



November

Minneapolis, Minnesota U.S.A.

2011

TCRC Banquet Scheduled For November 19th

by Tim Len

Hi Everyone!

The annual TCRC Fall Banquet is just about here.

Where: Timberlodge
7989 Southtown Center
Bloomington, MN 55431

When: Saturday, November 19

Time: 5:00 PM

Menu: Dinner Menu

I realize the date is usually the 2nd Saturday of November, but unfortunately Timberlodge already had that date booked.

Timberlodge has changed their policy and they do not offer the early bird menu on the weekends.

I need to know how many of our members and guests are planning to attend. If you are interested in attending the 2011 TCRC Banquet please call Tim at 407-304-0295 to see if there is still space available.

The TCRC banquet is always a fun-filled event and well attended by members and spouses.

Plan on attending TCRC Annual Banquet on Saturday, November 19th at the Timberlodge Steakhouse in the Southtown Center in Bloomington. J

**Be A Part Of The Fun At The TCRC
Banquet November 19th**

TCRC Elections Coming Up

Summer is over and fall has arrived. November is here already.

November brings the TCRC elections, which this year will be held on Tuesday, November 8th at the regular membership meeting.

Six of the seven board seats are up for election this year – president, vice president, secretary, treasurer and two of the three board seats.

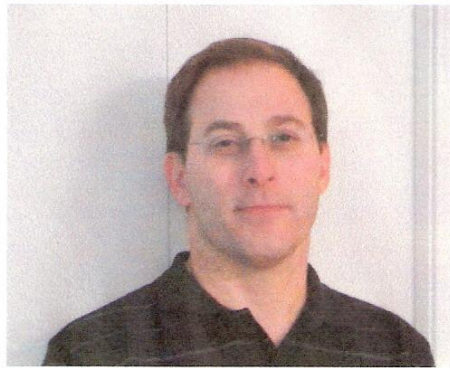
Several of the incumbent board members have indicated that they would run again for office in 2012. President Tim Len is very hopeful that many other club members will consider becoming a candidate for office for the upcoming year and that every position will have at least two candidates.

Consider becoming a candidate for a TCRC position and becoming part of the leadership of our great club. If you are interested in running please let any board member know as soon as possible. Be a candidate!

And don't forget to get to the meeting and be a voter. Have a say in the operation of TCRC. J

From The Flight Deck

By President Tim Len



Hi Everyone

We are now into the month of November and winter is almost here, now would be a good time to look over the airplanes you plan to fly in this winter season and make adjustments as required to get the models ready for cold weather flying. This may include installing floats or skis on existing models, it's going to be a challenge to keep warm and fly!

The TCRC Annual Fall Banquet is fast approaching and will be held at the Bloomington Timberlodge on Saturday, November 19, 2011. If you plan to attend and haven't notified me, please let me know ASAP. This is always a well-attended and very enjoyable event.

Don't forget to keep an eye on the latest up-to-date news in *Model Aviation*.

I am currently working on the Top Flite AT-6 Texan and look forward to getting the project finished. I'm looking forward to hearing about many of your winter projects, so at the next meeting don't forget to share your plans.

At this time, I would like to stress the importance of our November 8th monthly meeting. It is time for our club's annual officer and board elections. So don't forget to attend, and consider being a candidate for one of the 6 seats that are up for election.

I am looking forward to seeing everyone at the next meeting. Also, think about getting one or two of your planes outfitted with skis or floats so you can enjoy the calm skies that winter brings. J

2012 AMA Dues Statements

All TCRC members should have received their 2012 dues statements in the mail in September from the Academy of Model Aeronautics.

AMA 2011 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.

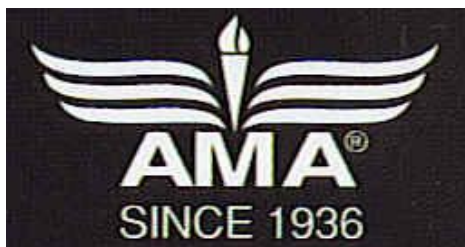
Please note that AMA also has a Park Pilot membership that has a cost of \$29.95 per year, but that membership is not valid for membership in TCRC.

To renew your membership in AMA, the Academy gives you four methods: at the AMA website, www.modelaircraft.org; 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 2012 AMA dues is December 15 to avoid a lapse in insurance and membership services. J

TCRCOnline.com

The Best Darn R/C Website.



AMA Government Relations Update

(Reprinted from *Model Aviation*, Official Publication of the Academy of Model Aeronautics, November 2011.)

