



November

Minneapolis, Minnesota U.S.A.

2021

# TCRC's Real And Virtual Meeting Format Working Well

Not a lot of good things have come out of the advent of COVID-19, but the combination of TCRC's use of real meetings combined with virtual Zoom meetings has been a big success.

Through almost all of 2020, TCRC was forced to hold its meetings only via the computer because of COVID-19. When the virus finally started to abate and indoor meetings were again allowed, Tim Wirtz, who hosted the Zoom meetings, thought it would be nice to continue holding virtual meetings in conjunction with the actual TCRC meeting.

For members attending the actual event everything appears to be the same, with the exception of Tim's computer on the front table showing the Zoom attendees. For those members attending from home, they see the audience at the meeting, and see and hear all that is occurring.

So now, just because you are out of town, you don't have to miss the membership meetings. Zoom can be used on your laptop, your iPad or your phone from the comfort of wherever you are!

The only drawback is that if the newsletter editor is not in attendance at the real meetings, photos taken from his computer screen can be somewhat grainy. But usually another member at the real meeting takes photos of Show & Tell, the program, etc. and email them to the editor.

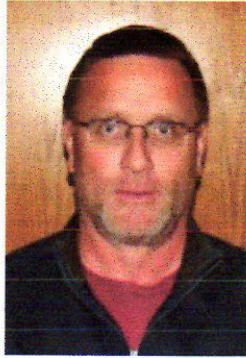
So, next time you can't make the real TCRC meeting, take the time to join in via your phone. ☺



Photos of the some of the real and Zoom audiences at the October 12<sup>th</sup> membership meeting. (Photos from home by Jim Cook)

## A Note from The Head Wing Nut

By Bob Briesemeister



Hello Members,

Hibernation season is almost here in the great state of Minnesota with club members heading for warmer weather. Some are headed for Arizona as well as Texas and Florida. But there are still some nice days to come.

In the past few weeks, I have left some pallets and scrap lumber to burn. If you would like any of it, you need to get to it before Dave Erickson or it will be gone. He's a little bit of a pyromaniac. Ha. Feel free to bring some firewood for a recreational fire and to stay warm.

Building season is upon us or as for me it is more of a repair season. It is fun to see what members are working on so please bring your projects to the monthly membership meetings. It does not have to be completed. Sometimes it is interesting to see airplanes as they progress.

### November Happenings:

- Membership Meeting will be held on the 9<sup>th</sup> at Cross Point Church as it is getting too cold and dark to hold it at the field. This will be a Zoom meeting as well allowing the members who are not able to attend the chance to see what is going on with club from the comfort of their homes.
- The annual elections will be held at the November meeting. All of the executive board positions and two at large positions will be up for election. All of the incumbents are running for reelection. Don't let that stop you if you are interested in running for office or the board. Competition is a good thing.
- The Ugly Airplane Contest will be held at the November 9<sup>th</sup> meeting as well. Bring that plane that is flyable but not ready for the trash. You never know you might win a gift certificate. Check out Sherwood's article in this newsletter for details.
- The TCRC Banquet will be held on the Saturday the 20<sup>th</sup>. It will again be held at David Fong's Restaurant in Prior Lake. With the cost of everything on the rise I was forced to raise the price from \$25.00 to \$30.00/person, which is the first time that I have had to raise it since I

have been president. This is only to cover the cost, as the club does not make any money from the banquet.

At the banquet there will be word games, a coloring contest and yes, Jeopardy will also be back. So, come and start your holiday season off with fellow TCRC members, their families and friends. It is always a fun time with good conversation from the past years.

Happy Flying!



