

Great October Program On New Flight Pack Batteries

by Jim Cook

TCRC vice president Chris O'Connor presented the program at the October meeting and it was a really interesting one – replacing your nicad and NiMH flight packs with LiFe or A123 batteries.



Chris has been using A123 batteries as flight packs in all of his planes for a considerable amount of time. He said the benefits of using A123 or LiFe batteries are many:

- Higher Effective Capacity (High internal resistance of nicads and Nimh batteries reduce their effective capacity)
- Considerably less weight (About ½ the weight of a comparable nicad)

- Can power several servos without internal resistance build up.
- Safe (Not a fire danger as lipos are)
- No memory problems

Chris cautioned that it is very important to buy a high-quality LiFe or A123. He said he normally purchases his batteries from Hangtime Batteries or from ElectroDynamics. Batteries he purchases from both come with a balancing plug. ElectroDynamics batteries do come with a balancing plug, but Chris uses special switches from ED and a pigtail (also from ED) that he can plug directly from his charger to his charging jack in the switch, and that allows the ED battery to charge and balance without using the balancing plug.

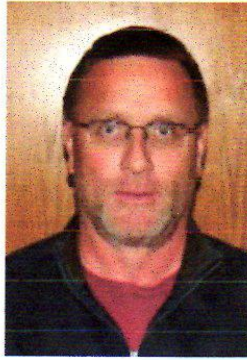
Chris explained that LiFe batteries are lithium iron phosphate and A123 batteries are lithium nano phosphate. He said that when programming his charger for A123 he uses the charger's LiFe program.

After the presentation, it was obvious that most of the members present were giving very serious consideration to switching to the LiFe or A123 batteries for all of their flight packs.

Thanks, Chris for another great program. J

A Note from The Head Wing Nut

By Bob Briesemeister



TCRC Members,

The flying season has come to somewhat of an abrupt end with the temperatures 15 to 20 degrees below average. But remember this is Minnesota and if you don't like the weather wait 10 minutes. As we all are aware the field is once again under water but if a nice day should come back you are still able to fly at the fairgrounds.

When the cold arrives in this part of the country, we turn our focus to building and staying warm in our basements and garages. If you are building a new plane feel free to bring it to the membership meeting when it is finished, or if you want to bring it monthly to show your progress that would be fine also. It would be interesting to see it in different stages of completion.

At the November membership meeting we will be holding our annual Ugly Airplane Contest for those airplanes that show a little wear and tear but are still flyable. Don't be ashamed -- it is all in fun. You might win a gift certificate.

Along with the Ugly Airplane Contest we will be holding the elections for the 2020 board. I can't believe I just wrote 2020 -- wasn't the world supposed to end 20 years ago according to some people? All 4 executive positions are up for election along with 2 at large seats. All 6 incumbents are running again but you can still throw your hat in the ring. Give it a try!

The big event this month is the year-end Banquet at Fong's in Prior Lake on November 16th. Cocktail hour will begin at 5 with dinner to follow. Bring your significant other or not. There will be games and hobby related prizes to win. There will be some prizes with the ladies in mind. And YES, Jeopardy is back with a few new categories. So, come join the fun with your fellow club members and reminisce about the last year of flying. If you are planning on attending please sign up at the meeting, you can also email or text me. I need to have a head count by November 14th.

See you at the meeting and bring your planes to Show & Tell, and a good joke if you have one. J

For Sale

President Bob Briesemeister has some very nice airplanes for sale.

Bob's planes range from small electric ARF's up to 1/3-scale sport planes. Some planes are still in kit form, and some are entirely completed.

The prices of the various planes are very moderate and any one of the aircraft would be a great value for the money.

If you are interested, give Bob a call at 612-964-8877, or see him at a meeting. J

TCRC meets every month on the 2nd Tuesday at 7:00 PM in Fellowship Hall of CrossPoint Church located on the southeastern corner of the intersection of 98th Street and France Avenue in Bloomington. Guests are welcome to attend these meetings.