NPRM Update

We are now just weeks away from the publication of the FAA Notice of Proposed Rulemaking (NPRM) for small Unmanned Aircraft Systems (sUAS).

Assuming the rulemaking process remains on track, the FAA has targeted mid-December 2011, for the release of its proposed sUAS rule. It is extremely important that every AMA member, modeler and aeromodeling enthusiast understands the NPRM process and participates in the public comment period.

An NPRM is a formal notice to the public by a government agency – in this case the FAA – stating its intent to create new regulations or modify already existing regulations. The NPRM procedure is required and defined by the Administrative Procedure Act and was created by Congress to require agencies such as the FAA to listen

to comments and concerns of the people whom the regulation will likely affect.

The NPRM is published in the Federal Register and typically provides 60 to 90 days of public comment and replies from any interested party. An NPRM may be followed by a further notice of proposed rulemaking (FNPRM), if the comments from the initial NPRM drastically change the proposal to the point where further comment is required.

The NPRM will include a summary of the proposed rule, the scope of the regulation, and the exact regulatory language that is being proposed. It will also include the time period and the means for public comment. Comments may be submitted electronically, mailed, hand-delivered, or faxed.

Will your comments make a difference? Absolutely! Individual opinions on this will vary significantly; however, one thing is for sure: nothing will change unless we make our views known.

Every comment received will be read and addressed. Comments will be broken down by the section of the regulation to which they apply and will be grouped with similar issues and concerns. A response will be drafted for each issue and the FAA rationale and response to the comments will be published in the Final Rule.

The proposed sUAS rule is new regulation – regulation that will have a broad and sweeping impact on the aviation community and

will literally change our world. The NPRM will engender thousands – if not hundreds of thousands – of comments from stakeholders on all sides of the issue. In order to ensure our views prevail, we will need a strong unified voice.

During our recent Congressional Awareness campaign, nearly 30,000 individuals sent letters of concern to their congressional delegation – a substantial response. However, we are going to need three or four times that number if we're going to affect changes and improvements to the proposed rule.

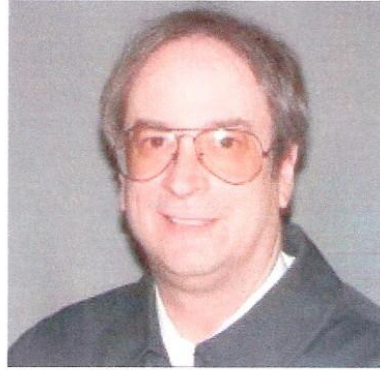
AMA is working toward providing its members a simple and effective means for responding to the NPRM. It will also provide analysis and commentary on the impact of the proposed rule and suggestions for improving the rule before the sUAS Final Rule is published in late 2012.

It is more important than ever that the AMA membership become well-informed and vigilant in keeping abreast of the sUAS issue as the rulemaking process unfolds. Timely updates can be found on the AMA website at www.modelaircraft.org, on Facebook by 'Liking' AMAGov, and on Twitter at [Twitter.com/AMAGov](https://twitter.com/AMAGov). **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.

Veep's Pre-Flight

by Mark Wolf



Power Plants

The Wright brothers' first powered flight lasted only seconds and it was the engine/airframe combination that made history. Except for the gliders and sailplanes, our aircraft need some form of power plant for sustained flight. Similar to the many different types of airframes, aircraft power plant designs also differ considerably.

Intake, compression, power and exhaust. The four stroke cycle (slight differences for the two strokes) which produces the power we need are common to the piston engine. Identified primarily by the arrangement and number/displacement of its cylinders or by the method of cooling (liquid-cooled or air-cooled) the piston engine designed for aircraft use has been produced in many different forms. Single cylinder, inline, V-types, the early WWI rotary engines, opposed and radial designs have all been used on airframes throughout the years. Other features such as built-in internal superchargers and external turbo-superchargers, improvements to fuel and ignition systems developed through the years, have made these piston engines very reliable. They have performed successfully in aircraft as slow as primary trainers, general aviation aircraft, advanced high-performance WWII military and postwar commercial airliner types of aircraft.

Higher altitude performance and efficiency has come from the turbo-prop, turbojet and the latest generation of high bypass turbofan engines. The same intake, compression, power and exhaust sequence found in the reciprocating engine however with these engines it's continuous! With the latest FADEC (Full Authority Digital, Engine Control) and with fewer moving parts compared to the piston engine, the modern gas turbine produces its power with remarkable reliability and ease of operation.