## Calendar

Nov. 7	Daylight Saving Time Ends, 2:00 AM
Nov. 9	TCRC Membership Meeting, 7:00 PM CrossPoint Church Bloomington, MN
Nov. 9	TCRC Elections CrossPoint Church Bloomington, MN
Nov. 9	Ugly Airplane Contest CrossPoint Church
Nov. 20	TCRC Annual Banquet, 5:00 PM David Fong's Prior Lake, MN
Nov. 25	Thanksgiving Day
Dec. 1	Joint Board Meeting Bob Beisemeister's Home, 7:00 PM
Dec. 4	All Season Flyer Finale, Jordan Field
Feb. 5	TCRC Auction CrossPoint Church Bloomington, MN

## 2021-2022 AMA Dues Statements

## TCRC Elections November 9<sup>th</sup>

### New Members

Most older TCRC members should have received their 2021-2022 dues statements in the mail this month from the Academy of Model Aeronautics. Newer members renew on the anniversary of the month they joined.

AMA 2021 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 either the print or digital *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](http://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 2021 AMA dues is December 15 to avoid a lapse in membership services. ☺

It is now November and it is time for the TCRC elections. As usual, the elections will be held at the November meeting, which this year will be Tuesday, November 9<sup>th</sup> at CrossPoint Church.

All four of the officer positions are up for election this year plus two of the three at-large board seats.

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 up for election are held by Brian Johnson and Jim Ronhovde. The board seat held by Gerry Dunne will not be up for election this year.

At this time, all of the incumbent officers are planning on running for re-election, plus the incumbents in the two board seats. But we want to have other members run for office this year.

All members attending the meeting, either by being at the meeting, or by being present via Zoom will take part in the elections.

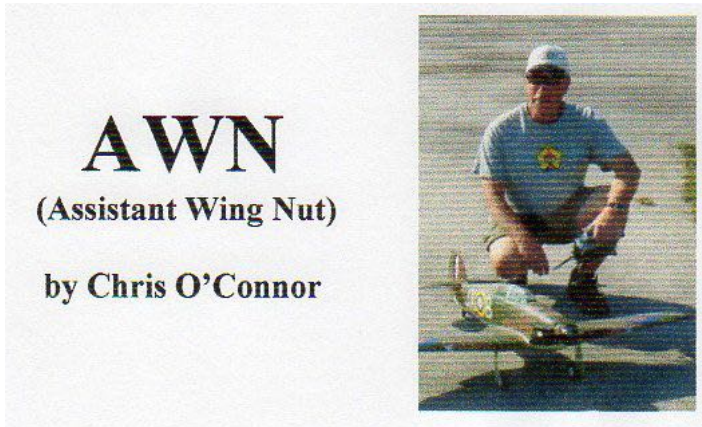
Please consider being a candidate for TCRC office. The club needs you. Be both a voter and a candidate at the TCRC elections on November 9<sup>th</sup>. ☺



Bob Bonahoom became TCRC's newest member in October. Bob lives at 14323 Wilds Overlook NW in Prior Lake 55372. His phone number is 412-327-0651 and his email address is [bobbonahoom@gmail.com](mailto:bobbonahoom@gmail.com). Bob has been flying for about 1-1/2 years and has lots of planes including a Parkzone T-28 and an Extra 300.

Dean Jansa lives at 1568 Quast Court in White Bear Lake, 55110. His phone number is 952-484-5017 and his email address is [dean.jansa@gmail.com](mailto:dean.jansa@gmail.com). Dean has been flying for 30 years and is currently flying a Velo FSJ sailplane.

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



This month is all about the benefits of mode 1 vs mode 2. Some of you are saying, “So what, who cares, etc.” Well even if you didn’t want to know, I’m going to tell you anyway.

It all started back in the reed days of R/C flying, before proportional radios came about. The reed Tx, using the example of a 10-channel very different than today’s 10-channel had five switches that looked like toggle switches and were spring loaded to stay at neutral. They were basically an on off switch, so to move the servo you would have to beep the switch to move the servo, but holding the toggle switch the servo would travel its full distance. So, beeping the switch many times would get the amount of movement you wanted.

