



August

Minneapolis, Minnesota U.S.A.

2022

Wings Over Jordan Attracts A Big Crowd

by Tim Wirtz

Wings Over Jordan started off clear and a little windy with nice temps that would last through the day. Chris and Nate O'Connor beat Bob Briesemeister, the organizer, down to the field. They had their tent set up and were flying by 9:00. Others came between then and about 11:00 and, by the end, we counted 25 pilots with, probably about 50-60 planes. Brian Johnson came down and helped with the paintball shoot out. Tim set up the sound system and provided music for the day. Bob brought the food and drink and everything was set.



The parking lot at the TCRC was full of cars at Wings Over Jordan.
(Photo by Bob Briesemeister)

Lunch was ready about 11:30 and included hot dogs, burgers and brats, accompanied by potato salad and chips. There was plenty of water and soda for people to keep hydrated.

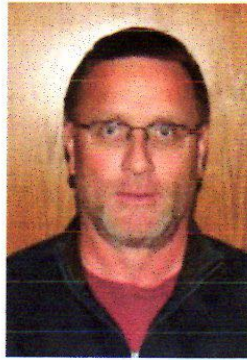
New to this year's event was a paintball shoot out. We used a U.S. AirCore coroplast trainer, built and donated by Larry Couture and with engine supplied by Bob, and a paintball gun supplied by Brian Johnson. We charged fifty cents per round to shoot paintballs at the AirCore trainer. Six people stepped up to try to shoot the plane, flown by Brian slowly across the runway, with each scoring at least one hit. The club made \$47 from the event. The trainer took several hits, including to the muffler, nose cone, wheels and underside of the wing and just kept coming back for more. Brian said the trainer flew surprisingly well, especially considering the Coroplast on the ailerons had warped and the plane was extremely heavy.

There were quite a few planes at the event. Dave Andersen and Chris O'Connor flew a pair of large electric T-28 Trojans in a loose formation. Chris and Nate O'Connor had their electric P-47s, as well as some glow-powered planes. Sherwood had his Taylor Craft (started but didn't fly) and his beautiful 60s-era, twin-tailed pattern

Continued On Page 3, Col. 1

A Note from The Head Wing Nut

By Bob Briesemeister



Hello Members,

We've had 15 days in the 90s already this year and August has just begun. The Twin Cities average 13 days in the 90s per year. I'd say we are in the dog days of summer! I would prefer upper 70s but as they say if you don't like the weather in Minnesota wait 10 minutes.

This summer has been flying by. The field is in great shape to fly but the winds have not been cooperating as much. The 7-inch deficit of rain has kept the field dry most of the year. Keep your fingers crossed that there will be moderate rainfall the rest of the year.

All of our events have been held at the main TCRC flying field with no rainouts including two membership meetings with the third to be held on Tuesday the 9th of August.

On August 27th TCRC will hold Model Aviation Day. This is an open event for anyone with a current AMA membership. With this event we also like to invite anyone who is interested in learning to fly model airplanes or R/C aircraft to come, observe, learn and possibly try to fly. This could be done on a simulator or even on a buddy box. This is your chance to invite your family or friends to come and watch and perhaps fly. The TCRC paint ball gun will be there if you want to shoot at a flying target for a minimal charge. Concessions will be open.

If you haven't seen or heard TCRC has purchased a commercial zero turn lawn mower to help with the mowing of the flying field. In August the Reinvest In Minnesota (RIM) land can be mowed. All of the long grass, weeds and trees on the East, West and North sides of the field can be mowed. If you want to help either mowing the field or the RIM land and need to learn how to operate the mower or tractor, please let me know.

If you have been to the field, you may have seen a pile of new shingles for the shelter roof. Over the last few years, the roof has been patched due to some shingles blowing off. Jeff Tolzmann was able to secure the donation of shingles with Siwek Lumber. Thanks Jeff and thanks Siwek!

The Northern Alliance will be holding their annual Military and Classics Fly-In at the SMMAC field in Owatonna on August 11-13. If you have not been there, it is a great show.

