



November

Minneapolis, Minnesota U.S.A.

2012

# Twin City Radio Controllers – A Group of Leaders!

by Scott Anderson – TCRC Historian

Since 1957, the TCRC purpose is: “To preserve, encourage, and to further develop the hobby of building and flying radio-controlled model aircraft.” This mission has been carried out by its members and exemplified by those members who choose to share their knowledge and experiences in the leadership of the club each year.

As the elections come up I have been looking back over the history of the club and its members to see where these leaders come from. There are a few individuals that stand out but the majority of TCRC officers have come from the general membership. Members who felt it was worth their time to donate a few hours each month to improve the modeling experience for their friends, their children and themselves.

TCRC has had over 100 different members step up to take positions to lead the club each year. Many had never been an officer before but they were mentored by the board and by those who had led previously. Many (including me) were surprised as to how much fun it can be to help make TCRC one of the nation’s strongest RC model flying organizations!

We even have a nice set of position descriptions documented in the Members Only Section of the website so you can read what these people have done and how they have made it easier for new leaders!

Now we are at election time again and it’s time to let some of those who have given so much of themselves to help us, get a break while new members step up and be leaders for a year or two.

Call outgoing President/Vice President Chris O’Connor and let him know that you would be interested in being Secretary, Treasurer, Vice President, or even President, and your friends will support you! J

## Calendar

- Nov. 13      Membership Meeting, 7:00 PM  
CrossPoint Church  
Bloomington
- Nov. 13      TCRC Elections  
CrossPoint Church
- Nov. 13      Ugly Plane Contest  
Membership Meeting  
Sherwood Heggen
- Nov. 17      TCRC Banquet  
Timberlodge  
Restaurant  
Southtown Center  
5:00 PM
- Dec. 7        Joint Board Meeting
- Dec. 8        All Season Flyers  
2012 Season Final



# Veep's Corner

By Chris O'Connor



Now that November has arrived, some of us are into building mode for next season. I think earlier in the year I asked the question, "What is one of your favorite planes and if you don't have it why!!!!" Look at what you have to fly and I bet a lot of you have multiple planes that are ready to fly. So why not build that scale or aerobatic or sport plane, etc. that you always wished you had. We all have a couple of favorites, so build one, either kit, ARF, ARF bash, plans or whatever. I would like to challenge everyone to have that favorite plane as a project this winter if possible. Let's see what happens this winter.

This coming meeting is our election meeting, to select new officers for the coming year. The four officers and I think one board member (2 year term) are up for election. It would be nice to have some new people try their hand at a position. It's not as much work as you think. I know that there are lots of people out there that could do a great job! Please consider running for a position.

At the last meeting we invited any member to do a kit review. Below Steve Meyer did a review of the giant-scale plane he is working on.



This coming meeting brings lots of activities. The election, Show & Tell, and a new event, chaired by Sherwood Heggen, "The Ugly Airplane Contest". So come to the meeting and participate in one or all of these events.

Lastly is our annual banquet on November 17, at 5-9 pm at the TimberLodge Steakhouse on Penn Ave. in Bloomington, in the Southtown Shopping Center. Please let me know if you are attending by the November meeting.

Let's see a great attendance at the meeting.

Happy building!

J

## New Member

At the October meeting Jim Lundquist joined TCRC.



Jim lives with his wife Jackie at 8336 Portland Avenue S in Bloomington, 55420. Their phone number is 612-834-1460 and his email address is [jhalundquist@gmail.com](mailto:jhalundquist@gmail.com). Jim started in U-Control in 1956 and has been in and out of the hobby over the last few years. His current fleet include 2 40-size high wings, a J-3 Cub with a 4-stroke engine, and a 46-powered pattern ship.

If you see Jim at a meeting or at the field, be sure and introduce yourself and welcome him to TCRC.

J

# Ugly Airplane Contest

by Sherwood Heggen, Contest Coordinator

The November TCRC meeting is one that you don't want to miss!

The most important item to take place will of course be the election of officers of TCRC for the coming year. Also, it is the meeting scheduled for Show & Tell of your newest pride and joy. Fill out the Show & Tell form from the TCRC website and bring it along with your new airplane.