Now imagine if both the elevator and aileron were on the same side of the Tx. Two separate switches, it would be impossible to do both at the same time, so elevator was on the left side and aileron was on the right side. The two primary controls separate.

Now comes proportional radios like we have today and the natural way they were setup is with the two primary controls separate as before. Then someone said, now let’s put both on one stick like full-size flying is done. Well, that sounds good, but flying a model with primary controls on one stick is not the same or as easy as full-size.

Review the two style of radios, mode 1 has the elevator and rudder on the left stick and the throttle and aileron on the right stick. Mode 2 has throttle and rudder on the left stick and elevator and aileron on the right stick. So, think about it for a moment, unless you use the pinch style of flying, and you use your thumbs on top of the sticks, when you move your ailerons stick side to side using your thumb, your thumb moves in an arc, not straight side to side. Doesn’t that give some up elevator when giving aileron control? Now think when you are landing and have reduced power you are probably holding some up elevator against spring tension, it’s very hard to give aileron without affecting how much elevator you are trying to input. Watching an approaching model on final and seeing the model move up and down makes you wonder if the two controls are affecting each other.

Same scenario on mode 1 the elevator is on the left and the ailerons is on the right not interfering at all with each other’s movements. So, it’s like Ford or Chevy. In my opinion I feel that mode 1 is easier to master in normal flying. You will learn to fly either way and some of the best fliers are on mode 2 and some are on mode 1. Whoever is teaching you is what you will probably learn to fly with even though mode 1 is better!

Different parts of the world fly different modes. Europe is a mixture of mode 1 and 2, and Japan is mostly mode 1. More guys that are older or having flown for some time may be mode 1 fliers.

Okay I’m done, see you at the field. 😊

## Always Wear An Orange Vest To Retrieve A Plane

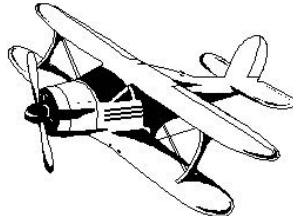
Every member is reminded to wear an orange vest if your plane goes down in the wooded areas surrounding the runways.

Minnesota hunting season started on September 18<sup>th</sup> and will continue for the rest of the year.

If your airplane does go down in the woods, the orange vests are quite close. The orange vests are stored in the rafters of the shelter and easy to reach.

Be safe! Where an orange vest anytime you have to retrieve an airplane. 😊

## Show & Tell



Six beautiful airplanes showed up at the October 12<sup>th</sup> membership meeting.



**Photo by Joe Neidermayr**

Joe Neidermayr had a great looking electric eFlite FW 190A warbird at the meeting. This foam/plastic ARF was done in two-tone gray, had a 60-inch wingspan and weighed about 8-pounds. The motor was a 4258-460 and the battery was a 5,000 mAH 6-cell lipo. Joe demonstrated how nice the mechanical retractors worked. He felt the detail and paint was well done.



**Photo by Brian Johnson**

Steve Meyer had a Great Planes Stearman Biplane for Show & Tell. Steve said this plane was given to him.

The wingspan was 71-1/2-inches and it weighed a little over 15-pounds. The plane was done in gray/blue/yellow trainer colors done from Monokote. It was powered with a DLE 20cc engine. He had two A123 batteries in it – one for the engine and one for the receiver. He has flown it many times and says it flies fantastic.



**Photo by Sherwood Heggen**

Sherwood had another reclamation project at the meeting. This was an Ultimate 10-300 that he purchased at the TCRC Auction. It had a partially built fuselage, canopy, cowling and wheel pants and a set of plans. Sherwood built the rest of the aircraft from the plans. The plane had a wingspan of 70-inches, a weight of 26-pounds. He powered it with a DLE 55 engine, and covered it with Ultrakote. It was done in white with blue and gray trim. He had the maiden flight in September and said it flies well, although he will beef up the landing gear before the next flying season.

