi-

Continued on next page.

This has already been a volatile year for club events. Since I took over concessions in 2017, I've been involved in almost every event we've had since. Each and every time, we've had to face possible weather conditions that could trigger trouble.

What I've learned over the last 18 months is that you need to look for that silver lining in those clouds.

We have the technology to forecast a significant rainstorm that will shut down an event and we watch it like a hawk. During the recent Electric Event, we watched the storm trends headed into Menomonee Falls and could see a short term potential storm that might pass through early in the morning during setup. The radar showed a significant window be-

tween that early storm and anything that could cause trouble behind it.

The result? . . . We had an excellent flying day and a great, although gusty day for all that attended.



Steve Huelsbeck, our CD for the day, had the event organized with an attractive

bank of raffle prizes and a couple of cool contests.

For the most part, jets ruled the day with over six in the air at one time flying an impressive and tight pattern around the field.



tion. Jeff Surges held a flag and stood at the east end of the field and Ken Pressman with a flag stood at the west end.

Three assigned "Timing Crew Members" pulled out their smart phones to access their "stop watch" app.

As a plane passed the starting line, Jeff threw down his flag and the timing crew started their clocks. Ken Pressman raised his flag when the plane crossed the finish line and the clocks were stopped.

Ed Malec averaged the three times and calculated the speed of each aircraft. Each pilot made three attempts and the best time was recorded for each.. The standings are shown in the chart above.

Pilot	Aircraft	Speed
Steve Huelsbeck	Frankenstein	150 mph
Kevin Malec	Avanti	141 mph
Nolan Henry	EFXtra 69	141 mph
AJ Henry	V900	131 mph
Paul Daniel	Habu	124 mph
Gene Schneider	ACRO	119 mph

Congratulations to Fast Steve for retaining his title with is modified speed plane. Steve, as some of you know, used to race cars in a former life. His aircraft is an example of what you might call a "Funny Car" in racing parlance.

But look out Steve! AJ and Nolan Henry are breathing down your neck..

Special Event Note:

During one of the speed flights, Nolan Henry almost lost his EFXtra 69, but made an incredible

high speed recovery to the gasp of spectators. The incident was followed by major applause.

This just shows you that it pays to keep you cool when you get into trouble.

Chris Milbauer did his usual masterful job as MC, keeping everyone in line and adding color to the flight demonstrations.

Later, Steve and Chris conducted the Electric Event Raffles and prizes were one by many.

On behalf of Steve Huelsbeck and myself, thanks to all that attended the event, and also those that worked behind the scenes to make it a success.

MEETING MINUTES

The Flying Electrons Membership Meeting Minutes (April 2019)

Meeting called to order at 7:03 pm

Attendee Count: 16 members

No raffle due to low attendance.

Guests: 2

Mini-Swap Items Available: No items available

New Members:

Bryan Kuklinski

Greg Inkmann (not present)

Jorge Mir (not present)

Promotions: Jorge Mir to Pilot, Greg Inkmann to Pilot and Instructor

Approve minutes as published in Newsletter:

Minutes were approved

Treasurer's Report

Tom Beyer reported on expenses including concessions and batteries for the charging stations. Income from new Memberships.

Secretary's Report on memberships

Chris Milbauer reports 3 new members, total membership is 128.

Clothing Sales Update

Tom Beyer reported that clothing is available at this meeting.

FAA Updates

In an FAA memorandum issued on 5/18/2019, the club is in the far western boundary that is still considered in restricted air space. The majority of our airspace is in unrestricted airspace. The AMA is working with the FAA to get this clarified. Bottom line, as of now we are still reporting to ATC at Timmerman Field. This doesn't affect any flying activity at our field. The 400 ft rule applies whether or not we are in restricted airspace.

Charging Station Update

Mark Polzin donated 24 volt and 12 charge stations. The Club supplied the batteries for these stations. If you have

a 24 volt charger and wish to use the 24 volt system see Mark Polzin for the proper connection. Mark will be writing an article for the newsletter to explain the tracking info these stations can provide.