But, here is what will make the meeting the one you don't want to miss. It has been decided to hold an Ugly Airplane Contest at the November meeting. The rules are basic: the airplane must be considered ugly and must be in flying condition. It doesn't matter how it got ugly. Ugly can be a result of being battle worn, sloppy building, numerous repairs, etc. Pretty simple, huh? Judges will determine the ugliest flyable airplane and a gift certificate from a local hobby shop will be awarded to the winner.

There is no shame in owning an ugly airplane. So, proudly bring your ugly airplane and enter the contest. Even ugly should be recognized in a positive light!

This is for real! Let's fill the meeting room with ugly and have some fun. J

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# 2013 AMA Dues Statements

All TCRC members should have received their 2013 dues statements in the mail in September from the Academy of Model Aeronautics.

AMA 2013 dues have not changed from the previous year. They are:

- Adult (19-65) \$58
- Senior (65 and up) \$48
- Under 19 \$1  
or \$15 with *MA*
- Additional family \$30

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 \$29.95 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 2013 AMA dues is December 15 to avoid a lapse in membership services. J



# Use The Frequency Control Board!

TCRC Safety Officer Larry Couture discussed the use of the frequency control board at the October membership meeting. His concern was that with the advent of the 2.4 MHz transmitters, members were not putting their AMA or TCRC card on the frequency board.

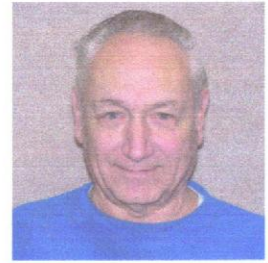
Rule #3 of the TCRC Club Flies Rules states:

“A valid AMA card or TCRC membership card must be in place in the proper channel location on the Frequency Control Board when a transmitter is in use. That card can only be removed from the Frequency Control Board by the owner or by the mutual consent of two other members who have concluded that the card owner is not present and is not using the frequency.”

Some members seem to feel that because there is little or no chance of conflicting transmitters which are 2.4 MHz frequency, then it is not necessary to put his card on the frequency control board. Larry explained that it is important to always use the frequency control board for two reasons: 1) because it is a club field rule it must be followed. If it is not followed the user is not only in violation of the TCRC field rules but also the AMA Safety Code; and 2) putting your card on the board let's everyone at the field know that there is an active transmitter that is turned on, even if it is one that has no chance of conflicting with another pilot.

## Safety At The Field

By Larry Couture



Here it is November and the weather has changed but the good news is no snow yet.

Don't forget to go to the meeting on Tuesday the 13<sup>th</sup> as we have to elect new officers for the club. We have president, vice president, secretary and treasurer and one of the three board seats up this year. We need candidates and I know we have several new good members that would make great officers. Throw your hat in the ring at the November meeting.

The cutting on the north line of the field is done and it looks great but we may have to have a couple of bonfires this winter to get rid of all of the wood.

There have been some crashes by the northwest corner or area of the field over the last few weeks. Some are thinking that there is some kind of interference in that area but myself and others have not had any problem. It maybe is due to low batteries and the momentary loss in the receiver so make sure your batteries are up at all times. This will eliminate at least that kind of problem. The 2.4 systems will shut off at low power and take up to 30 seconds to rebind, which could definitely cause a crash. The use of two or three surface movements at the same time can cause the voltage to drop for the moment and the receiver will shut off. The newer receivers are able to rebind in about 5 seconds but that still in some cases can be too long.

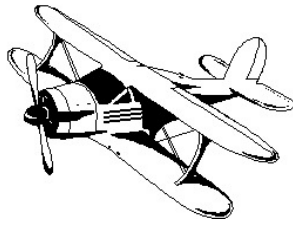
Make sure you post your card when at the field and help see that other due the same as I am still watching. Just because you are on 2.4 doesn't mean you do not need to put your ID on the board.

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 keep the rubber side down. J

Now you know the rule so there is no excuse for not abiding by it. Do your part to keep TCRC a safe place to fly. J

**Think Safety First!**

# Show & Tell



Nice airplanes showed up at the October meeting.



Terry Spletstoester had a nice E-Flite P-19 scale trainer ARF done in traditional blue fuselage with yellow wings and stabs and a red and white striped rudder. He originally powered this with an OS LA 10 that was mounted upside down, but he replaced the glow engine with an electric. He has 30 flights on the plane and says it flies much better as an electric.