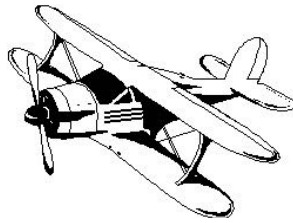


**Photo by Brian Johnson**

Mark Wolf had a Waco Biplane he had purchased at the TCRC Swap Meet last fall. The plane had a wingspan of 71-inches and weighed in at 12-pounds.

**Continued On Page 6, Column 1**

# Show & Tell



Continued From Page 5

And 10-ounces. It was done in red Solartex with white trim. It was powered by an OS 91 2-stroke engine. Mark flew it for the first time at the Fond du Lac Warbirds and Classics and he said its flight was 'exciting'. After some CG changes he said the second flight was much better!



Photo by Jim Cook



Photo by Brian Johnson

Chris O'Connor had a great looking T-33 Shooting Star. This was a Freewing Models ARF and the foam plane was done in silver with red nose, wing tanks and tailfeathers. It was powered with an electric ducted fan, and he said it sounded just like a turbine. After putting eight flights on the aircraft, he said it was one of the nicest flying planes he has ever flown. At 1/2-throttle he was getting 6-minute flights on the 6-cell battery and still had 50% capacity in the battery.

John Berk had another of his foam creations at the meeting. (See photo in column to the right) John has been quite prolific in designing and flying planes from foam board that designs from his mind. This one was a delta-wing with a slot in the middle of the wing for the pusher prop. He said the initial design was quite noisy until he opened up the propeller shot considerably. He said the plane flies well and he now has three of them. He has added lights and been doing some night flying with them. 😊




## TCRC Online Store

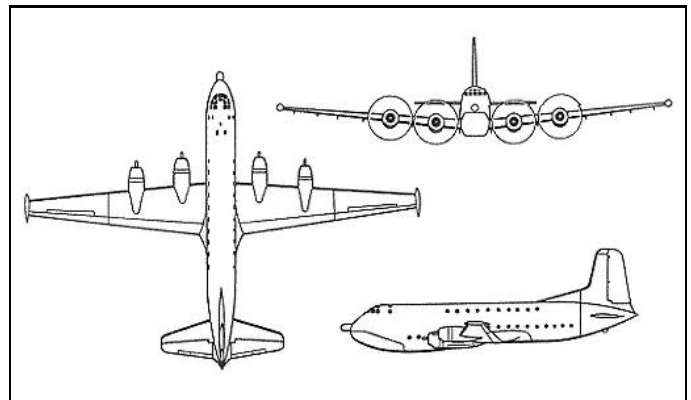
Donate your unwanted RC items  
and support the club

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.

## November Mystery Plane



# Leslie Gerber Donation To TCRC Completed

by Jim Cook

Leslie Gerber, the widow of former TCRC member and my very good friend, Scott Gerber, had sent me a box of engines to be sold. After deducting any sales costs and shipping, the net would be split between TCRC and Leslie.



Scott and Leslie Gerber

There were six engines, almost all of which were new-in-the-box. I took them to our Swap Meet on September 25<sup>th</sup> and was able to sell five of them almost immediately. The remaining engine, an OS FT160 Gemini was listed by Brian Johnson on the TCRC eBay website. Brian was able to sell that engine at a very nice price.

After deducting the cost of selling the Gemini on eBay, and the shipping cost Leslie incurred in

getting the engines to me, TCRC netted \$435 dollars! Money that will be used to help fill the shortfall created when the club was not able to hold its annual auction last year because of COVID-19. I sent a check to Leslie for \$535.

Scott passed away two and one-half years ago. He was a member of TCRC and in the hobby for a long time, and even though he had moved away to Missouri, he and I would meet at the Toledo AirExpo and renew old times every other year.