Many options are available to put together a power plant package for our airplanes. Several strands of rubber for rubber power. CO², glow fuel two-strokes, glow fuel four-strokes and gasoline four-strokes are available in many different displacements. Also required are fuel tanks, clunks and lines to supply and provide fuel and a source of ignition. Electric motors are available in many different sizes, along with

batteries and ESC's to match. The turbine engines have their ECU's, kerosene fuels and of course that unique sound of a full-scale jet.

Whatever your interest in powered aircraft are, there should be a power plant to fit. If your aircraft's performance doesn't meet your expectations you may be able to change or modify that power plant installation. Other than the ducted fans and turbines, there is another item to consider. To complete your power plant installation we'll also need a means to transfer that power into useful thrust with a propeller. A propeller . . . well that's another story.

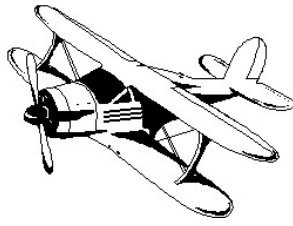
Until next time . . .

J

Calendar

- | | |
|----------------|--|
| Nov. 8 | Membership Meeting, 7:00 PM
Fellowship Hall
CrossPoint Church
Bloomington |
| Nov. 8 | TCRC Elections
CrossPoint Church |
| Nov. 12 | Deadline for AMA Elections Ballot Submission |
| Nov. 19 | TCRC Annual Banquet, 5:00 PM
Timberlodge
Steakhouse
Southtown Center
Bloomington
Tim Len |
| Jan. 1 | TCRC Dues Payment Due |
| Jan. 15 | Deadline for TCRC Dues Discount |

Show & Tell



Lots of planes at the October meeting.



John Berk had a nice foam ARF FW190 for S&T. It was done in green and yellow camouflage with a yellow vertical stabilizer. This 1/12th-scale electric warbird was a 10-year project for John and he has put several flights on it, even in 10 mph winds. He said it flies well but needs a powered landing.



John Berk also had a foam blue and yellow Tomcat done in Blue Angels format. The Tomcat is being held by Dominic Leonardi in the above picture. This electric had a pusher motor and John said it had plenty of power to go vertical. He said it was very easy to handle in the sky.



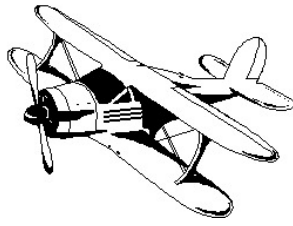
Newest TCRC member Dan Collier had a giant-scale 3D Slick 540 ARF. This plane was done in yellow and red with graphics Dan designed himself. He said it took him one week to assemble the 540 which was powered with an electric Hacker 80-10, which is equivalent to an 80 cc gas engine. The wingspan was 80 + inches and it weighed in at 23 pounds. Dan has 11 flights on the plane and says it has great flying characteristics.



Tim Len had a Super J3 Cub PA-18 ARF done by E-Flite. This nice looking plane was powered by an E-Flite Power 46 and done in white with red and black trim. It had a 68-inch wingspan and weighed 6 pounds 10 ounces. He was swinging a 13x10 prop, had a 60 amp ESC in it and was powered by a 4-cell lipo. As of the meeting he had yet to do the maiden flight but was hoping to get it in sometime in the near future.

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Show & Tell



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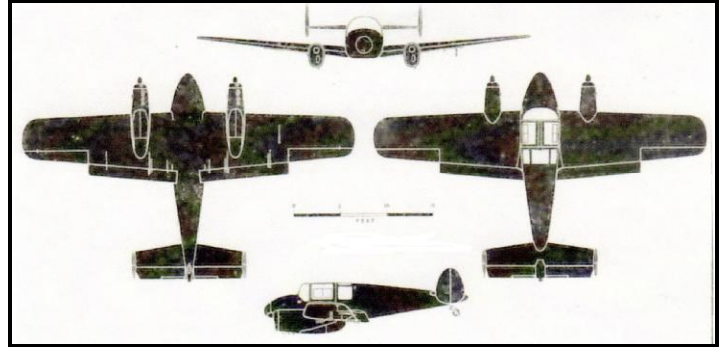
Gerry Dunne had a nice looking foam T-28 ARF done in silver with black trim. The detail on the plane was very nice. It had a 55-inch wingspan and weighed in at 84 ounces. The manufacturer was JR and it was powered with a 4850 500 KV 700 watt motor. The battery was a 4-cell lipo. Gerry said it flew like a 'big trainer.