TCRC has a busy schedule in September. There will be a Scale Fly/Float Fly and a Swap Meet.

Happy Flying!



Calendar

- Aug. 3** **3rd Quarter Board Meeting**
President's Home
7:00 PM
- Aug. 9** **TCRC Meeting At The Field, 5:30 PM Dinner**
7:00 PM Meeting
TCRC Jordan Field
- Aug. 12-14** **Northern Alliance Military Fly In**
SMMAC Field
Owatonna, MN
- Aug. 27** **Model Aviation Day**
TCRC Model Air Park
- Sept. 10** **Scale Fly**
TCRC Jordan Field
Scott Anderson
- Sept. 13** **TCRC Meeting At The Field, 5:30 PM Dinner**
7:00 PM Meeting
TCRC Jordan Field
- Sept. 17** **Fall Float Fly**
Bush Lake Park
Bloomington, MN
Steve Meyer



Wings Over Jordan

Continued From Page 1

plane. Tim Wirtz had his Japanese Tony there with a replacement Saito 100 that flew great and only went through 5 ounces of fuel in 5 minutes instead of 14 ounces in 5 minutes as with the previous motor (definitely something amiss with that one). Thanks, Bob, for the replacement motor! There was also a Kadet EP42 that had been converted to glow with a Norvel .061.

There were many electric planes, probably more than glow-powered planes, at this event. There were electric military and civilian jets, an electric ME-109, and many sport planes flying around. It was great to see a mix of power options and planes at the event.

About 4:00, just as Brian and Tim were starting to pack up, a family came down and wanted to know more about the club and RC Aircraft. The son already flies drones and both father and son seemed very interested in the club. Tim showed them around, told them about how the planes work and then they got to see his green and yellow trainer fly and Joe Niedermayr's electric ME-109 fly. Perhaps we'll have more new members soon?

Clean up was finished and everything put back in its place by 5:30 when Tim went home. There were still a couple of people flying even then. It was a great event on a beautiful day.

Thanks to all who came out to fly, to Brian for the paintball fun, and to Bob and Tim for organizing and hosting this very successful event. ☺

Brian Gave The Paintball Shooters A Pretty Easy Target!



Brian Johnson's slow flybys with the Coroplast Trainer gave the paintball shooters some great shots. (Photo by Bob Breisemeister)

A Smooth Landing For The Tony



Tim Wirtz greases his Tony in. (Photo by Bob Breisemeister)

Pictures From TCRC's Wings Over Jordan



Sherwood Heggen brought some of his beautiful vintage aircraft that he loves to build.



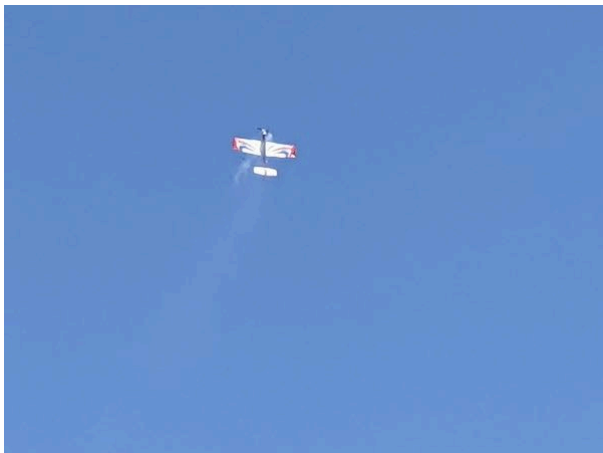
Chris and Nathan O'Connor sure know how to come and enjoy a flying event at Jordan.



The shelter was a pretty popular place to be when you weren't in the pits or on the flightline.



Tim Wirtz gets an assist from Brian Johnson as he readies his Japanese Tony for another flight.



A nice looking electric makes a run for the heavens on a bright sunny day at Wings Over Jordan.



The Coroplast Trainer and her backup plane relax in the grass after facing a huge barrage.