A very big thank you to Leslie for sharing Scott's engines with TCRC! ☺

## 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.

#### 2021 Officers

<b>President</b>	<b>Bob Breisemeister</b> 612-964-8877
<b>Vice President</b>	<b>Chris O'Connor</b> 612-619-5471
<b>Secretary</b>	<b>Ken Weddell</b> 952-500-3446
<b>Treasurer</b>	<b>Tim Wirtz</b> 952-941-5357

#### TCRC Flare Out

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

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

# TCRC Online Store Update

2020 and COVID-19 put a pretty big strain on TCRC's budget. The TCRC Annual Auction, which is the club's biggest fund raiser, had to be cancelled for that year. The club looked at many ways to bring in funds to make up for the budget shortfall that was created.

The TCRC Online Store was created. Brian Johnson set up the program where members donated R/C items that he could put up for sale on eBay and Facebook Marketplace. Brian established the club's seller ID which is TCRC-61 and immediately started selling donated engines, radios, kits and other items that could easily be shipped to the buyers.

Brian reported at the October 12<sup>th</sup> meeting that in the past month the club had \$1,028 in sales that netted the club \$995. He reported that since the Online Store has been started, gross sales have been \$5,184 which has resulted in a net profit of \$4,759! It was noted that the average profit from the annual auction is about 4,750, so the Online Store has done its job!

In addition, Brian was able to sell an OS Gemini FT160 engine that was part of the late Scott Gerber's equipment for a nice price which in total added another \$435 to the club.

A big thank you to all of the members that donated equipment to the Online Store, and a huge thank you to Brian Johnson for the great work he did for the club. ☺

# Goodyear F2G-1

by Conrad Naegele

The October Mystery Plane was the Goodyear F2G-1.



Goodyear participated in the Vought Corsair production program in 1942. In 1944 basic design began for a special low-altitude fighter, using a Pratt & Whitney 4360 4-row 28-cylinder radial engine.

A standard F4U-1 airframe was highly modified, with a longer fuselage, and a taller vertical stabilizer, with a new engine cowling, also taking advantage of the engine's 50 percent take off power. A new bubble canopy was installed. At the same time water injection was planned to boost the engine's emergency rating to 3,650 horsepower. With the injection, the speed was expected to exceed 450 mph, in level flight.

With this much horsepower, the fuel increase was to provide a range of 1,190 miles. Tip tanks provided 1,995 miles. Only five F2G-1's were finished by VJ Day, and none saw combat as the contract was cancelled.

The F2G-1 had a wingspan of 41-feet, a loaded weight of 15,422 pounds, and a speed with water injection of 431 mph at 16,000 feet. It was powered by a Pratt & Whitney R4360 engine. For armament it carried 4 50-caliber machine guns, 85" rockets, or 2-1,600 pound bombs. ☺

# TCRC Annual Banquet November 20<sup>th</sup>

The TCRC Annual Banquet is back and is scheduled to be held starting at 5:00 PM on Saturday, November 20<sup>th</sup> at Fong's Restaurant in Prior Lake at the intersection of Highway 13 and County Road 21. Because of COVID-19, the 2020 edition of the banquet could not be held.

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 2021 events, and to be a part of some fun games with nice prizes for the winners.

President Bob needs a final head count of who will be attending, but don't wait until the last minute, give Bob a call today or sign up at the November 9<sup>th</sup> meeting.

Mark your calendars and plan on being a part of the fun at the TCRC Annual Banquet on Saturday, November 20<sup>th</sup>. ☺

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

**MNBigBirds.com** Free! Scale Plan Downloads

**Andersen Designs**

**New!** Hawker Hurricane Mk II 1/4 Scale British Fighter

**New!** Howard Pete 1/3 Scale Racer

**New!** KI-45 DRAGON SI AYFR

**Add'l Extras**

- In Flight Videos
- Construction Articles
- Scale Documentation
- Paint Masks & More!

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# Mercy

by Sherwood Heggen

You've all heard it and surely have said it: "What is one man's junk is another man's treasure." Model airplane swap meets depict that pretty well. As if I don't have enough at home to fill a barn, there is always the excitement of seeing what else I don't need to add to my collection from a swap meet.

