

Flypaper 2020

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



Celebrating 60 Years of Service to the Community & Counting!



President's Preflight

Announcements & Last Call For Office Candi- dates.

As noted in the last edition of Flypaper, Tom Beyer is stepping down as treasurer. The good news is that Mark Polzin has agreed to fill the role for the upcoming 2021 year.

Mark has considerable back-ground in accounting procedures and if you recall, he came forward to audit last year's books during which Mark made several recommendations, most of which have been implemented. Given his past business experience and work completed on the audit, Mark stands as one of the most qualified members to handle the task.

I want to publicly thank Mark for stepping up to fill the role and also thank Tom Beyer for his last two years of service. Tom did a great job in keeping our books in order.

As you know, you as a member can come forward to run for any office or director position. It's al-

(See **ANNOUNCEMENTS** on page 14)



Renew Early & Receive a \$10.00 Discount!

As announced last month, the board met to discuss club issues and among them was a renewal discount for the 2021 season.

The offer is extended to only those seeking to renew their existing membership for the 2021 year.

Why did we do this?

This year, due to the COVID-19 crisis, nearly all of our events had to be cancelled for safety reasons. Although the club still has annual expenses to maintain the field and business related activities, and we still plan to make our annual donation to Scout Troop 110

this year. The net impact of this is that the club's expenses will be down about 20% this year. As such, the board felt that we should relax the renewal fee for this year, and this year only, and pass this savings along to the membership.

(See **DISCOUNT** on page 10)



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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.flyingelectrons.com



Last year we implemented our Incident Reporting System.

As you continue to fly throughout the spring months as weather permits, be sure to indicate any signal interference you may experience so that we can begin tracking events for the 2020 flying season.

To reach the Incident Reporting System, simply click this link, [Incident Reporting System](#)

You can also register an event by going to the www.FlyingElectrons.com. Select "Contacts" from the left side bar and then "Incident Report" from the dropdown.

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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

TBD

De Marini's Restaurant
N88 W15229 Main Street
Menomonee Falls, WI 53051
Bring a Friend and/or a Plane to Show & Tell



The Flying Electrons Reach 60 Years of Service and Counting!

1990 to 1999

In 1990 the club newsletter officially updates to an 8.5" X 11" format. Now BW photos are included, albeit poor quality but still an advancement.

If you look at a map of Menomonee Falls you'll see Tamarac Park, an area that surrounds on three sides the new Electrons flying field.

Calling this area a park is a wild leap as over the next several years many planes will be lost in this so called park. With swamp areas and cattails that rise 8 to 10 feet high the park is a massive black hole for any aircraft that venture too far into it.

In 1990, newsletters were not published over the Spring months due to Jerry Conrad-Forest stepping down as editor. Information on the club's activities becomes somewhat sketchy in the Spring



as the board, led by Paul Hohensee (president at the time) search for a new editor.

HISTORY Continued next page)

Regarding the Facts Presented in this History

The dates and events listed in this and future articles are drawn from documents, newsletters and a handwritten histories that were compiled by several past officers.

Several years ago a published historical document was created and covered events that occurred from years 1968 through 1979. There was very little information prior to that time period until I uncovered some hand-written pages in an old file box that shed light on the club's earlier days.

From these documents I tried to reconstruct a connected history which takes the club back to 1958.

Some of the names may be misspelled due to handwriting legibility. These documents were created well before the days of computers and spell check. There are conflicts in some cases regarding accounts but I tried to adopt those most credible for this history.

Later accounts were extracted from club newsletters, event brochures and other documents that were uncovered in the files.

This history is broken down in several parts but will be eventually compiled into a single document and placed on our website once completed.

I hope you find it fun and interesting.

TJ

HISTORY *Continued*

From the snippets learned between missing editions, the club, after only a few short years started to experience pressure jeopardizing the new field location.

In April, the club again began consideration of an alternative flying site just west of their present location. Information to be found doesn't make clear why the club was considering moving once again but president Paul Hohensee stated that "alleged violations of rule #7 were happening," and, "the potential for losing the field is high." I'm sorry that I can't provide more details because information is sketchy. It may be that the surrounding neighbors were raising pressure on the village to move us out.

By July, a new editor came for-



ward to handle the newsletter. It was reported that because the area was not habitable, full scale pilots would often fly low over the area causing a potential collision risk with model aircraft. Later that month, rumors started to form that the Village was considering

repurposing the location as a soccer field, which turned out to be erroneous.

The Christmas party at year end had more than 100 members attending with families. Food service was member provided as an organized "pot luck" and very successful. The newsletter reported many to be thrilled with the quality of food brought to the event.

1991

Late the previous year, noise complaints from the surrounding residents begin to surface and the club begins to consider a plan to limit noise to a specific decibel range.

In 1991 Cliff Evans becomes president. "Crash of the Month" is instituted, whereby Cliff is the first winner in the month of February. Early in the year the village is required by the DNR to cap off the field which will limit available runway space. This activity

forces the club to consider going back to Aero Park temporarily for flight time while work is being done. An alternative runway location is established while the village finishes off resurfacing the area.

Board members met with the village and discovered that the village plan to upgrade the area will not only resurface the runway area but also provide road access and possible parking area. Great news! The current runway direction at this time is generally in a north/south direction.

The alternate runway area is weedy and needs seeding and work. The club decides to seed the area at a cost of \$500.00. The club now begins to identify certain frequencies that can't be used at the field because of pager interference. Pilots start recording radio glitches in the northeast corner of the field. (This is something that plagues the club for years.)



Swamp Thing

In April of 1990, a man came out of the woods and broke Marv Ingerson's antenna insisting that he leave the field. This man, accompanied by a nastier dog, returned in the month June of 1991. While this man shouted profanities, Marv was able to land his plane and call the police. By the time the police arrived, the man was gone.