**Sign Up For The
TCRC Banquet
Today!**

AMA TODAY

Academy of Model Aeronautics Newsletter

AMA Government Affairs Update

October 15, 2019

FAA to Impose Restrictions on the Hobby

AMA needs your assistance in an urgent matter. The FAA unexpectedly informed us that, contrary to earlier commitments to AMA, the agency is planning to limit all recreational model aircraft operations to 400 feet in controlled airspace and there will be *no exceptions*. Although a 400 feet limit may work for a large number of our members, we have a number of disciplines that will need to go higher than these proposed heights. Additionally, the FAA is proposing restrictions in uncontrolled airspace to altitudes that could present safety issues as well as limit some model aircraft operations altogether. We were stunned by this proposal and are pushing back, but we need your help.


We urge you to send a letter to your elected representatives in Congress and ask them to contact the FAA concerning this critical issue. Please visit www.modelaircraft.org/higher-flight to contact your representative.

Congress specifically granted the FAA the flexibility to allow operations over 400 feet if safety would not be affected. The FAA has not provided AMA with any data that proves that our operations are a safety risk. As you know, our model aircraft operations do not pose any safety or security risk to local airports or aircraft. The FAA needs to honor the Congressional directive to work with AMA on these issues.

Since the passage of the 2018 FAA Reauthorization Act, AMA has been working with the FAA to make sure our members have the same ability to operate in the airspace as we have had for more than 80 years. Specifically, we have been working with local clubs and the FAA to establish letters of agreement (LOAs) for model aircraft operations at fixed flying sites in controlled airspace, as required by law. These LOAs were intended to set reasonable parameters for model aircraft operations based on the safety needs of each individual flying site.

We have participated in the LOA process with the FAA in good faith and have successfully reached agreements for many clubs. Unfortunately, the FAA has now indicated that it is planning to set a sweeping 400-foot altitude limit for recreational UAS flying in controlled airspace. This limit would make it impossible for numerous clubs to operate and perversely make those operations less safe. The limits in uncontrolled airspace are also of great concern.

Because of the negative impact on so many AMA members and clubs, AMA is going to fight this proposal with every resource at our disposal. You, our members, are our best resource. To have the maximum impact on this proposed policy, please share this message with your friends, family, and fellow club members who love our hobby. Please also monitor your emails and www.modelaircraft.org/gov for new information as we work to fight this restrictive policy.

As always, we are committed to doing everything possible to protect the model aviation hobby. If you have questions, please contact us at (765) 287-1256 or amagov@modelaircraft.org. 

Calendar

- | | |
|---------|---|
| Nov. 1 | Building Season Arrives |
| Nov. 12 | TCRC Membership Meeting, 7:00 PM
CrossPoint Church
Bloomington |
| Nov. 12 | TCRC Elections |
| Nov. 12 | Deadline to Vote In AMA Elections |
| Nov. 16 | TCRC Annual Banquet, 5:00 PM
David Fong's Restaurant
Prior Lake |
| Feb. 1 | TCRC Annual Auction
CrossPoint Church
Bloomington |

Ugly Airplane Contest

November 12th

by Sherwood Heggen

There are those model airplanes that shouldn't be entered in this contest at the TCRC general meeting on November 12, 2019.

If your airplane was shown at Toledo and still hasn't been test flown, it probably shouldn't be entered. If your airplane was judged and competed at Top Gun, it probably shouldn't be entered. If your airplane is no longer airworthy, it should not be entered. If other modelers gather around your model at the field, wishing they could build like that, it probably shouldn't be entered.

Well, you get the idea. Many of us have airplanes that are used and abused after a season of flying and are starting to get their ugly on. There are many models out there that easily qualify as an "ugly" airplane. It doesn't have to look like it is one flight away from being trashed. It can be your "go to" flier that lets you enjoy flying without the fear of messing it up. It might have 150 flights on it and looks just plain used. Pretty can start to leave after that many flights. Or, it could be one of those homely creations that only the owner can love but could be a winner in the judge's eyes.

Be a participant and bring what you have been flying this year. A trophy and a gift certificate are

waiting for the owner of the winning model.



David Langer, shown above, was the winner of the coveted Ugly Airplane Trophy last year as he proudly displays it at the field.



A close up of the coveted Ugly Airplane Trophy

If you are the winner of this trophy you have the right to add to and enhance the trophy's elegance,

as several past winners have done. But you must win the trophy first.