Model Aviation Day August 27th

by Tim Wirtz

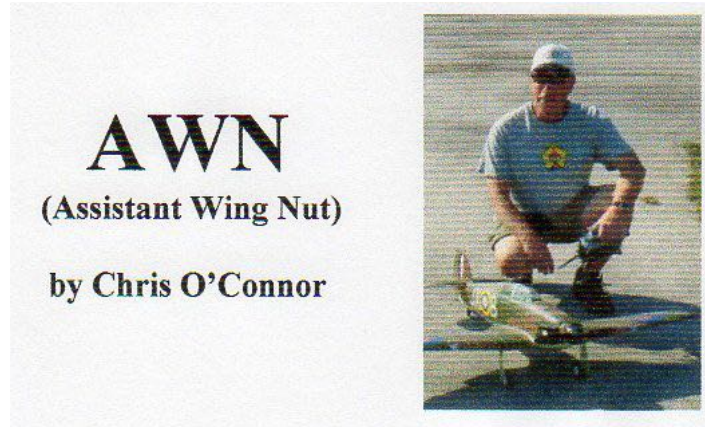
Model Aviation Day is right around the corner, August 27th. This is the event that we celebrate model aviation, inviting the public to see and participate in our great hobby. We traditionally offer flight simulator training and buddy box training for people who want to experience flying an RC aircraft. We also have an area for display of different airplanes and try to have as many different planes as possible to showcase what our members build and fly.

New to this year, we will be offering Take Your Best Shot, an event in which anyone will be invited to shoot at a flying model with a paintball gun for fifty cents a round. We'll offer bags of 10 or 20 paintballs for \$5 and \$10, respectively. We've done this at other events and it's really fun.

In order to make MAD 2022 a success, we need club members to: This is a fun event and the only one that is targeted towards the general public.

- Bring airplanes for the display and to fly
- Bring a simulator if anyone has one (Tim has one, it would be nice to have a couple more)
- Help with concessions
- Act as an instructor for buddy box flights (We need a trainer with a buddy box)
- Talk to people and answer their questions about the hobby.

This is a fun event and the only one that is targeted towards the general public.



Hopefully many or all of you can say I've gotten to fly a lot by now. Between the heat and the wind, it's been a challenge at times.

Well, the next couple of months are busy with many flying activities in the area that there should be something for everyone.

First event coming up is the Northern Alliance Military Fly-in down in Owatonna at Tim Johnson's field or known as SMMAC field -- Southern Minnesota Model Airplane Club. Their website has directions if you have never been there. The fly-in starts Thursday August 11th through the 13th. Saturday usually is the biggest day. If you're a fan of warbirds, both prop and jet, and all giant-scale then this is a must-see event. There will be 100 -- 120 pilots with 300 -- 400 planes throughout the three days. Come watch or, even better, participate. People come from as far as Canada, Colorado, Oklahoma, Florida and everywhere in-between. There will be some TCRC members flying and also TCRC runs the flightline for the three days. One of the biggest and best events in the country.

Another event that many of you can be involved in is Model Aviation Day, on Saturday August 27. This is open to all members and visiting pilots. There will be all types and sizes of planes flying. This will be another event to participate in.

In both of the events that I just mentioned the pilots will be flying a oval racetrack pattern with either right or left hand turns depending on wind direction, and no pattern when only one plane is in the air. Obviously, the racetrack pattern is used to help prevent midair's and provide safety to all.

That's the special events coming in August. There's even more in September ! So, let's get out and do some flying! ☺

If you know of other AMA member pilots that might want to come and fly, please let them know.

Plan on being a part of MAD 2022 on August 27th. ☺

Twin City Radio Controllers Model Aviation Day



August 27th, 2022 at the TCRC field in Jordan, MN

Come see what the world of Model Aviation is about!

10 am to 4 pm

Many different types of aircraft — Scale, Aerobatic, Sport, Trainers

Demonstration flights

Try flying for yourself on Flight Simulators and Training Aircraft with experienced pilots

Take Your Best Shot — Shoot paintballs at a model airplane! 50 cents per paintball. Buy 20 balls for \$10 or 40 balls for \$20!