HISTORY *Continued next page*

HISTORY *Continued*

Hoping that this man had been arrested, on a Sunday between 3 and 4PM in 1991 he shows up once again with his nasty dog. He terrorized Gary Simon, while he was trying to land his student's aircraft. After much verbal abuse, the man & dog returned to the swamp along to the north.

Gary immediately filed a report with the police. The officer responding was familiar with the individual in question. The club immediately published policies on how to deal with this man if they encounter him in the future.

The charity event is cancelled this year but it's not clear why. In lieu of the event, the Electrons establish a static aircraft display at Karl's Country Market to raise money by selling tickets for Discovery Flights.

As earlier reported, the club was incorporated in 1968 but not until 1991 does the club vote to officially change the name of the club to "The Flying Electrons, Inc."

Still as of 1991, only even numbered channels are flown at the field to avoid frequency interference, while most members are transitioning to the more popular narrow band receivers. The membership begins to consider opening up odd channels for flying. Also, electric aircraft begin to grow in popularity.

Later this year, a new area of Tamarac field is freshly top soiled and seeding begins for use the following year. It's not exactly clear which area this is because

the newsletters covering the relocation were never published. A road to the airfield is finally completed along with a parking area.

The club at this point is on a year-to-year lease with the village. The club decides to approach the village for a long term contract and the village is open to



the idea. The membership votes to approve a \$10.00 increase in the initiation fee for new members to help offset future costs of field maintenance and help compensate the club for its previous financial contributions over past years.

1992

The year opens with 67 members attending the club's first member meeting. Sixty-seven Polar Bears collected to fly and eat grilled hot dogs. The New Years Day event included an "egg drop" competition among 15 competitors. There are yet a large num-

ber of builders finishing up their new aircraft for the 1992 season.

In 1992, all member transmitters were required to finalized transition to "gold stickers." This essentially meant that they were converted to the narrow band frequency mode for flying, allowing the club to begin the transition of opening odd channels for use at the field.

The FCC launches an attack on the use of the 31 currently used RC frequencies by looking to allow the insertion of new, high powered mobile frequencies that are very close to those used by many RC pilots. The club is asked to support the AMA with letters to the FCC and Congressional Representatives to stop

such overreach.

Jim Wahner came forward this year to establish a "Ground School." Mainly targeted at new flyers, the school was held at Cudahy News & Hobby with Paul Hohensee and Mike Dorna as guest speakers.

In February someone sent an anonymous flyer to Menomonee Falls residents surrounding Tamarac Airfield. With a petition, it claimed that the club should be removed from the area citing many local area infractions toppling off with a claim that the club

HISTORY *Continued next page*

HISTORY *Continued*

was "harming the wildlife" in the area. Cliff (as current president) sent a four page letter to the village countering all stated issues in the flyer.

The club hired ornithologist, Dr.



Charles Weise, to investigate and generate a report. The claims in the flyer were essentially discredited but the village noted that noise was a secondary complaint, so club representatives met with the three signatories of the petition claiming noise was a problem. The complainants wanted flying limited to one weekend a month which was totally unrealistic.

After a period of time, even the village board became weary of the resident's demands. The club, through this period of litigation, established sound abatement guidelines and hours of operation that satisfied the village and enforced sound compliance guidelines for all members by April, 1992.

The village readily accepted the sound abatement plan as a final

resolution to residential complaints.

Following this news, Paul Hohensee was placed in charge of the sound committee and became the dB guidance officer. Mem-

bers would have to qualify their engines to meet the established dB rating to fly at the field, then display a sticker of approval.

May 16th was set as the "grand

opening" of the new field location. Unfortunately, the weather did not agree and pilots must wait until the grass grows efficiently before use. The village must first rake for rocks to clear the area. The DNR continues to hold back our use of the new field area

(SPECIAL NOTE: I believe the area at the time in use by the club is the West area where we currently fly. Flying at that time was mainly to the North/South area. I could be wrong. The commentary in the July 1992 newsletter states while members continue to fly, "In the meantime please do your best to stay East of the tree line that borders the Western edge of our current field so that we stay as far away from Marcy Road neighbors as possible.")

The club establishes an "impound table" for transmitters to ensure that members don't interfere with each other. Apparently clashes with frequencies require that this be done.

1993

In 1993, George Ropiak becomes president and the newsletter is taken over by Steve Schultz. He decides to redesign it in some ways for the better, but in other ways, not so much.

To complicate things further, the first three months of the year are missing, so it's not clear if anything big happened over that period.

The FCC puts out a call for comment about repurposing 31 out of the 50 frequencies currently used for RC and the club is asked to respond to their local congressmen. The AMA intercedes with its lobbying effort and the FCC steps down leaving the frequencies in tack.

In the month of May, club meetings were moved to a hanger at Capital Airport. Before this first meeting, somehow the word got out that anyone interested in aviation was invited. As a result, the word spread and a group referred to as the "Little Mosquitoes" arrived "en mass" leaving meeting members wondering what was going on? It also left some member wondering if these kids could be future aero modelers.

The 1993 newsletter started to invite articles from members inter-

HISTORY *Continued*

ested in making editorial contributions. These articles covered self help tips like "how to tune your engine" to "The History of Balsa Wood." Everyone seemed to have corner to "speak out."

The club was really starting to grow at this time. At the start of June the club had 132 members. At the end of that meeting, the club had signed up another ten. A change in the bylaws might become necessary to establish a cap in membership to avoid the problems that arise when too many people get involved. These thoughts were mainly spurred by the previous altercations with surrounding neighbors such as the "swamp man."

In August, Jim Wahner started the movement to have a shelter built at the airfield and the club started calling their annual charity event "AirFest."

1994

Several club members volunteered this year to man the

phones for the Easter Seal Telethon and the seat belt law for Wisconsin goes into force.

In February, the club membership approved participation in the Bud Weber Classic, a major Midwest pattern contest currently being managed by the Pebble Creek club. As a co-sponsor it is thought that participation will bring more national attention to our club.