So, drag that tried and true, but somewhat tired airplane in and enter it into the 2019 edition of the Ugly Airplane Contest on Tuesday, November 12th. J

TCRC Annual Banquet

November 16th

The TCRC Annual Banquet is just around the corner. It is scheduled to be held starting at 5:00 PM on Saturday, November 16th at Fong's Restaurant in Prior Lake at the intersection of Highway 13 and County Road 21.

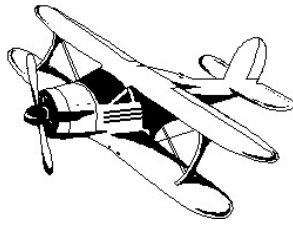
The banquet is always a very enjoyable time with TCRC members and their families coming together to partake of a great meal, indulge in camaraderie with both old and new friends, to see a recap of the club's 2019 events, and to be a part of some fun games with nice prizes for the winners.

President Bob needs a final head count by November 14th, but don't wait until the last minute, give Bob a call today or sign up at the November 12th meeting.

Mark your calendars and plan on being a part of the fun at the TCRC Banquet on Saturday, November 16th. J



Show & Tell



Five nice planes were at the October meeting Show and Tell.



Larry Couture had an AT 6 Texan from a Top Flite ARF kit. It had yellow wings and tail feathers with a blue fuse, done in US trainer colors. It had a 60-inch wingspan and was powered by a Saito 190 3-cylinder radial 4-stroke engine. It has yet to have its maiden flight.



Sherwood Heggen had an Explorer from a Guillow's kit. This kit dates back to the 60's and was a plane he had always wanted, but back then he could not afford the \$14.95 for the kit. He saw the kit on

EBay and was happy to pay the \$100 for it today. He did the plane the exact color scheme shown on the box, which included some black and white checkerboarding, which he painstakingly did with spray paint over the silk he had covered the plane with.



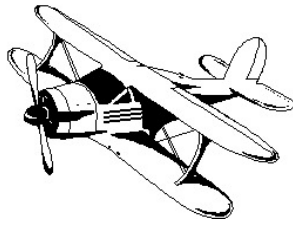
The checkerboard (shown above) was around the nose and also on the vertical stab. It was powered by an Enya 29 2-stroke and weighed it at 3 pounds and 14 ounces. The wingspan was 56 inches. He has not had the maiden flight on the Explorer yet and feels it won't happen until spring.



Sherwood also had an Easy One which he had scratch-built from plans designed by Ted Strader. It was done in white lite Ultrakote with blue trim. He powered the plane with an electric EFlite Park 370 motor powered by an 800 mah lipo. The Easy one had

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Show & Tell



Continued From Page 5

a wingspan of 38-inches and weighed in at 19 ounces. This was Sherwood's second Easy One. The original he built in 1962 from plans purchased from *Flying Models* magazine. It was designed for a Cox .049, but he enlarged the plans to a 54-inch wingspan and powered the plane with a Fox 15. His 2019 version he returned to the original dimensions. He has had the maiden flight on the plane, and it flew well.



John Berk had a couple of neat planes at Show & Tell also. His first was a Cheap & Easy, which he scratch-built from foam. He actually has three of these – two of which he flies in Arizona. The C&E is a delta-wing with a pusher prop cutting through the middle of the fuse. John says it is an impressive flyer on just rudder and elevator channels and can even fly inverted. It is quite lite and was powered with an electric 1,500 kv motor. He has put lights on these planes and loves to fly them at night in Arizona. He does 'Sky Painting' with them, which is to photograph the plane with its lights on with the shutter on the camera open. He suggested members should Google 'sky painting' to see some other pilots' images, using their lighted planes as brushes on the night sky.



John also had another foam plane. This was an Arctic Cat built from EP foam. It had a blue/white/black color and was modeled after the Balsa USA Northstar. Like the Northstar, it was a pusher, powered with an electric 2,200 kv motor. John purchased the kit for \$35. He can fly the Cat off of water or grass and he says it flies quite well, even inverted. He has put many flights on the airplane. J

A Lofty Place To Store A Plane!