Past and Upcoming Events

Builders Workshop Update/Education Event Recap

- Tom Jacobs report that 6 kids participated in the event, 2 of which were from the Workshop. Those 2 flew their creations.
- Good comments were received from the parents of the kids.
- We need more kids to make the workshop worthwhile (6-9).
- We would like more kids for the Education event (10-16)

Club Fun Fly Recap

- 20 flyers came out, poor weather day.
- No one took advantage of the Trim clinic that Joe Burzinski and Mike Dorna were present to put on.
- Concessions were up from last year.

Electric Event - June 23rd

Steve Huelsbeck said that he will have a good raffle this year.

Scale Event - July 7th

- Chris Milbauer gave some flyers to the members in attendance
- He encourages all to attend.

AirFest 2019

Airfest 2019 is working on having a full size Heli at the event.

Fond du Lac Warbird Show

- Tent for Warbirds over Midwest Aug 15-18?
- Tom Jacobs asked the membership about sponsoring and tent for the use of the Electron Membership. The membership had no objection. Chris Milbauer will handle the tent rent.

Old Business

Pilot "Sign-in" Board

The board decided to discontinue the requirement for pilots to use the "sign In" board. Members flying 72 MHz should still the board.

Introductory Pilot (IP) Program

We current have 2 persons enrolled in this program

Incident Reporting System - live this week

If any member has any type of radio issue, you are encouraged to use the reporting system on the club website.

New Business

FPV Flying at the field

- A general discussion was had about the rules for the pilots wishing to fly FPV.
- A committee of Mike Batson, Ryan Wehr, Kevin Malec, will review the work product of the board and make recommendations about FPV to the board.

Open Forum

- Bryan Kuklinski, brought up several items for consideration:
- Additional wind socks closer to the flight line (on the

fence line) for easier viewing while flying. Dave Schroeder will look in to this.

- Signage to be placed in the industrial park prior to club event for addition advertising. Tom Jacob will explore this.
- 60 year anniversary for the Club in 2020
- Possible club only picnic
- Celebrating 60 years at each club event with the culmination at the Charity event in Aug 2020
- Mike Batson brought up the possibility of bring back the night fly event.
- The need to have enough people to organize the event to make it safe for at the attendees.
- Whether or not this would be allowed under FAA and AMA rules.
- Ken Pressmen, lost more keys.

Next Meeting

Next Meeting - Sunday, July 14th, 7:00PM

Motion to Adjourn at 8:25 pm

Submitted By:

Christopher Milbauer, Secretary

Show & Tell



Kevin Malec:

Extreme Flight MXS 76 from a swap meet w/o electronics
X power 40cc electric motor, 12s



Jim Zahorik:

Carbon Z Yak 54 ARF from Horizon hobby. BL 25 motor Brushless outrunner



Jim Zahorik:

Sprit Glider, from a Kit. Made in China

The Flying Electrons 17th Annual Scale Festival 2019

Sunday July 7th, 2019

All SCALE Radio Controlled Model Aircraft are Welcome.
FLY OR DISPLAY!



Spectators Welcome!

Come Out and Enjoy Great Conversation, Flying & Food!

Registration starts at 8:30AM

Flying from 9:00AM to 2:00PM

AMA Membership required to
FLY or SHOW.

All flying aircraft must be test flown
prior to this event, no test flights
please

\$7.00 Landing Fee.

Maximum 3 Aircraft allowed to
compete for Cash.

Great Food On Site with FREE Parking!

*(Scale Documentation would be nice but not a
requirement to enter)*

For more information contact:

Chris Milbauer, Phone: 414.750.2740, Email: chrismilb@att.net

Check the Flying Electrons website for more details.

www.flyingelectrons.com

Event Information

- All Scale Aircraft are Welcome
- Cash Prizes Awarded, over 9 FUN SCALE Categories
- Best Flying Scale - \$20 for each WWI, WWII, SPORT, and Jet
- Best Scale Built from Kit, all types - \$20.00
- Best Flying ARF (Almost Ready to Fly) "ARFmanship" - \$20.00
- Best Flying Scale Performance by an Electric - \$20.00
- Best Flying Scale "SCRATCH" built - \$20.00
- Best Static Scale "Hanger Queen" - \$20.00

(All prizes will be awarded at 2:00PM)

LOCATION: N61W17000Kohler Lane, Menomonee Falls, WI 53051

From Hwy 41, take Siler Spring Drive Exit and go West. At Pilgrim Road, turn North. Take Shawn Circle East, then left onto Kohler Lane to the Water Tower. Look for signs directing you to the airfield.