In March an overhaul of the bylaws is completed and voted on by the membership. Due to recent neighbor complaints, a decibel sound level program is revised for various classes of engines and all aircraft are checked for compliance. That same month, the club seeks a long term lease with the village but is rejected, which is a disappointment.

The club discusses having a mobile phone located at the field for emergencies but the idea is rejected in favor of a land line which is installed during the month of August. Plans for a pavilion move forward and await approval from the Parks Board. The club is required to put up \$500.00 to handle the cost of the village canvassing to seek out opinions from surrounding neighborhoods. The

possibility of a shelter begins to look bleak.

1995

Not much happens in '95. Cliff Evans steps in as president and early in the flying season, the village announces that there will be construction to the road turning off Kohler Lane down to the airfield. All access will need to be diverted to the Marcy road entrance until completed.

1996

Steve Misher takes over the presidency this year. In August, the topic of a shelter once again is raised. Although there is no mention of village approval, I have to assume that progress was made along those lines as members met to discuss construction costs and details. Over that month the shelter was constructed and the village was very cooperative. With the permanent shelter on the site it was thought that this would be the time to approach the village once again regarding long term lease.

The new building was constructed at a cost of \$2,850.00, and a vote was taken to increase the dues and add an assessment of \$25.00 for the 1996 year to cover the cost of the field improvement.

1997

Paul Daniel is elected president. Jerry & Robin Granis from Scout Troop 67 attend the February



HISTORY *Continued*

meeting and offer the troop's services for the upcoming AirFest '97. The board considers making the troop its designated charity as a result.

Jim Wahner and Jim Reiss have been making trips to local area middle schools to interest students in the RC hobby. The PTA's begins to take interest and a time is arranged for parents to come visit the airfield.

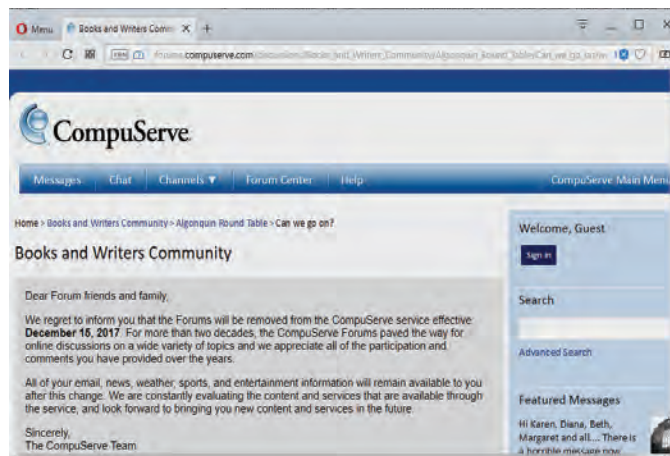
Club meetings are attracting some 50 to 65 members on average. With the shelter now constructed, it needs some furniture, so benches and picnic table are voted for purchase. In addition, a motion is made to provide



a chain link fence to separate spectators from the pilot areas.

The July '97 AirFest takes place and the scouts do a terrific job! This was the first year the scouts were beneficiary of the event so they pulled out all stops. The "Northern Aces" put on a fantastic air show concluding with a two-plane candy drop as a finale.

This year, the Internet starts to make itself known. People are seeing mail solicitations form



CompuServe and America Online (AOL). Bulletin Boards begin to pop-up promising all kinds of information. Exec PC only costs \$100.00 per year and new computer users are trying to figure out how to use the 56k modems. The club newsletter starts listing URL's for RC information.

In September, the access road from Kohler Lane to the airfield is completed. What used to be a bumpy dirt trail, is now a smooth ride down to the RR tracks.

Dues are now set at \$50.00/year, and \$25.00 for Menomonee Falls residents. Raffles continue to be important to members with winners reported in every newsletter. The club begins to permanently establish the Pattern Contest at the club as an annual event.

1998

The Boy Scout Troop 110 is the club's new charity and they announce that they will build a

plane this year. Paul Daniel, re-elected president, will loan his house as the building site with hopes that the AMA will fund the project. This year, the Tamarac Challenge is coined as the club's official name for its Pattern Contest. Some of these contests throughout the nation have been around for more than 20-years when the club finally established its moniker. In the February issue of Flypaper, Mike Dorna writes a motivating article on

how to get started as a Pattern Contest Pilot.

In March, the AMA provides funds (\$500) as did the RC Association (\$105) to support the Boy Scout building project. Paul chose to support his local hobby shops for materials to begin the project. Paul continues to seek out helper/members over several months.

During the year, email starts to become more popular. There is some occasional vandalism at the field with destruction to the Porta-Johns, and "Name that Plane" becomes the first newsletter contest.

The Boy Scout project starts to take shape and the plane appears ready for covering by July. The club is financially stable. It's having monthly Fun Flies with FREE food provided by the club, although it's not specified as to what kind of food is served. There is an active group of flying instructors that are willing to help.

HISTORY *Continued next page*

At this time the club has 12 willing instructors taking part in training new students.



Now, buddy boxes have become popular. The club purchases one for student use. Jim Wahner uses it to take a student from novice to pilot in one day. Some kids just have a natural talent to pick up this hobby and fly naturally.

The club AirFest is a total success. The scouts complete the aircraft and it becomes a club trainer. After the AirFest event, the club donates about \$900.00 to the Scout Troop 110, the official long-term beneficiary of the club's charity.



In October, Tower Hobbies starts to become a major source for RC plane, parts and equipment. Concerns start to rise regarding the loss of local area hobby shops and what that could mean to hobbyists. Also this month, interest grows in forming a combat

team. The effort would include 1/12 scale Warbirds and "Wild Things." The idea is tentative but receives a lot of attention.