Concessions

- Burgers
- Hotdogs
- Chips
- Soda/Water

R/C Pilots with Current AMA Membership welcome to fly

Contact Info:
Tim W. (952) 297-5226



Instructions to take the	Miles
Head South on US-169 toward Jordan	0.0
Turn RIGHT onto County 9 at the traffic signal in Jordan	0.0
Turn LEFT onto County 54E DR ² St	0.4
Turn RIGHT on Southport Ave. Southport Ave becomes Southport Way. Go straight through the four way stop.	0.5
Turn LEFT at the yield sign onto W Sioux Vista Dr	0.4
Turn Right onto the gravel road at the sign for TCRC and proceed down to the parking lot.	0.5



The TCRC Membership meeting on August 9th will be held at the Jordan Model Air Park.

The grill will be on and dinner will be served at 5:30 PM. The meeting will start at 7:00 PM. Bring a plane and get some flying in before enjoying a dinner on the club and then attending the membership meeting.

The membership meeting for September 13th is also scheduled to be at the TCRC Jordan field, weather and water permitting.

In case of bad weather, the meeting will be at its normal time of 7:00 PM at CrossPoint Church in Bloomington. ☺



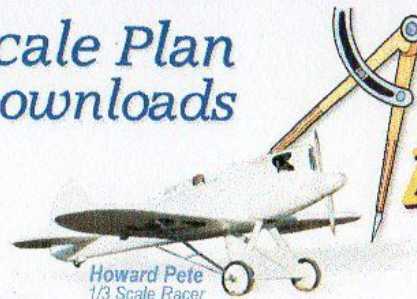
MNBigBirds.com

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



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KI-45 DRAGON SCOUT

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- Paint Masks & More!

Beriev MBR-2

by Conrad Naegele

The July Mystery Plane was the Russian Beriev MBR-2.



One of the most successful of the Soviet Union’s designers of waterborne aircraft was G. M. Beriov, whose flying boats and float planes were virtually the only such aircraft to be used during the war years.

Perhaps his most successful pre-war design was the MBR-2 in service from 1931. This plane had a wooden hull, two spar metal-wings, and tail feathers, covered in fabric. It had especially fine water handling on both lake and sea conditions. Really unusual was that it could easily fly with wheels or skis.

Production continued through 1942, and a total of 1,500 planes were produced. It carried a crew of five. In addition, it also set many records for altitude. In 1937, a lady pilot, P, D, Osipenko, attained an altitude of 29,083 feet. (Although this was with no load.) She set many other altitude records with certified cargo loads. One plane, in civilian role was designed to carry eight passengers.

This short-range recon flying boat had a wingspan of 43-feet, 11-inches, a speed of 154 mph, and a range of 870 miles. It was powered with a 12-cylinder, liquid-cooled Vee engine, developing 860 horsepower. For armament it carried a 7 62 machine gun in an open bow and a rear turret, plus carried 660 pounds of bombs. ☺

Model Aviation Day

August 27th

THE TCRC FLARE OUT Monthly Newsletter



TWIN CITY RADIO CONTROLLERS INC.

Purpose: To preserve, encourage, and further develop the hobby of building and flying radio controlled model airplanes.

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Treasurer	Tim Wirtz 952-941-5357

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Editor James R. Cook 952-200-2030
Publishers: Pat Dziuk 952-445-3089
 & Mike Timmerman 952-496-1631