AstroWings of Grafton, Wisconsin 30th Annual Charity to Benefit Boy Scout Troop 840

FLY-IN AND SWAP MEET

Saturday, July 13th from 9 AM to 3 PM

(rain date: July 14th)

Scale Planes • Jets, Warbirds • Acrobatics • Helicopters

**The Public is Welcome;
Concessions and Facilities on Site;
Bring your own lawn chair
or beach blanket!**

**Pilot's Raffle Includes
These Great Planes:**

RC Pilots Registration Fee \$5 (including parking fee);
Swap Fee \$5; Parking Fee \$5 per vehicle;
Registration and AMA Membership Required to Fly;
Gates open 7 AM; Pilot registration 8 AM;
Pilot's meeting 8:30 AM; Open flying 9 AM;
Pilot's raffle drawing 3 PM



Freewing Super Scorpion



Freewing Mirage 2000C V2 Tiger



AstroWings is partnering with
Boy Scout Troop 840 to host the event.
A portion of the proceeds go to fund
Scouting activities.

This is an AMA Sanctioned Event.

For more information contact
Greg Williams, Event Manager at
(414) 761-8320 or cobrabuilder@aol.com
www.AstroWings.com



Directions:
I-43 to Exit 93 (Hwy 32 North)
First road on the right will take
you to the parking area.
(Approximately 22 miles north
of downtown Milwaukee)



You're All Invited to
**the 7th Annual Jim Wahner
"Dead Chicken"**



Brought to you by

the "Flying Electrons Screaming Chicken Squadron"

Thursday, August 22, 2019

From 10:00AM to ?

Lunch will be promptly served at 12:00 Noon.

Come out and finish off the summer flying season with some weekday flying, camaraderie and lunch. We will serve a traditional "Dead Chicken" lunch with all the fixings.

Guest are Welcome.

\$10.00 per person

Please RSVP by Monday, August 19th, 2019

to Chris Milbauer at chrismilb@att.net



Weather permitting, see and examine a full scale helicopter on site and have your family or personal photo taken for FREE!

Food & Refreshments provided by the Boy Scouts

Parking - \$5.00 per car load

General Public and Pilot Raffle

\$5.00 Landing Fee for all pilots

Pilot registration starts at 8:30 AM

Discovery Flights!



Try your hand at flying an RC model aircraft with our Discovery Flights!

The Flying Electrons

in cooperation with

**Menomonee Falls
Boy Scout Troop 110**

Radio Control AirFest 2019

**Saturday, August 24th
9:00AM to 2:00PM**

(Rain Date: Sunday, August 25th)

***A portion of the proceeds go to benefit
Menomonee Falls Boy Scout Troop 110!***

**OPEN TO THE PUBLIC
Spectators Welcome!**

Huge Air Show at Noon!

Tamarack Airfield is located at
N61W17000 Kohler Lane, Menomonee Falls, WI

(Just behind the Frito-Lay Distribution Center)

To learn more about the Flying Electrons
log on to our website at:
www.FlyingElectrons.com

**Event Director: Tom Jacobs Phone: (262) 527-2481 Email: tjacobs421@att.net
www.FlyingElectrons.com**

(This is an Academy of Model Aeronautics Sanctioned Event #8060)