Steffan Schulze, a 14 year old young member of the club, and student of Jim Wahner, received a liver transplant the month earlier. Jim worked with him to try to get him certified as a pilot which he

was determined to be. In November, Steffan passed away after succumbing to complications of his liver transplant.

It was said, "Some people come into our lives and go quickly. Some stay awhile and leave footprints forever in our hearts. And we are never the same."

In November, Paul Daniel adds a new member to his family and the club votes to include "combat" managed by Wally Bickel. It becomes a total adrenaline rush as it is today.

All aircraft are nitro, using under a .26 or lesser engines. Some are 1/12th scale war birds, if you want to spend time making it real. Others include the Wild/Crazy Thing, the Gremlin, the Wonder, etc.

Streamers were used unlike today at the club, with one point for each flight and 10 points for

a tail cut. Planes were held to a five minute limit, with Top Gun prizes awarded. The expectation was that the club would keep score and at the end of the year and then offer first, second and third prizes. It never happens.

1999

This year the club creates its first Internet site. The charity event shifts over to Scout Troop 110 for the long term and the scouts take on building two RC aircraft, the club puts together a club-owned trainer for the next flying season and combat really takes off in popularity.

For some reason, the club decides not to report activity from club meetings any longer making it very difficult to unearth some of the import issues facing the club over the year as the club approaches Y2K.

The charity event was a tremendous success this year, raising \$1,000 more than previous years. Scout Troop cemented their standing by taking on both food and parking completely. The troop from this year forward becomes the club's charitable beneficiary.

Those of you that were present during this past decade may have information that clarifies some of the events that took place. If so, please let me know so I can update the content for clarity.

In the next issue we'll examine the events dating from 2000 through 2009.

NEW MEMBER SPOTLIGHT



Gary Chudzinski, Newest Member

Gary has been married to wife Ruth for over 54 years this month. Congratulations Gary! Originally from Ohio, Gary and his wife migrated to Cedarburg, WI in 2020 to be closer to two of their daughters, so family is very important to Gary.

Gary is a career military service pilot and has spent over 35 years in the Air Force and Air Guard. During his career he served as a fighter pilot, flight instructor, Ops Officer and Group Commander.

Gary enjoys both RC and model railroading. He has been an RC

enthusiast since 1971 and paused briefly with hobby in 2007. As such, and at the age of 80, he wasn't sure as to where his skills currently lied.

Gary recently invested in a T-28 electric trainer and approached the club to inquire about brushing up on his flying skills. Steve Tarney took Gary on as a student and after a few brush-up lessons, Gary soloed and passed his pilot certification test flying his own T-28.

Gary is working on regaining his proficiency hoping to fly on a regular basis. He's very interested in scale, fun-fly aircraft, jets and expects to try his hand at combat.

Gary is looking forward to participating in future events and in the meantime is taking all precautions to avoid the COVID crisis, as are we all.

When you see Gary at the field, please come up and introduce yourself and make him feel at home. I'm sure he has some great stories to tell.

Welcome to the club, Gary!

(DISCOUNT *Continued from page 1)*

We know that many of you did not feel comfortable visiting the airfield this year.

We are also hopeful that next year we will have a preventative vaccine available but according to most sources, it's not likely to be available and accessible until mid to late next year, best case.

If this is true, then it looks like we are going to continue to be on hold regarding events, meetings and other social gatherings.

The good news is that thus far, we know of no reported cases of COVID with our membership and we'll continue to do everything we can to keep it that way.



It's Time to Renew Your FAA Registration

The Federal Aviation Administration (FAA) has important registration information for drone recreational flyers whose registration was automatically extended until December 12, 2020.

It's time to renew your FAA registration. The process is simple and easy by clicking the link below and accessing the FAA Drone Zone Dashboard.

[FAA Registration Renewal](#)

Be prepared to provide your credit card information to handle the required \$5.00 renewal fee.

Getting Started in RC



Bench-Trimming Your Aircraft

Bench trimming your aircraft is something everyone should do before taking your plane to the field for its "maiden flight." Bench trimming ensures that your first flight will be manageable and not yield any unexpected surprises. It makes good sense to go over this list between visits to the airfield as well. I've learned the hard way that it's always a good idea to go over your aircraft carefully before every visit to the field.

When you take your plane up the first time, you'll want the plane to fly straight and level. You'll want it to perform loops without it rolling out, and rolls without it dropping its nose.

Here are just a few advance tests your aircraft should pass before heading out to the field.

Center of Gravity (CG)

Every aircraft has a CG or "Center of Gravity" point. On a standard aircraft (high wing or low wing) the CG is usually specified by the manufacturer and assuring a proper CG should not be taken lightly. If the CG is too far back, the plane will be "tail heavy." If the CG is too far forward the plane will be "nose heavy."

A "tail heavy" aircraft is nearly impossible to fly and the more tail heavy, the worse it is. A "tail heavy" aircraft is uncontrollable and often results in disaster. A "nose heavy" aircraft can be

flown and is a much easier problem to deal with while in the air. In fact, it may be a good thing to have an aircraft be just a little "nose heavy" on its first flight. Why? Because a "nose heavy" aircraft will tend to drop forward, which is the direction that the plane needs to travel to maintain control.

A "tail heavy" aircraft loses control surface effectiveness when airflow over the control surface suffers. This is essentially what happens when an aircraft is "tail heavy." Therefore, it's always better for the plane to be CG balanced or, a little nose heavy. In fact, some planes fly even better when they are a little nose heavy.



Relocating the aircraft battery pack in your aircraft is probably the most effective way of adjusting CG. If your aircraft is tail heavy then move your battery pack forward inside the aircraft if you can. If you can't reposition the pack, then you'll need to add weight to the nose of the craft. Lead weights are often used but it is more environmentally friendly

(Continued next page)

to use heavy steel weights. Lead is poisonous to wildlife if it's left on the landscape, so we always recommend weights that don't include lead.