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

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. ☺

Electric Funeral: Disposing Of Your Lipo Batteries

by Terry Dunn / terrydunn74@gmail.com

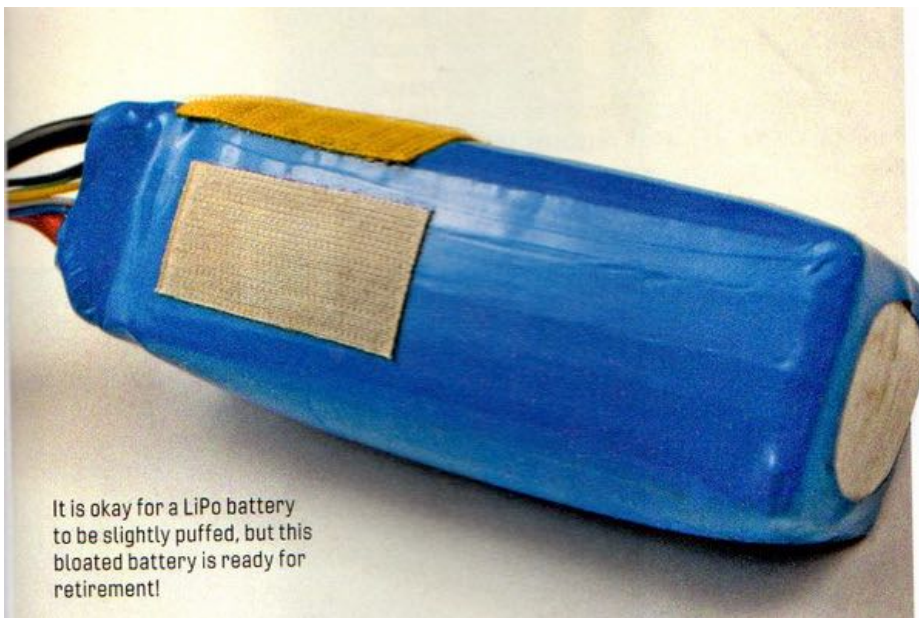
(Reprinted from Model Aviation, August, 2022)

It's fair to say that most modern, electric RC aircraft are powered by LiPo batteries. Every single one of those LiPo batteries will eventually reach the end of its useful life. As with any other chemical, it is important that we dispose of those departed batteries safely and responsibly.

I thought that it would be wise to solicit the advice of a LiPo guru for guidelines on proper disposal, so I reached out to Josh Barker at MaxAmps, a US-based company that hand-builds LiPo packs for RC applications. Josh explained things much better than I ever could. The remainder of this column is his response to my query.

LiPo Triage

Step one is to diagnose the suspect battery pack. Obvious causes for failure, such as crash damage, over-discharging, and swelling or puffing, are often easy to see. If your pack is visibly damaged, we recommend discontinuing use, even if it is still holding voltage. The internal components are likely compromised. One more hard hit (or even just charging) could be the final straw that causes the battery pack to short out.



It is okay for a LiPo battery to be slightly puffed, but this bloated battery is ready for retirement!

A sweet, pungent smell from a crash-damaged battery indicates that the electrolyte solution in one or more cells is leaking. The damaged cell(s) will be unable to maintain the same voltage as undamaged cells in the pack. In fact, it might not hold a charge at all.

Discharging a LiPo battery below the minimum suggested voltage (approximately 3.0 volts per cell) is another potential way to cause damage. This is called over-discharge. A cell measuring at or near 3.0 volts at rest was most likely even lower when it was used in the model. Most hobby-grade chargers will not begin a charge process if any cell in the battery pack is below 3.0 volts. This is a safety feature of the charger because over-discharged batteries can be unstable.

Puffing or swelling is common with LiPo cells. Slight swelling over time is normal as a pack ages. This swelling will be less than 2mm if the cells are healthy. If swelling more than this amount occurs, discontinue use because the battery is on its way out the door. Common causes of swelling are improper storage, over-discharging, or pulling excessive current from the battery.

What constitutes improper storage? That could be storing the battery fully charged or even simply storing it for a long time. LiPos are designed to be used. The longer they sit on the shelf unused, the faster they will fail over time. Battery packs that are not in use should be kept in a storage state (50% to 60% of the battery's capacity) and cycled (fully charged and discharged) monthly.