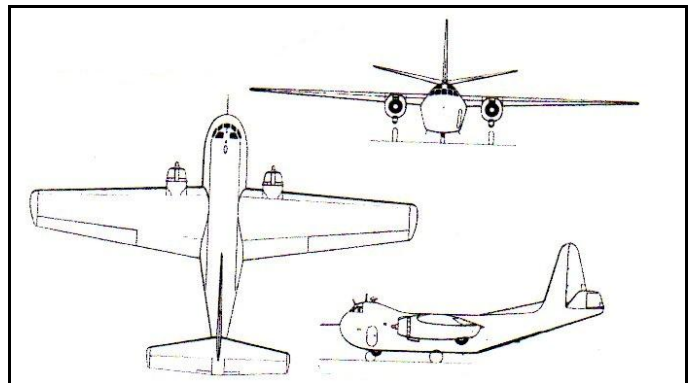
Jim Gravle had a Green Models Tiger Moth that he picked up at the Hobby Warehouse swap meet in

September. This ARF had clear-covered wings and horizontal stab and a splash of black and white on the front of the fuselage. It was powered by a 2217-9 electric motor. As of the meeting, he had not put the maiden flight on the Tiger Moth.



Gerry Dunne had a great looking B-17 Flying Fortress at the meeting. This electric ARF had an 80-inch wingspan and was done in green tan with red-tipped wings and red stab. It weighed 124 ounces and had electric retracts, flaps and bomb bay doors that opened. He said in total there were 10 servos in the plane. J

## November Mystery Plane

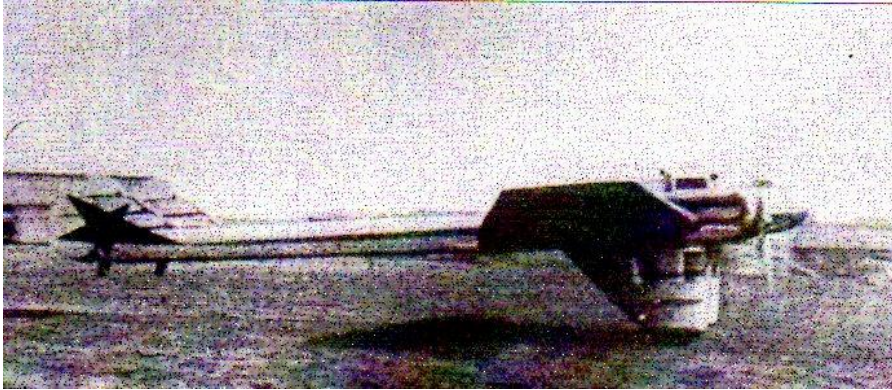




# Grokhovskii G-37

by Conrad Naegele

The October Mystery Plane was the Russian Grokhovskii G-37.



The numbering of Grokhovskii aircraft is difficult to interpret, and this aircraft, the G-37, was developed and built before the G-31. The concept was for a versatile aircraft primarily for airborne assault, but it was very apparent that this plane would have side commercial appeal.

The aircraft, built by Vladimer Rental in Grebno was taken to the airfield in 1935 and flown by V. Chkalov. He gave it high marks. It was designed to lift a detachable payload container (refer to the Miles M.68, Fairchild XC 120.)

The wing used was one from the ANT 9, made of Kolchug duralumin with corrugated dural skin. The engine cowls were extended down into huge trousers, which contained the engine cooling radiators. At the rear, they extended into the tail booms. All of this of light alloy. Each boom had a tail wheel. The tail booms were duralumin covered with fabric and on centerline, the wing was expanded into a small nacelle for pilot and engineer.

The underside of the wing contained fittings for the pre-loaded cargo container. No photographs have turned up of the plane with the pod

attached. The completed plane was painted with gay stripes, stylized red stars and slogans. Only one was completed and flown. It appeared an excellent and potentially versatile aircraft. No reason is known why there was no production.

The G-37 was a Universal Flying Wing and had a span of 74 feet. It had a weight of 12,566 pounds and a speed of 146 mph. The engines were BMW V-1 water-cooled V-12 power plants that developed 680 horsepower. J

## New Pictures For The Roster

The TCRC Roster is a great tool for all members to use. It can be found in the 'members only' section of the club website, TCRCOnline.com.

With all of the new members the club has taken in over the last couple of years, there are several members that you probably don't know by name. An easy way to correct that is to go to the TCRC Roster and place the faces with the names.