You can either tuck the weight forward inside the aircraft or possibly attach it to the firewall. The further forward you can place the weight, the more effective it will be in changing the CG.

Lastly, if the manufacturer doesn't give a clear indication of where the CG is on your aircraft, then calculate it to be between 1/4 and 1/3 distance from the leading edge of the wing as a general rule.

Most importantly, make sure your plane is balanced or at least, a little nose heavy for your first flight. It will make all the difference.

Physical Alignment

Not quite as critical is front view alignment. The wing, when installed on the fuselage, should be in alignment with the rudder and stabilizer. One can check

this simply by observing the aircraft from the front. The wing should be plainly horizontal and the stabilizer should be equally parallel. The rudder should be exactly perpendicular.

It's not critical that these elements are in perfect order, however misalignment will contribute to flight abnormalities that you won't be able to account for. It's best to correct misalignments rather than let them stand before taking your plane up.

Power Source & Torque

If you're adding your own power source to your aircraft, be sure that you have enough power. I've built many aircraft over the years and used the recommended power source only to find that it was not enough to make the aircraft perform successfully.

With aircraft that offer a range of power choices from smallest to largest, always choose the largest power source. With most air-

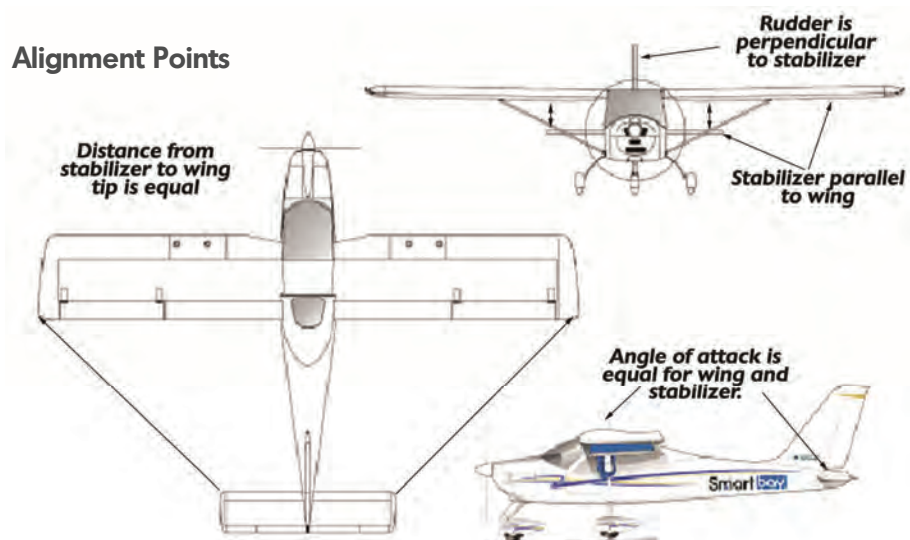
craft that list a low range of motor or engine, the low end is the least possible power supply that the plane will support. This means that there is no extra power when you need it. The high end power source is what the manufacture says the plane can handle and perform well. That's the power you want.

Every power source has what is called "torque." Torque is the amount of opposite force created by a power source as the propeller rotates. The power source rotates in a clockwise direction which creates reaction in the aircraft of a counter clockwise direction. What this means is that when an motor's propeller forcefully propels to the right, because of its rotation, it will force the plane itself to the left, as a reaction. This is "torque."

Because of torque, the tendency for a power source is to pull your plane to the left and upward. Therefore you need to make sure that your aircraft compensates by including 2 to 3 degrees right thrust and 2 to 3 degrees down thrust to compensate for this phenomenon. If your aircraft does not take this into account, your plane will fly but it will drift up and to the left all the time, and remain hard to control.

Most ARF's will have this thrust adjustment built into the aircraft and you will be able to visibly see it. So, don't be alarmed if you look at the front firewall and see that it is slightly crooked. This is by design.

Alignment Points



If you find that your model does not have right or down thrust you can sometimes add these measures by adding a washer or two behind the motor or the mount it's attached to.

Prop Balancing

The larger your plane gets, the more important prop balancing



A Prop Balancer

becomes. If you've done some laundry in a washing machine, and the spin cycle starts, that laundry better be balanced or the washing machine will start bouncing all over the floor. Sometimes it's very disturbing.

The same thing happens when a propeller is unbalanced. An unbalanced propeller will cause vibration in the aircraft, shaking up a lot of things. This can cause motors or engines to come loose, or damage electronics. Always balance your props using a simple prop balancer before starting up your engine or taking your first flight.

Control Surface Movements

Most every manufacturer recommends rates for your control sur-



faces. These "rates" determine how far your control surfaces should move for best performance of the aircraft. Always use them and make sure that you start there with those measurements for your first flight.

Later you can adjust and increase those control surface actions after you are more in control.

Often the manufacturer will supply a template to arrive at the proper degree of control and there are some other more sophisticated tools you can purchase or even make yourself like the one shown above.

Dual Rates

Most transmitters (see blow figure) have what are called "Dual Rates." These are switches on the transmitter that allow you to control how much throw your servos deliver to control surfaces at flip of a switch. You can often set these on your transmitter to provide a gentle flying mode, and also a radical flying mode for your aircraft.