2019 Flying Electrons & Local Area Events Calendar

Date	Time	Event	Club
Tuesday, January 1st	8AM to 11AM	Chili Dump	Flying Electron's Airfield
Sunday, January 13th	7PM	Club Meeting	De Marini's
Sunday, January 27th	9AM to 2PM	RC Association Swap Meet	Washington County Fairgrounds www.facebook.com/milwaukeeercassociation
Sunday, February 10th	7PM	Club Meeting	De Marini's
Sunday, March 10th	7PM	Club Meeting	De Marini's
Saturday, April 6th		Model Engine Collector's. Swap Meet	Model Engine Collector's Assoc. http://www.modelenginecollectors.org/
Saturdays, April 6th to May 18th	10AM to 11:30AM	Builders Workshops	Menomonee Falls Recreation Center
Sunday, April 14th	7PM	Club Meeting	De Marini's
Saturday, May 4th	8AM to Noon	Field Clean up	Flying Electron's Airfield
Sunday, May 5th	7PM	Club Meeting	De Marini's
Saturday, May 18th	9AM to 2PM	Education STEM Event	Flying Electron's Airfield
Sunday, May 19th		Badger Season Open Racer	Badger RC Boat Club http://www.badgerboaters.com/
Sunday, May 19th	9AM to 2PM	STEM Event (Rain Date)	Flying Electron's Airfield
Saturday, June 1st	9AM to 2PM	Club Fun Fly	Flying Electron's Airfield
Sunday, June 2nd	TBD	Annual Control Line Contest	Circle Master's Flying Club http://www.circlemasters.com/
Sunday, June 9th	7PM	Club Meeting	De Marini's
Saturday, June 15th	TBD	Open Fun Fly	Fond du Lac Aeromodeler's Assoc., Wellnitz Field http://www.fdlaa.com/
Saturday, June 22nd	TBD	Fun Fly	Sky Ranch Flyers
Sunday, June 23rd	8AM to 2PM	Electric Event	Flying Electrons Airfield
Sunday, July 7th	8AM to 2PM	Scale Event	Flying Electron's Airfield
Saturday, July 13th	TBD	Scale Fly-in	Astrowings of Wisconsin
Saturday, July 13th	TBD	Fun Fly	Pebble Creek Flyers
Sunday, July 14th	7PM	Club Meeting	De Marini's
Monday, July 22 thru 28th	TBD	EAA Airventure	Wittman Airport, Oshkosh https://commemorativeairforce.org/
Saturday, July 27th	TBD	Fly-in	Lakeland RC Club
Saturday, July 27th	TBD	Annual Badger Regatta	Badger RC Boat Club http://www.badgerboaters.com/
Saturday, August 10th	TBD	Float Fly DNR Bong	Milwaukee Area Radio Kontrol Society
Saturday, August 10th	TBD	Fun Fly	Rubican Area Flyers
Saturday, August 10th	TBD	Friend Fly	SWARM, Southeastern Wisconsin Area Rotary Modelers
Sunday, August 11th	7PM	Club Meeting	De Marini's
Thursday - Saturday August 15th-17th	8AM Daily	Warbirds and Classics	Fond du Lac Aeromodeler's Assoc., Wellnitz Field http://www.fdlaa.com/
Sunday, August 18th	8AM	Fond du Lac Fun Fly	Fond du Lac Aeromodeler's Assoc., Wellnitz Field http://www.fdlaa.com/
Thursday, August 22nd	9AM	Jim Wahner Dead Chicken	Flying Electron's Airfield
Saturday August 24th to 25th	TBD	Demo Flying	Circle Master's Flying Club http://www.circlemasters.com/

2019 Flying Electrons & Local Area Events Calendar (Continued)

Date	Time	Event	Club
Saturday, August 24th	8AM to 2PM	Airfest 2019	Flying Electron's Airfield
Sunday, August 25th	8AM to 2PM	Airfest 2019 (rain date)	Flying Electron's Airfield
Saturday, September 7th	8AM	Swap Meet	Flying Electron's Airfield
Sunday, September 8th	7PM	Club Meeting	De Marini's
Saturday & Sunday September 14th -15th	8AM	Pattern Contest	Flying Electron's Airfield
Saturday, September 28th	9AM to 2PM	Franken-Plane and Build & Fly Event	Flying Electron's Airfield
Saturday, 28th to 29th	8AM	Maker's Faire	Wisconsin County Fair Grounds
Sunday, October 13th	7PM	Club Meeting	De Marini's
Saturday, October 12th	TBD	Colletco & Hobby Swap Meet	Model Engine Collector's Assoc. http://www.modelenginecollectors.org/
Sunday, October 13th	TBD	Badger Annual Turkey Shoot Race	Badger RC Boat Club http://www.badgerboaters.com/
Sunday, November 10th	7PM	Club Meeting	De Marini's
Wednesday, December 4th	5PM	Club Holiday Dinner	Davian's