However, to do that, you need to have a good picture of yourself in the Roster. Preferably one that is fairly recent and actually looks like you!

If you would like to have your picture updated and also your roster information, you can send the information and a recent picture to Bernie Gaub at [berniecarrol@aol.com](mailto:berniecarrol@aol.com), or have Jim Cook take your picture at the next meeting.

Let's get your information and picture updated today. J

## A Replacement Airplane?



Steve Meyer, a known giant-scale enthusiast lost one of his favorite airplanes during the year. It was a Paulistinha P-56 which had flown in several events including the TCRC Fall Float Fly.

The plane succumbed to one of those mysterious events that sends perfectly good airplanes into the ground and Steve felt the loss.

Terry Splettstoester, also a giant-scale guy decided that Steve really should have a second chance at flying the Paulistinha and presented him with a new kit of the same model.

Steve's smile in the above picture says it all. It is these kind of acts that really says what our hobby is all about!

## TCRC Election Night November 13<sup>th</sup>


The TCRC Elections are Tuesday night November 13<sup>th</sup> at the regular membership meeting.

President, Vice President, Secretary and Treasurer plus one of the three board seats are up for election this year.

The club needs you to step up and be a candidate for one of these seats. Don't think you need to have more experience. If you have been in the club as a flying member for a year or more please consider running for office.

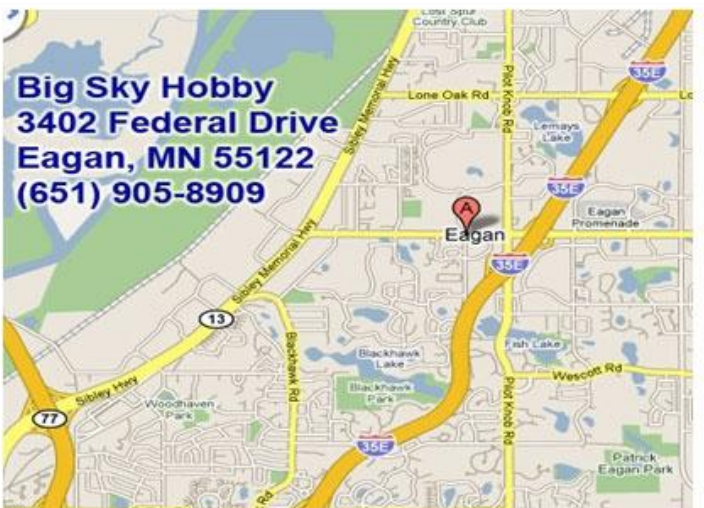
Let's see you at the meeting on November 13<sup>th</sup> as a candidate and as a voter. J

**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.**



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## Academy of Model Aeronautics “AMA Advanced Flight Systems Committee”

October 21, 2012

RE: AMA Flight Systems Policies  
AMA Documents #550 and #560

Greetings,

In June of 2012 the AMA Advanced Flight Systems Committee (AFSC) was created for the purpose of developing operational policies and guidelines for advanced flight systems used in R/C model aircraft.

The committee's first project was to evaluate and revise AMA's current policies for "*R/C Model Aircraft Operations Utilizing First Person View Systems*" (AMA Document #550) and "*R/C Model Aircraft Operations Utilizing Failsafe, Stabilization & Autopilot Systems*" (AMA Document #560).

The committee in a collaborative effort with leading members of the hobby industry and FPV community revised these documents and presented this report to the Executive Council during the October 20, 2012 council meeting. Revisions were made and the report and documents were adopted by the council. We ask that you send any comments or questions you may have to the AMA committee at [amaflightsystems\(5\)gmail.com](mailto:amaflightsystems(5)gmail.com).