Sherwood Heggen showed up with a recycled Aeromaster. This plane belonged to former TCRC member Scott Johnson and he had it earmarked for the burning pile after a particularly rough crash. Sherwood asked for the bones and Scott was happy to

give it to him. Two years later, like a Phoenix, the plane arose from the ashes and came to the October meeting. The biplane was now done in green/white Century 21 kote and painted with Rustoleum. Sherwood had built a new top wing and pretty much completely replaced the nose of the plane. It was powered with an OS 46 AX and as of the meeting it had not again taken to the skies. J

November Mystery Plane

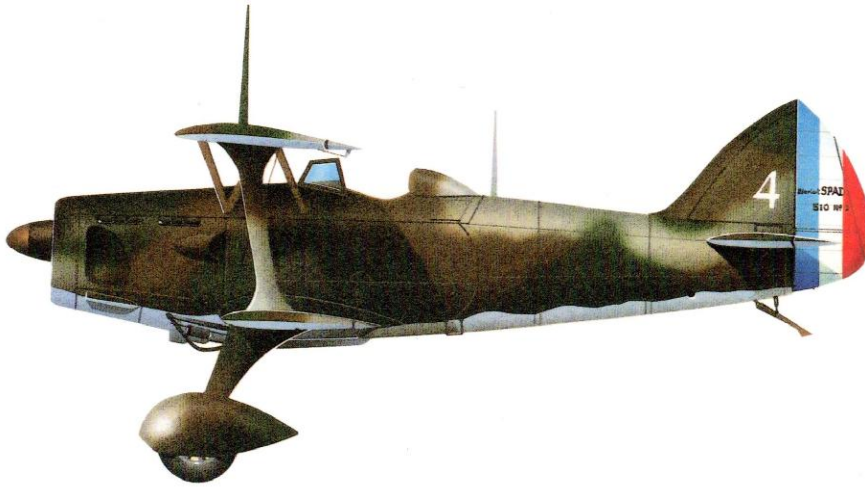


You're never too young to fall in love with R/C flying, as this fellow at TCRC's MAD illustrates. (Photo by Scott Anderson) J

Bleriot Spad S-510

by Conrad Naegele

The October Mystery Plane was the Bleriot Spad S-510.



The Spad story is well known to most airplane people – WWI – Eddie Rickenbacker. Louis Bleriot flies the English Channel July 25, 1910. In 1915, the first of the Spads (Societe Pour L Avion et ses Derives) was delivered. In 1930 French officials requested a new single-seat fighter. Now, the S-510 was unique by being a biplane! The S-510 had an oval fuselage, mainly of duralumin, equal span wings, all-metal, fabric-covered with 4 ailerons, braced by Herbemont single I struts. The landing gear was very smoothly faired, wheels were spatted.

Flight trials resulted in lengthening the fuselage to prevent longitudinal instability, actually the plane tended to ‘Dutch roll’. Now, a concurrent design, the Dewotine D-50 appeared superior, but company pilots demonstrated the S-510 unsurpassed maneuverability, and far superior rate of climb. All pilots reported it was simply a superb handling machine! However this was now into the age of ‘modern machines’, and by the time of the onset of WWII, the plane was relegated to flying schools. Rumor has it that the Spad actually flew in combat in the Spanish Civil War. Never proven. Ah, the biplane in the ‘modern age’. However, keep in mind the Fiat C R 42 biplane -- 342 miles per hour!

The S-510 had a wingspan of 29 feet and was powered with a Hispano-Suiza 12-cylinder water-cooled V which developed 690 horsepower. For armament it had 4 7.5 mm machine guns in underwing gondolas.

AMA National Elections

Every current member of the Academy of Model Aeronautics should have received a 2012 AMA Election Ballot attached to their 2012 Dues Statement.

In 2012, the positions of National President, National Executive Vice President and District VII VP are up for election. District VII is the AMA district that TCRC is in.

For president, there are three candidates: Jim Rice, Bob Brown and Rick Hanson.

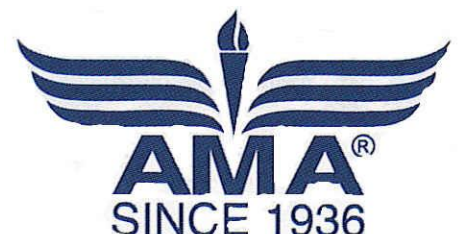
For executive vice president, there are also three candidates: Gay Fitch, Bill Oberdieck and Jerry Neuberger. Bill Oberdieck is District VII’s current VP.