Larry Couture has been using trees at the fairgrounds as storage areas for his airplanes. J

AWN

(Assistant Wing Nut)

by Chris O'Connor



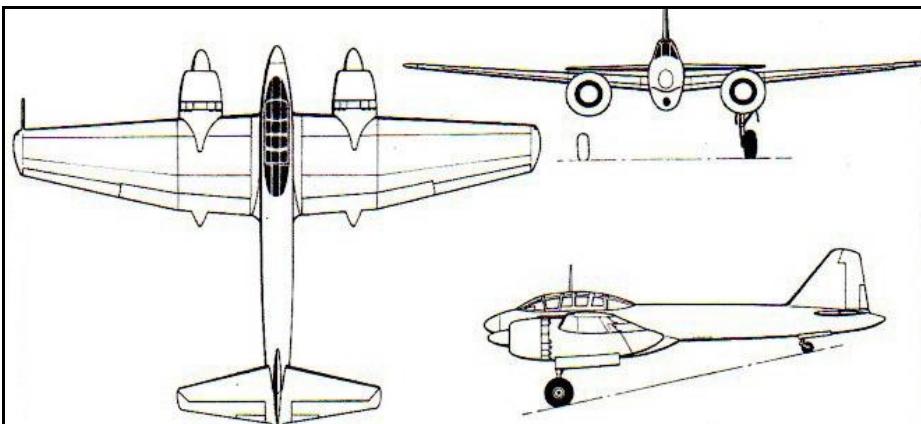
November is election time at the November meeting, along with the Ugly Airplane Contest, and then about a week later our banquet at David Fongs in Prior Lake. At lot going on -- be a part of all the activities -- get involved it's fun.

Last month we had a great discussion on batteries and how they affect our radios and the equipment we use. As a review about the use of at least 6 volt battery supply is that if you use digital servos, they draw more energy because they are updating their position hundreds of times more per second than an analog servo would, so with many digital servo operating together, if you have inadequate batteries, you could cause a brownout situation with your receiver. That's the other problem we have run into before, a low voltage issue on the receiver. If you are using nicads and especially nimh, they have a high internal resistance so if you are doing 3D flying or even aerobatics in general, the servo many draw so much that there's not much left for the receiver and if the voltage gets to about 3.6 volts you may experience a brownout condition. It's like having a garden hose instead of a fire hose, only so much can flow through. So that's what makes A123 and LiFE batteries so appealing compared to the older style batteries like nicads and nimh. A123 and LiFE batteries even look better than Lipo's, because you don't need a voltage regulator which is another point of failure, not to mention the fire hazard Lipo's have.

Enough with batteries, let's move on to radios. Like cars, everyone had an opinion on what radio is the best. I would say the ones that seem to be the best are Spektrum, Futaba, Jeti, and Graupner. Each has good reliability. Usually when you here of a crash and dig deeper into the cause, it's not the radio that caused the failure but rather how the modeler setup his or her airplane. Today's radios are so reliable compared to years passed, that the failure point is more than likely the modeler. So, choosing a new radio comes down to how the transmitter feels when you hold it and also the ease of programming. In my opinion they go from Spektrum on the easier side to Futaba on the very complicated side with the others in between. I know that people are passionate about what they think are the best so I'm not going to get into that, other than say don't buy the cheap stuff or the knockoffs. It's not worth losing a plane over or worse having someone get hurt. Paying the price for good quality is almost always the best way to go.

We will see you at the membership meeting on November 12th, and hopefully at the annual banquet on November 16th. J

November Mystery Plane



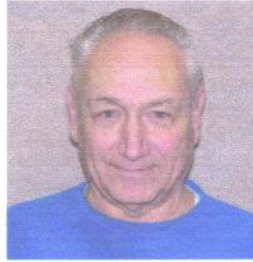
TCRC Has Fuel For Sale

TCRC still has a few gallons of 10% fuel for sale. Price is \$15/gallon.

If you are interested in purchasing a gallon, see Tim Wirtz or Bob Breisemeister at a membership meeting. J

Safety At The Field

By Larry Couture



Here it is the end of October, but it feels more like winter and there is some information out there that seems we might have snow. So, I will bring out my harp about winter conditions and things to be aware of when flying in winter conditions.