Thank you,

Bob Brown  
President

### Radio Controlled Model Aircraft Operation Utilizing “First Person View” Systems

#### 1. DEFINITIONS:

- a) **FIRST PERSON VIEW (FPV)** refers to the operation of a radio controlled (R/C) model aircraft using an onboard camera's cockpit view to orient and control the aircraft.
- b) **FPV AIRCRAFT** is an RC model aircraft equipped with a video transmitter to send real-time video images from an onboard camera to a ground based receiver for display on a pilot's video monitor/goggles. {*FPV model aircraft types include: Fixed Wing, Rotary Wing, and Multi-Rotor Platform*}
- c) **VISUAL LINE OF SIGHT (VLOS)** is the distance at which the pilot is able to maintain visual contact with the aircraft and determine its orientation without enhancements other than corrective lenses
- d) **FPV SPOTTER** is an experienced AMA RC pilot who has been briefed by the FPV pilot on the tasks, responsibilities and procedures involved in being a spotter; is capable and mature enough to perform the duties and is able to assume conventional VLOS control of the aircraft.
- e) **FPV NOVICE PILOT** is an AMA member learning to fly FPV utilizing a buddy-box system with an experienced AMA RC pilot operating the master transmitter and serving as the FPV spotter.
- f) **AMA FPV PILOT** is an AMA member who is capable of maintaining control of stability and orientation of FPV model aircraft when flown FPV without losing control or having a collision.

#### 2. GENERAL:

- a) FPV flying of radio control model aircraft by AMA members is allowed only for noncommercial purposes as a hobby/recreational and/or competition activity.

Continued On Page 9



- a) All FPV flights must be conducted in accordance with AMA's current National Model Aircraft Safety Code and any additional rules specific to the flying site/location.

### **3. OPERATIONS - REQUIREMENTS - LIMITATIONS:**

- a) AMA FPV novice pilots must use a buddy-box system with an FPV spotter while learning to fly FPV.
- b) All FPV flights require an AMA FPV pilot to have an AMA FPV spotter next to him/her maintaining VLOS with the FPV aircraft throughout its flight.
- c) The FPV pilot must brief the FPV spotter on the FPV spotter's duties, communications and hand-over control procedures before FPV flight.
- d) The AMA FPV spotter must communicate with the FPV pilot to ensure the FPV aircraft remains within VLOS, warning the FPV pilot of approaching aircraft, and when avoidance techniques are necessary.
- e) The FPV spotter may at any time during an FPV flight acquire the transmitter from the FPV pilot and assume VLOS control of the aircraft.
- f) If the FPV pilot experiences a problem due to a loss of video link, orientation, or is unable to safely fly, he/she must abandon FPV mode and fly VLOS or pass the RC transmitter to the FPV spotter to assume VLOS control of the aircraft.
- g) Before initial FPV flight and after any flight system changes or repairs, FPV model aircraft must be test flown by conventional VLOS to determine that flight systems are working properly.
- h) FPV model aircraft must use frequencies approved by the FCC for both the RC system and the wireless video system. Pilots must meet applicable FCC licensing requirements if they choose to operate the RC flight control system or the wireless video system on Amateur Band frequencies

### **4. RANGE - ALTITUDE - WEIGHT - SPEED:**

- a) One of the requirements in Federal Law (Public Law 112-95 Sec 336 (c) (2) February 14, 2012) for model aircraft to be excluded from FAA regulations is that model aircraft be flown within VLOS of the operator.
- b) Model aircraft flown using FPV must remain at or below 400 feet AGL when within 3 miles of an airport as specified in the AMA Safety Code.
- c) Model aircraft flown FPV are limited to a weight (including fuel, batteries, and onboard FPV equipment) of 15lbs. and a speed of 70mph.

### **5. RECOMMENDATIONS & INFORMATION:**

- a) AMA FPV novice pilots should consider using a cockpit view flight simulator to become accustomed to FPV flight.
- b) AMA FPV pilots should consider using a programmable autopilot (AMA Document #560) with a failsafe "return to launch point" feature that will maintain control of the aircraft in the event of signal loss.
- c) An onboard camera equipped with a pan and tilt mount that is positioned by "head tracking" goggles, will improve the FPV pilot's situational awareness of the airspace surrounding the FPV aircraft during flight, but does not replace the requirement for an AMA FPV spotter.
- d) When purchasing FPV operational systems, always try to select quality equipment, verify its compatibility, install components for interference rejection, and determine that signal range is adequate for maximum VLOS range.

### **6. PRIVACY PROTECTION SAFEGUARDS:**

- a) The use of imaging technology on radio control model aircraft with the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of aerial surveillance data/information on individuals, homes, businesses or property, is strictly prohibited by the AMA unless expressed written permission is obtained from the individuals, property owners or managers. **Q**

Editor, Jim Cook  
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## Green Will Be Turning To White



This beautiful aerial view of the TCRC Jordan Field was taken by TCRC member Darryl Volk. With the arrival of November, the snow can't be too far behind. So get some skis ready and do some winter flying!

### 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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