For District VII VP, Bill Oberdieck and Tim Jesky are candidates.

TCRC members should refer to the candidate’s statements that are in Model Aviation and acquaint themselves with the candidates.

To have your ballot count in the election, it must be postmarked no later than November 12, 2011.

Take the time to decide which candidates you will vote for and then complete your ballot and be a voice in your AMA.



Changes

by Mark Wolf

Seems like the only thing that remains the same is the fact that changes will continue to occur. We're all pretty much used to that, except it does present a challenge to accept it when it happens. A recent change (as of 10-18-11) to my professional schedule will make it difficult for me to continue as TCRC vice president for next year. The impact of these scheduling constraints may affect my regular meeting and/or board meeting attendance. I'll remain a club member and was planning on running for office again but regrettably will now have to withdraw.

The newsletter articles were an interesting challenge. There are many aspects of this hobby that we enjoy and the TCRC club is quite diverse with its member participation. From designing, scratch-building, kit building, ARF assembly, electrics, scale, etc. you

name it and there's some of our members that have knowledge about and/or experience with it. I tried to select a topic, draw on full-scale issues or concerns and see how adaptable or applicable some of this information might be to some of our model building and flying. If you are a new or relatively new member, hopefully the articles provided some interest and gave you a few items to think about. If you've been a member for several years with a lot of experience, then hopefully the information proved was a good general review. It's also been fun to put together and present a few programs.

The change is only temporary until the next one occurs. We have a great club and you're all great members with a wealth of knowledge and experience. It's been a challenge and it's been fun. Thanks for reading the articles and I hope you enjoyed them.

Until next time J

TCRC Dues Renewal

TCRC 2012 dues are the same as they were in 2010. They are:

- Regular \$75.00
- Junior \$37.50


Dues payments are due on January 1, 2012. Any member paying his/her dues prior to January 15th will be given a discount of \$15 (to \$60.00) on an adult membership. After January 15th the full \$75 will be required.

Remember, to be a member of TCRC you must be a member of AMA and supply proof of that membership at the time of your TCRC renewal.

Your TCRC dues can be paid to treasurer Tim Wirtz at a meeting or by mailing them to Tim at:

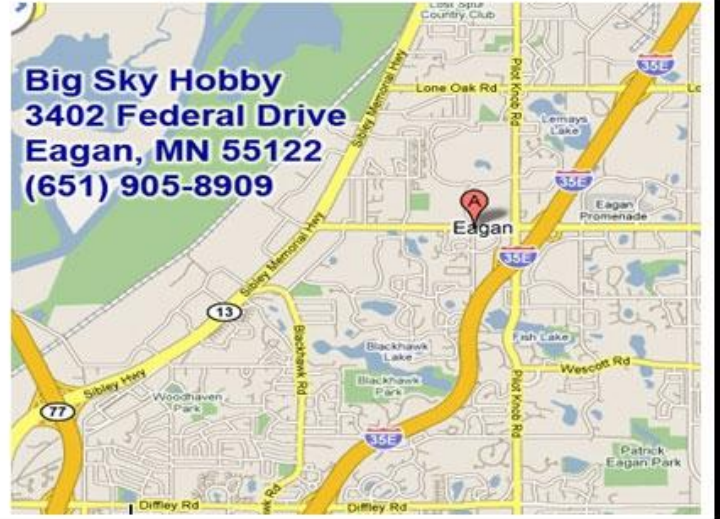
Tim Wirtz
2422 Downing Avenue
Shakopee, MN 55379

Pay your 2012 TCRC dues today and secure your discount. J



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Editor, Jim Cook
@ Flare Out Publisher
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A Thing Of Beauty!



Dave Willcott's fantastic 50% Pitts M12 biplane soars over the skies of Jordan during TCRC's Model Aviation Day in September. The plane was a fantastic flying machine complete with smoke and a great crowd pleaser.

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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	407-304-0295
Vice President	Mark Wolf
	952-475-2307
Secretary	Curtis Beaumont
	612-991-8693
Treasurer	Tim Wirtz
	952-941-5357

TCRC Flare-Out

Editor	James R. Cook	952-445-5257
Publishers:	Pat Dziuk	952-445-3089
	& Mike Timmerman	952-496-1631
Website:	http://www.tcrconline.com	