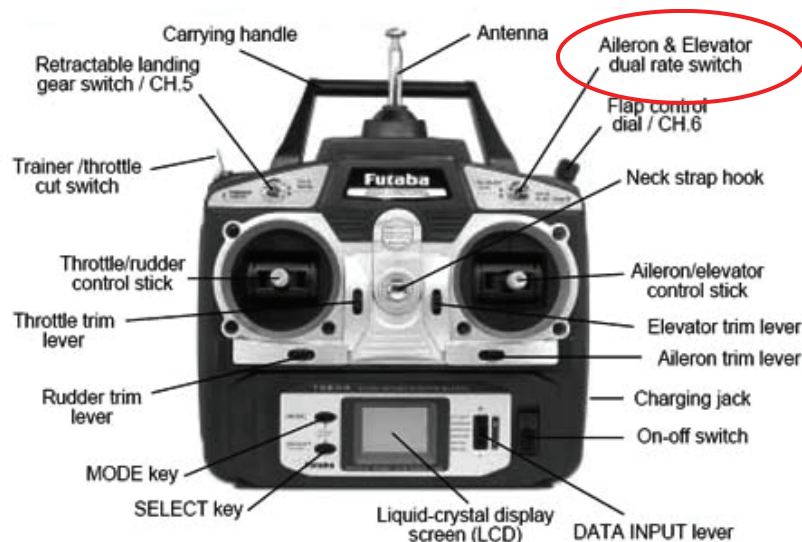
When the rate for a control is set low, control surfaces are limited. When set high, they can provide the maximum throw a servo can deliver.

Exponential

Exponential is a rather new technology feature embedded in most all newly purchased radio systems.

It's main purpose is to soften what may be the tendency to over control your aircraft from the control surface's center point.

When this feature is not used, or turned off, your control surfaces



move in direct proportion to the movement of the transmitter stick. In many cases, this direct control response can result in a quick and jerky response as you try to compensate for what appears to be over control.

With "exponential," you can dial softness into your initial stick movements so that the aircraft responds more smoothly to your actions. The affect is that initial stick movements create a subtle response in your aircraft and as you move the stick further, the control surface movement increases more rapidly.

The obvious benefit is that your aircraft is less sensitive in the mid-stick location and becomes more sensitive as you increase the stick's movement.

Lock Washers

Be sure to use lock-washers behind all fasteners wherever you can. Bolted connections suffer greatly with vibration and we see a lot of loose landing gear, motor mounts, and propellers leaving the aircraft unintentionally. In addition, double check all fasteners and nuts after your first flight and then again each time you go to the field. Vibration is a constant enemy and can eventu-



ally loosen a critical nut or bolt that could put you out of business.

Glow & Gas Fuel Tank Cautions

If you are flying "glow" planes you'll have a fuel tank. Be sure that you lock down all tubing to brass fittings with zip ties to en-

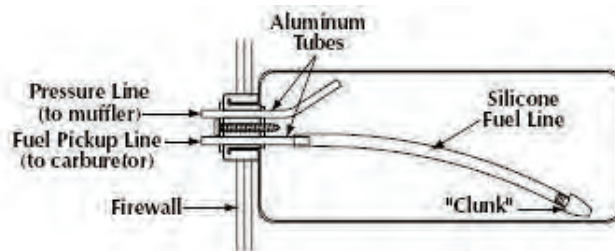


Image from Hobbistar 60 MKII manual

sure that they won't slip off. It happens so often that you can't imagine.

Another important test before you install your tank is to test the tank's integrity. Oftentimes, a loose stopper screw will allow fuel to creep out along the seal causing problems with fuel flow.

To test the tank for leaks, blow on one of the two leads (fuel intake or overflow line) while holding the other closed. You should be able to put a lot of air pressure into the tank without hearing any leak or loss of pressure. If no air escapes the tank while under pressure, then you're good to go.

I hope this helps you get a handle on "first flight" readiness. Bring your plane out to our airfield and we'll be happy to help and work with you on any issues that you may have.

(ANNOUNCEMENTS Continued from page 1)

ways great to have new blood in club management positions because it challenges the status quo and brings in new ideas.

I hope you will consider serving as a board member at some point in the future. We really need new and exciting ideas that will take us through the decade.

Elections

This year is a strange year. No club meetings, no big events, no meetings with schools and the list goes on.

This year's board member elections need to be handled differently as well. Provided that no one else comes forward, the board will move to accept those members that have agreed to continue on in their present post and elect and appoint Mark Polzin as Treasurer for 2021. As long as there are no pending contended positions on the board, we will go forward under this leadership structure for 2021.

September Events

September was a big month for club events. These included the Swap Meet, Pattern Event, Builder's Challenge & Frankenplane events. You'll be excited to see some photos from these events, most notably our Builder's Challenge where everyone was successful in getting their foam board aircraft in the air as qualifiers.

Check out the event articles coming up!

The 2020 Swap Meet

Although the weather was forecasted to be sunny and warm, both buyers and sellers were faced with cold winds and heavy clouds that kept some attendees away. Despite the weather, the Swap Meet was voted a success in that there were more than 20 sellers at the field and many club members and visitors walked away with great stuff.



Mark Polzin made a hard to refuse offer of \$100.00 for a giant scale Extra 300 SL while Ron Jans parted with his pristine large scale Pitts Special to the same buyer.

A recent IP student made a deal for a Timber aircraft with Doug

Colton and the Assassin Team flew several combat missions throughout the day.

The event trickled to a close at

about 12:00 noon with depleted sellers packing up to go home empty handed, which after all, was the goal.

Tamarac Challenge 2020



Jennifer Kimball

The Flying Electronics hosted the 23rd annual Tamarac Challenge pattern contest on September 19th and 20th. We had 11 registered pilots from five states, including an 85 year old gentleman from Ohio and a young lady from Wisconsin who was flying in her very first pattern contest. Yes, that's right.... her first contest. It's hard to remember a recent pattern contest that wasn't presented with some challenging weather conditions; however, it was the days leading up to the contest that were the most



challenging. Several days of heavy rain made practice difficult, not to mention finding time to get the grass cut. Fortunately, we had

a small break in the weather, the field was cut, and lines were painted just in time for the contest. Once contest day rolled around, we were rewarded with fair skies and 5-10 mph winds. Fortunately, there were no mishaps and all planes made it home safely.



George Gordon

George Gordon, our octogenarian pilot from Ohio, has been flying RC since 1956 and flew in his first pattern contest in Dallas, Texas in 1961.