Last spring was no exception. I don't remember what I decided to bring home that day that were good deals except for one item. At the end of the day, sellers were putting back in their vehicles the unsold items that probably could be sold at the next swap meet to a new crowd. I, who has a liking for old timer models from late 1930's, caught a glimpse of what appeared to be a Buzzard Bombshell. Walking over to it, it was just that, but it was about ¾ size of the original 72" version of which I have. It apparently didn't attract a buyer. The wing covering was torn and full of holes, the fuselage was intact but tattered looking. It did have two servos and all was straight. But it truly was an "ugly duckling". The price marked on it was \$15. The seller said he'll take \$10 and if I don't want it he was going to throw it in the trash. Then my motto ran through my thoughts of, "A broken airplane is a terrible thing to waste," and I gave him \$15.

Sometime later in my shop, I took a close look at it. The covering would have to be removed from the entire model and a new firewall was necessary. The motor that came with it was an obsolete gear drive

unit. The batteries for it were apparently too big to install forward behind the firewall. So, to achieve balance, a number of lead tire weights were wrapped in foam and stuffed up front.

I could see promise in this ¾-size Buzzard Bombshell! New equipment of a motor, speed controller, and small LiPo were ordered. The new firewall was made and new covering was applied. Soon the new equipment came and was installed. It was looking much better now. What a cutie! Balance required about an ounce in the nose and final weight reduction was about four ounces.

It was time to fly. A pleasant calm evening was available so out to the field my little Buzzard Bombshell and I went. It only took a moment to plug in the battery and close up the battery hatch and all was ready. The throttle stick was pushed forward causing a whirring sound from the little motor and prop. A light thrust forward and the Buzzard Bombshell took off from my hand like a frightened bird. It found altitude quickly and the throttle stick was pulled back for cruise speed. Though it flew OK, I could tell balance wasn't yet correct. With full down trim, it had a swooping flight path that begged for some more nose weight. Yet, it was flyable, and a couple of more flights took place before the sun set.

The next day in the shop, another ½-ounce of nose weight was added. Then, back at the field, the little bird was tossed back into the air with much better results. At altitude with power reduced, a new flight characteristic showed up. It flew on its wings with smooth grace as model airplanes are supposed to

do. It was gentle and sweet in the air. It did not scream from one end of the field to the other. It asked the pilot to relax and enjoy the marvel of flight.

A lot of enjoyment has come from this nearly trashed model and the expense of time and effort was minimal and enjoyable. I see it as an example of showing mercy to something unlovable, or someone, to make things better. It's not that hard to do. ☺

## Crocketoberfest Held October 2<sup>nd</sup>

by Brian Johnson

The club's season finale, the Crocketoberfest was held on Saturday, October 2<sup>nd</sup> at the TCRC Model Air Park.

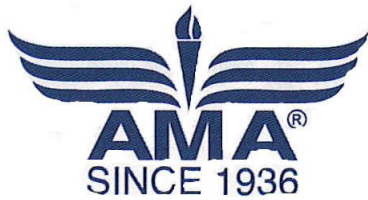
The chair for the event was Brian Johnson. He said it was originally intended to be a potluck event but was changed to the club operating a grill for this year.

Twenty-five members showed up for the event and enjoyed the hotdogs, brats and hamburgers served up by Brian and his team.

Brian had three small flight contests set up with the winner earning shots with a paintball gun at a plane crossing low over the runway. Unfortunately, the paintball gun broke during the first event and thus the target plane was unscathed.

All in attendance still had a good time as they officially buttoned up the last flying event of the year.

Thanks to Brian and all that showed up at the 2021 edition of the Crocketoberfest. ☺



## FAA Releases Draft AC 91-57C

by Tyler Dobbs  
Government Affairs Director

The FAA recently released Advisory Circular (AC) 91-57C, which will soon replace the current version, AC 91-57B. The updates to the new AC are centered around the recognition of community-based organizations (CBOs), a process that AMA worked with Congress to establish in 2018. This CBO recognition will allow AMA to continue safely managing the recreational model aircraft community, something AMA has done for more than eight decades.