Winter flying has a few other conditions that we must contend with and adapt our rules and minds to. The snow can change the use of the existing runways and in general the areas in which we take off and land in. So, everyone one must be extra vigilant of others and express their intentions when at the flight line as it is being used at any given time. The following rules have to be adjusted to fit the condition at the time you are flying:

FOR ALL MEMBERS NEW AND OLD:

The rules are printed in the front of the roster and on a large board in the shelter at the field. I suggest that all members should read them from time to time just to refresh the memory. The thing I will always harp about is let your fellow flyers know what you are doing or going to do by LOUDLY ANNOUNCING take offs, landings, dead stick and on the field travel, and make sure the others hear you and acknowledge you. In my opinion this is the most important rule to follow as it will make accidents less likely to happen. IT SEEMS TO BE WORKING SO LETS ALL KEEP IT UP.

Now if you haven't noticed it is cooler and jackets and sweaters are the new dress code. Here is a tip worth noting: make sure that all things and such are buttoned up or zipped because when an engine starts it tends to pull lose fabric and strings into the prop and that can sure spoil a garment in a hurry, and I have a jacket to prove that. It may also take on fingers, toes and arms and that is not comfortable. Hand launching must be made in front of the flight line and never behind pilot stands.

The rules and common sense still apply when the field is covered with snow, but we must make a few changes for runways due to tracks and conditions of the snow so please be careful and stay safe.

Rule to point out: LAST ONE OUT EACH DAY LOCKS THE GATE.

Thought for the day fly often, have fun and crash less and as usual all landings from which you can fly again are great but not always graceful. So, stay warm and have fun summer, will come, again, maybe.

Safety Always Comes First!

THE TCRC FLARE OUT Monthly Newsletter



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 & Mike Timmerman 952-496-1631

Website: <http://www.tcrconline.com>

Lock The Gate!

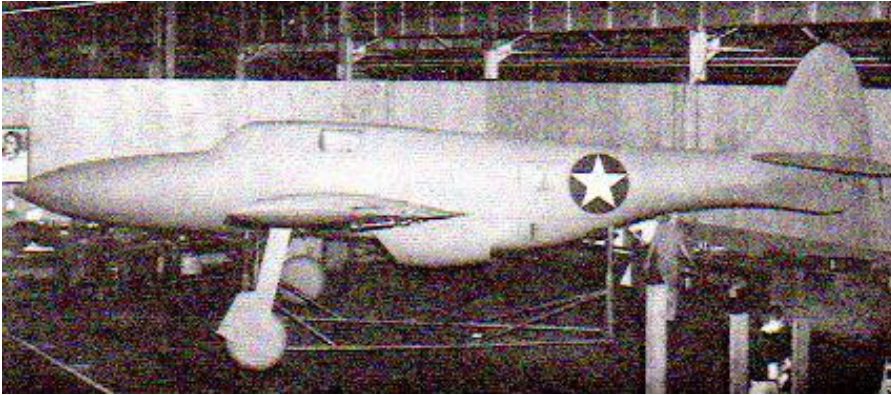
It is very important that the gate to the field be kept locked at all times when there is no member present.

It is every member's job to lock the gate when her/she is the last one at the field. It doesn't matter the time of day or how nice the weather is. This simple rule is to keep the gate locked to prevent theft, vandalism and the unauthorized use of our land from occurring. J

Republic XP-49

by Conrad Naegele

The October Mystery Plane was the Republic XP-49.



One of the more interesting aircraft power plants under development in the early years of WWII was the Wright R-2160, reportedly to produce 2,500 horsepower. It was a complex 42-cylinder, with the cylinders in 6 rows, displacing 2,160 cubic engines.

This engine was to power a contemplated huge fighter, the XP-49. It progressed only to the mock-up stage, and two such wooden mock-ups were completed, but by then the USAAF decided that fighters already in production were superior.

The proposed plane had a long-blown canopy to provide rearward vision. At that point, 1941, the current fighters still featured razorback canopies. The engine was mid-mounted – providing a long drive shaft (think P-39) beneath the pilot, to drive a pair of 13.8-foot contra-rotating propellers. Armament was planned to be two 37 mm cannons and four 50 caliber machine guns.

This rather radical plane program was discontinued in May, 1943. The one mock-up was in ¾-size for the proposed fighter. The wooded mock-up was eventually destroyed.

The XP-49 was to have a 51-foot, 8-inch wingspan, a gross weight of 26,164 pounds and a speed of 450 mph. J

2019-2020 AMA Dues Statements

Most older TCRC members should have received their 2019-2020 dues statements in the mail in September from the Academy of Model Aeronautics. Newer members renew on the anniversary of the month they joined.