It's hard to imagine with today's advanced radios systems, but back when George was flying his first contest, control was limited to the rudder and throttle only. He must have been very good at it, considering he amassed more than 250 trophies over the years. Even at 85, George doesn't appear to be slowing down. He flew in 14 contests last year. Wow!

As I mentioned earlier, we had a pattern newbie at our contest, 25-year old Jennifer Kimball from Delavan, WI. Jennifer is a full-scale pilot who dabbled in RC for a couple years and then decided she'd like to give pattern a try. Most people would test the pattern waters by flying in the Club or Sportsman classes, but not Jennifer. She jumped right into the

(Continued next page)

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top class (FAI),... the one flown at the world championships. Not only did she finish second in our contest, it was by a mere 28 points. That equates to about one score-able point on one maneuver across six flights... against one of the top pattern pilots in the US. Oh, and did I mention that she only had about 40 flights on a 2-meter pattern plane in preparation for the contest. Jennifer is probably the closest thing to a precision aerobatic savant as you can get. So much for the rest of us who toil for years trying to perfect our craft. Be sure to keep an eye on this gal as she competes on the world stage.

This contest would not have been possible without the help and cooperation of the Flying Electronics Board, my co-CD Mike Dorna, and several club volunteers. The flying field was in prime shape thanks to Bob Scrip, plus Steve Huelsbeck and Tom Jacobs took some awesome shots of the action.

Thanks guys – I couldn't have done it without your help.

- Joe Burzinski





Builder's Challenge

Sturmovik. Constructed of Flite Test foam board, this scale detailed model was made ready and flew successfully on it's first attempt.



Ed Malec brought entries for both himself and his son Kevin. Ed returned this year with his "Pizza Box" aircraft, this time designed around plans offered by Flite Test.

The aircraft took to the air and flew like a store bought model.



Steve Huelsbeck's entry was fashioned after one of Crash Test Hobby's larger delta wing models.



Contestants receive three attempts to get their plane into the air. Steve's first attempt failed due to a CG issue, so Steve moved his battery pack forward. The second failure was due to the wing collapsing on take-off.





With only one chance left to qualify, Steve repaired the wing at the field for a last and final attempt.



Success! It just shows what you can accomplish when you keep trying.

Ed Malec then followed with his son's entry, a modified 3D design.



The air craft was said to fly like it was a little tail heavy but it flew well, just the same.



The group was gathered for a final vote on best entry and Ryan Ocampo took top honors this year with his Soviet War plane.

Congratulations Ryan!



Frankenplane

Only two entries were offered up at this year's Frankenplane Event.

For those of you that don't know what the Frankenplane is all about, I'll explain.

A Frankenplane is a combination of aircraft parts which may have survived a crash but were still good and useful if they could be

combined with the left over parts of other airplanes.

Not often do these components naturally go together or fit properly, so it's up to the builder, or in this case, "the mad scientist" to create something special from them.

This year Doug Colton and I pro-





Doug's entry consisted of a monster created from an 850 Pitts, a Valiant and a 1.2 meter Optera.

Doug added a nose gear because the landing gear was so far back on the fuselage.



Doug's attempt to get the plane off the ground resulted in the great action shot taken by Chris Ocampo.



Unfortunately, it's back to the drawing board with this one.

My entry called the "Giant Gremlin" met with different disappointment.

After working for two weeks on this 89" Gremlin monster, I found that I miscalculated the length of the center section, leaving the plane "tail heavy." The design required an additional 1-1/2" to the front of the nose for proper weight distribution, which an extended motor box could provide.

As a result, I wasn't able to take it up and I was disqualified. I'll be back next year.

So, despite Doug's crash on take-off, he is the "last man standing"



and winner of this year's Franken-plane event.

Congratulations Doug!



Meet Our Two Newest IP Students

Meet **Logan & Riley Krueger** of Glendale, WI. Logan & Riley came to us after learning about our program from a friend and neighboring IP student, Jack Korducki.

The boys are EAA Young Eagles and have their sights set becoming aerospace engineers. With three lessons under their belt, they are well on their way!

If you see them out at the field, introduce yourself and make them feel at home. They're going to make a great couple of future pilots.

RENEWAL MEMBER APPLICATION

You must include a photocopy of your AMA card to receive your membership card!

☐ Check this box if you have updated your address, email, phone...etc.

☐ Check this box if this is a "STEM Student Membership Academy" Application

AMA NUMBER: _____ FAA NUMBER: _____

(Please include copies of both cards)

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

EMAIL: _____

PRIMARY PHONE: _____ DOB: ____/____/____ (month and year only)

RADIO CHANNELS CURRENTLY USING: _____, _____, _____, 2.4 GHz: _____

SPONSOR (Required for new membership): _____

By signing this application I agree to abide by the Field Rules.

Signature: _____ Date: ____/____/____

Make checks payable to The Flying Electronics, Inc.

Mail to: The Flying Electronics

Chris Milbauer

4952 N 106th Street, Milwaukee, WI 53225

414-750-2740

chrismilb@att.net

Academy of Model Aeronautics, 1-800-IFLY AMA, www.modelaircraft.org

The Flying Electronics Inc., www.flyingelectronics.com

2020 RENEWAL FEES AND TERMS

Select the Membership Category (Enter Cost at Right)	Unit Cost	Extension
New Member Initiation Fee	\$50.00	\$
Non-Resident - Individual or Family Renewal	\$65.00	\$
Menomonee Falls Resident - Individual or Family Renewal	\$45.00	\$
Junior (18 Years or Younger by July 1st) Renewal Only	\$45.00	\$
Single Senior (65 or Older by July 1st) Renewal Only	\$45.00	\$
Additional Costs		
Add if renewing after January Club Meeting	\$5.00	\$
Add if renewing after February Club Meeting	\$10.00	\$
Deduct if you paid initiation fee previous year	-\$20.00	-
STEM Student Membership Academy (IP Qualified)	N/C	
Calculate Total Membership Cost Here		\$

Incomplete forms will be returned to the applicant. Failure to provide proof of AMA membership will result in suspended flying privileges until proof such as a photocopy of AMA card or faxed confirmation from the AMA is provided to the club secretary.