This recognition also gives AMA a stronger voice regarding future regulations, requiring the FAA to consult our community when updating model aircraft operational parameters.

In addition to CBO recognition, AC 91-57C clarifies that educational UAS operations can be performed under US Code 44809, the Exception for Limited Recreational Operations of Unmanned Aircraft. This legislation was created and passed at the request of AMA in the 2021 National Defense Authorization Act. This change allows AMA members to perform educational UAS operations at universities, military JROTC programs, and chartered clubs, without obtaining an FAA Part 107 Remote Pilot Certificate.

Additional updates in AC 91-57C include a waiver process for sanctioned events, a process for higher altitudes at fixed flying site locations, and opens the door for night operations to be reinstated at our fixed site locations in controlled airspace.

Although not perfect, this Advisory Circular does give our community a path forward to continue enjoying the hobby as we have done for so many years. Rest assured that AMA will continue working with Congress and the FAA to preserve model aviation.

To remain current with the most recent government-related news, regularly visit the [AMA Government Affairs blog](#).

If you have any further questions or concerns, contact the Government Affairs department at (765) 287-1256 or [amagov@modelaircraft.org](mailto:amagov@modelaircraft.org) →

## How To Take The FAA TRUST for Drone Flyers

Anyone who flies a UAS (Unmanned Aircraft System) must take The Recreational UAS Safety Test.

To take the test, go to:

Modelaircraft.org  
In the search bar type in 'TRUST'  
The first item in the list will be 'The Recreational UAS Safety Test (TRUST)'. Click on it.  
Click on 'Take the test'.  
Click on 'Start' in the yellow bar.

Take the time to take the FAA Trust test today. ☺

## 2021 Ugly Airplane Contest

by Sherwood Heggen

This is to alert all TCRC members of the holding of the Annual Ugly Airplane Contest during the TCRC membership meeting on November 9, 2021.

The rules are very short and easy. Your entry must show some wear (hangar rash, hard landings, age, repair evidence, etc.) and it must still be flyable. It does not need to be one flight away from the trash can.

Everyone who has flown their airplane(s) in the past year has an airplane that qualifies. Bring what you fly. It gives you a chance at winning a gift certificate to buy more modeling stuff plus an extraordinary trophy that you can proudly hold for an entire year. Be proud of what you have that is less than perfect. Bring what you got and win! ☺

## 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. ☺

# Twin City Radio Controllers



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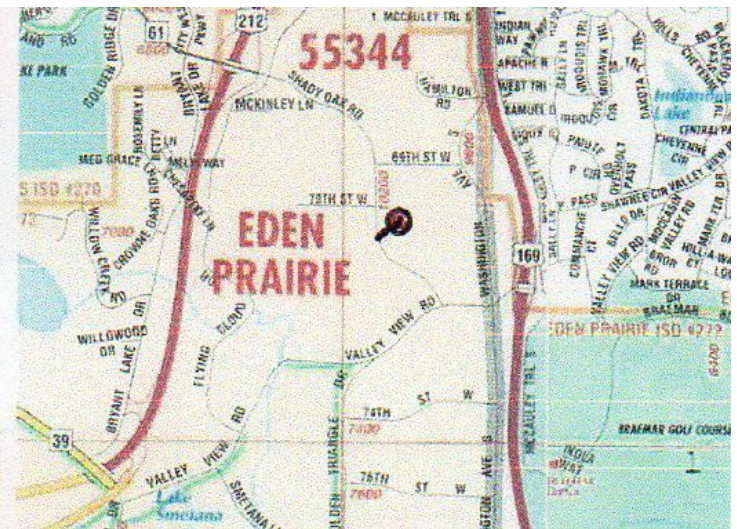
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