Many LiPo chargers will measure the internal resistance (IR) of each cell within a battery pack. This can indicate the health of the cells. Although the IR value of each cell might fluctuate for a variety of reasons, the relative IR among the cells in a pack should remain close. For instance, if you have a four-cell battery with three cells that measure 4

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Disposing Of Your LiPo Batteries

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milliohms and the IR of the fourth cell is 25 milliohms, there is a good chance you have a failing cell.

LiPo batteries can fail in many ways, with many different symptoms. If you are unable to assess the health of a specific LiPo battery, I recommend contacting the manufacturer for guidance. Someone should be able to walk you through the process of diagnosing a bad battery and make recommendations.

Salt and Batteries

After you have identified a bad battery, you must dispose of it. My recommendation is to recycle it. Lithium is a limited resource compared with the current demand. Recycling lithium will be an important future step in battery technology if it continues to be used in the variety of applications that we see today.

You can simply tape up any exposed leads on the battery and take it to your local recycling center or lithium drop-off location. Lowe's, Batteries Plus, and other large retailers have locations to drop off old lithium batteries for recycling. Check locally for proper disposal centers.

The other disposal option is to render your lithium battery completely inert. Some chargers

have a 'destroy' feature that will completely discharge a LiPo battery for safe disposal.

If your charger does not have this feature, you can use a resistor to fully discharge the battery. Using a resistor can generate a lot of heat, so make sure that you know what you are doing before attempting this method. (*Author's note:* See the lightbulb discharger presented in the April 2021 'Electrics' column.)



A lightbulb discharger

Some hobbyists dunk their sketchy LiPos in salt water to slowly drain the voltage to zero. I do not recommend this method because it is inconsistent. Safety can also be a concern because you need to expose the lithium to the saltwater to guarantee that it is inert.

No matter what method you use to deplete your battery, do it in a fire-safe, outdoor location, such as on a concrete driveway. There is a small chance that the battery could catch fire. For the same reason, you should also keep the battery within sight at all times during discharge, but that's true even when you are charging or discharging a perfectly healthy LiPo.

After the battery has been discharged to zero volts, you should strip off enough of the insulation to join the positive and negative wires together. This will ensure that the battery remains completely dead. Do not throw away any battery that still has voltage, even if it's in just one cell. It could short and start a fire.

A fully discharged LiPo battery can be thrown away with your normal household garbage. Note that this is not true for other types of rechargeable batteries, such as NiCds and NiMHs. Those types of batteries contain hazardous materials and must be properly recycled.

Handle With Care

LiPo batteries are an integral part of electric flight, but they do require special care and attention. This remains true from the cradle to the grave.

I repeat my thanks to Josh for sharing his expertise with all of us.

As always, I hope you found this column useful. I encourage you to send me your electric power-related tips, tricks, and ideas. I also love to hear about your electric-powered RC flying machines. 😊

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.

Minnesota River Level Report

by Jim Cook

The Minnesota River level at Jordan has been at 5.5 feet and dropping very slowly for several days now. This is very good news to TCRC and its Jordan Flying site.

The TCRC field will have water creep on the eastern end of the field when the River is at 18 feet.

NOAA is not making any projections on the River level at this time, which is a good sign that, barring any large rainstorms in the western Minnesota River bottom, the Jordan Field should remain in good flying condition throughout the summer. ☺

For Sale

President Bob Breisemeister 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.