Applications for AMA membership are available from the club secretary or from most area hobby stores. Acceptance into membership of the Flying Electronics Inc. is contingent upon Club sponsorship. Board approval, and completion of all requirements of The Flying Electronics Inc. bylaws and based on the information provided herein.

All fees are payable in advance.

Renewal Application Form 9/1/2020 TJ

NEW MEMBER APPLICATION

You must include a photocopy of your AMA card to receive your membership card!

☐ Check this box if you have updated your address, email, phone....etc.

☐ Check this box if this is a "STEM Student Membership Academy" Application

AMA NUMBER: _____ FAA NUMBER: _____
(Please include copies of both cards)

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

EMAIL: _____

PRIMARY PHONE: _____ DOB: ____/____/____ (month and year only)

RADIO CHANNELS CURRENTLY USING: _____, _____, _____, 2.4 GHz: _____

SPONSOR (Required for new membership): _____

By signing this application I agree to abide by the Field Rules.

Signature: _____ Date: ____/____/____

Make checks payable to The Flying Electronics, Inc.

Mail to: The Flying Electronics

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chrismilb@att.net

Academy of Model Aeronautics, 1-800-1 FLY AMA, www.modelaircraft.org

The Flying Electronics Inc., www.flyingelectronics.com

MEMBERSHIP FEES AND TERMS

Select the Membership Category (Enter Cost at Right)	Unit Cost	Extension
New Member Initiation Fee	\$50.00	\$
Non-Resident - Individual or Family Membership	\$75.00	\$
Menomonee Falls Resident - Individual or Family Membership	\$55.00	\$
Junior (18 Years or Younger by July 1st)	\$55.00	\$
Single Senior (65 or Older by July 1st)	\$55.00	\$
Additional Costs		
Add if renewing after January Club Meeting	\$5.00	\$
Add if renewing after February Club Meeting	\$10.00	\$
Deduct if you paid initiation fee previous year	-\$20.00	-
STEM Student Membership Academy (IP Qualified)	N/C	
Calculate Total Membership Cost Here	\$	

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All fees are payable in advance.

Member Application Form 6/29/2020 TJ

2020 Flying Electrons Events Calendar

Below is a tentative calendar of events for the upcoming 2020 flying season. The Caronavirus epidemic has placed all meetings and events temporarily on hold.

Date	Time	Event	Club/Location
Wednesday, January 1st	8AM to 11AM	News Year Day Chili Dump	Flying Electrons Airfield
Sunday, January 12th	7:00PM	Member Meeting	Cancelled. Go Packers!
Sunday, February 9th	7:00PM	Member Meeting	De Marini's Restaurant
Saturday, March 7th	9:00AM to 12 Noon	RC Association Meeting	Wauwatosa Library
Sunday, March 8th	7:00PM	Member Meeting	De Marini's Restaurant
Saturday, April 4th	10:00AM	Builder's Workshop Starts	Menomonee Falls Rec Center
Sunday, April 5th	7:00PM	Member Meeting	De Marini's Restaurant
Saturday, May 2nd or 9th	8:00AM	Field Clean up	Flying Electrons Airfield (Weather permitting)
Sunday, May 3rd	7:00PM	Member Meeting	De Marini's Restaurant
Saturday, June 13th	10:00AM to 2:00PM	60th Anniversary Celebration & Club Fun Fly	Flying Electrons Airfield
Sunday, June 14th	7:00PM	Member Meeting	De Marini's Restaurant
Sunday, June 28th	10:00AM to 2:00PM	Electric Only Event	Flying Electrons Airfield
Sunday, July 12th	10:00AM to 2:00PM	Scale Event	Flying Electrons Airfield
Sunday, July 12th	7:00PM	Member Meeting	De Marini's Restaurant
Saturday July 18th	9:00AM to 2:00PM	Education Event	Flying Electrons Airfield
Sunday, July 19th	9:00 to 2:00PM	Education Event (Rain Date)	Flying Electrons Airfield
Sunday, August 9th	7:00PM	Member Meeting	De Marini's Restaurant
Thursday, August 13th-16th	8:00AM to 4:00PM	Warbirds & Classics Over America	Wellnitz Field In Fond Du Lac
Thursday, August 27th	10:00AM to 2:00PM	Dead Chicken Event	Flying Electrons Airfield
Saturday, August 29th	10:00AM to 2:00PM	Airfest 2020 (Rain Date 8/30)	Flying Electrons Airfield
Saturday, August 30th	10:00AM to 2:00PM	Airfest 2020 Rain Date	Flying Electrons Airfield
Saturday, September 12th	8:00AM to 2:00PM	Swap Meet	Flying Electrons Airfield
Sunday, September 13th	8:00AM to 2:00PM	Swap Meet (Rain Date)	Flying Electrons Airfield
Sunday, September 13th	7:00PM	Member Meeting	De Marini's Restaurant
Saturday, September 19th - 20th	8:00AM to 4:00PM	Pattern Contest	Flying Electrons Airfield
Sunday, September 27th	10:00AM to 2:00PM	FrankenPlane/Builder's Challenge	Flying Electrons Airfield
Sunday, October 11th	7:00PM	Member Meeting	De Marini's Restaurant
Sunday, November 8th	7:00PM	Member Meeting (Elections)	De Marini's Restaurant
Sunday, December 13th	5:00PM to 12:00PM	Christmas Party & Dinner	TBD
Friday, January 1st	8:00AM to 11:00AM	New Years Day Chili Dump	Flying Electrons Airfield