AMA 2019 dues are the same as the previous year. They are:

- Adult (19-65) \$75
- Senior (65 and up) \$65
- Under 19 Free or \$15 with *MA*

Your AMA membership gives you \$2.5 million in personal liability coverage, \$25,000 in medical coverage and also a subscription to *Model Aviation* for the year.

To belong to TCRC, you must have a valid membership for the year in AMA.

Please note that AMA also has a Park Pilot membership that has a cost of \$38 per year, but that membership is not valid for membership in TCRC.

To renew your membership in AMA, the Academy gives you four methods: at the AMA website, www.modelaircraft.org; by fax at (765) 741-0057; by phone at (800) 435-9262; or by returning the renewal form you received in the mail in the supplied envelope.

Deadline for paying your 2019 AMA dues is December 15 to avoid a lapse in membership services. J

MNBigBirds.com Free! Scale Plan Downloads

Hawker Hurricane MkII
Kawasaki Ki-45 "Nick"
Focke Wulf TA-152H
Lavochkin La-7
Grumman Lynx
ARADO 96B
Howard Pete
Mitsubishi Ki-15 "Babs"
Thomas Morse Scout S4C

TCRC Elections November 12th

It is already November, and is cold and snow is in the forecast, and the year is racing past. This means that the TCRC elections are just a couple of weeks away. As usual, the elections will be held at the November meeting, which this year will be Tuesday, November 12th.

All four of the officer positions are up for election this year plus two of the three at-large board seats. The board seats not up for election this year is occupied by Gerry Dunne.

Currently the officer positions are held by Bob Breisemeister, president; Chris O'Connor, vice president; Ken Weddell, secretary; and Tim Wirtz, treasurer. The board seats are held by Brian Johnson and Doug Elyea.

All six of the incumbents have indicated that they will run for reelection this year. But it would be great if each of the seats had another candidate proclaim and we could have contested elections for all positions. Consider being a candidate for TCRC office this year. It can be a very rewarding experience and be very helpful to the club.

Plan on being at the TCRC membership meeting on November 12th. Consider being a candidate for this year, and by all means be a voter at the election. J

The Wednesday Bald Eagles Breakfast Is A Great Time



For Many years now retired and not so retired TCRC members have met on Wednesday mornings at Perkins Restaurant in Bloomington. (Photo by Jim Cook)

18304

If someone were injured at the TCRC flying field and you had to call 911, what would you tell the operator for the location of the emergency? You would tell the operator the fire number for our field: 18304.

For safety reasons, it is very important every member knows our fire number. Hopefully we will have the fire number prominently displayed in the shelter at the field in the very near future. J

TCRC Auction February 1st

As fast as the year is flying by, it is certainly not too early to start thinking about the TCRC Auction scheduled for Saturday, February 1st. It will be here sooner than you think.

Start thinking about what you are planning on selling at the auction, and also what you might need to buy at the auction. And, without a doubt mark off that date to be there to work. Your services are needed! J

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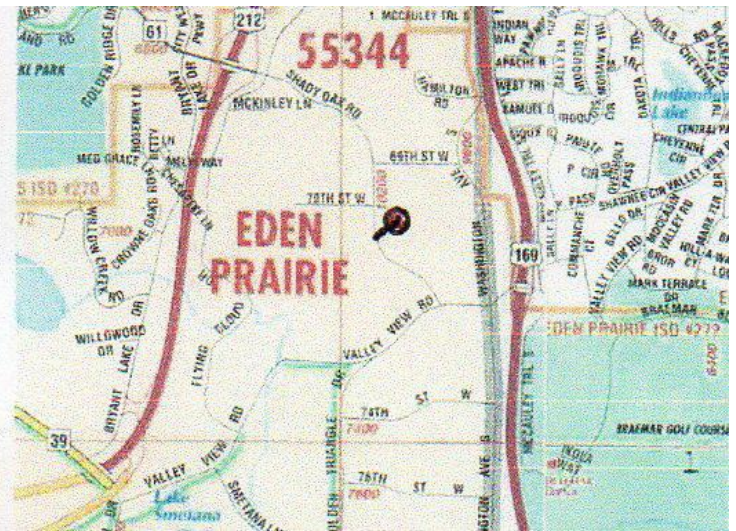
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