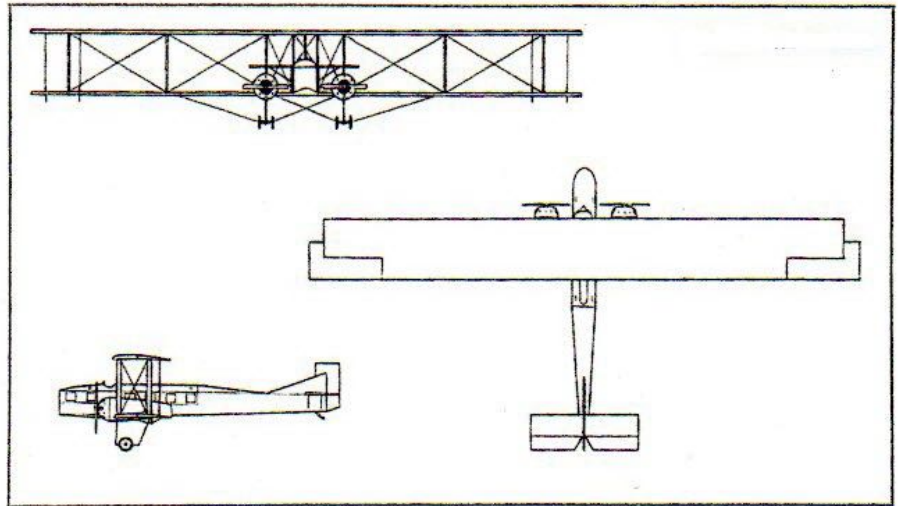
If you are interested, give Bob a call at 612-964-8877, or see him at a meeting. ☺

Northern Alliance Military Fly In



SMMAC Field Owatonna, MN
August 12th through August 14th

August Mystery Plane



TCRCOnline.com

A Great Website!

New Members

TCRC gained two new members in the month of July.

Bernard "BJ" Buckland lives at 4024 Hunters Hill Way in Minnetonka, 55345. His phone number is 952-240-2869 and his email address is b.j.buckland@gmail.com. BJ is a returning member and currently is flying a Turbo Timber Evolution and an Ultimate 3D Biplane.

Scott Thompson lives at 14211 Shore Lane NE in Prior Lake 55372. His phone number is 224-355-9790 and his email address is scottyis@comcast.net. He is new to the club and currently is flying a Laser, Trigger, Husky, Polaris and a Marlin.

When you see BJ and Scott at a meeting or at the field, be sure and introduce yourself and welcome them to TCRC. ☺

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. ☺



We have store on eBay, Facebook and Craigslist. We get the best return on eBay but large items or complete airplanes sell better on Facebook Marketplace or Craigslist.

Things you can donate:
Engines, 2.4 GHz Radios, kits, planes.

Contact Brian Johnson at 763-744-6379
with any questions on how to donate.

Show & Tell Data Form

Bringing a plane to the TCRC meeting for Show & Tell?

If you are, be sure to go to the club website TCRCOnline.com and print out a blank Show & Tell Data Form. Fill this out and make sure it gets to the newsletter editor, Jim Cook so that the correct information shows up about your new airplane in the newsletter.

Also, if Jim is not at the meeting, make sure someone takes a picture of your new masterpiece and emails the picture to Jim also. If he is not at the meeting, you can have someone take a picture of the completed form and email that picture to him also. ☺

Show & Tell Data Form

Twin City Radio Controllers



HOBBY

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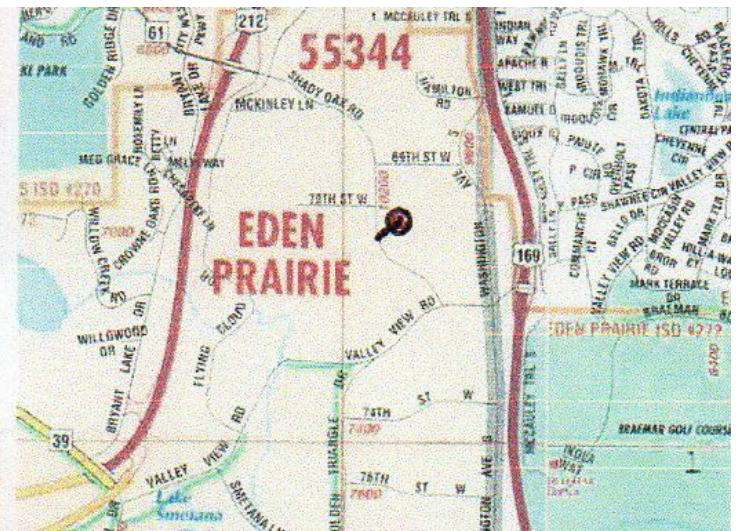
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