



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

DECEMBER 2016

THE MEETING WILL BE THURSDAY, DECEMBER 15, AT RIVERWIND!!

PRESIDENT'S CHATTER

At this month's meeting we will be discussing club dues, and other means to prepare our finances for the next hit, i.e. the runway. The seal coating is expected to last about 3 years and then need to be redone. The lawn mower will also have to be replaced sometime in the future. A dues increase would also enable the club to offer prizes or raffle items at events and meetings, do advertising of events etc.

Another issue to be decided is the necessity to post the club membership card on the board when flying.

Virgil Okeson

FROM THE VEEP

So here we are, facing another Minnesota winter. Sigh. Lawn mowers are in storage, snow blowers at the ready. I guess it's time to winterize the airplanes too. Clean them up, oil the motor, cycle the battery one last time or put it on the trickle charger before you forget. Clear that workbench too. Mine is nearly 12 feet long and I have about 2 square feet that's not cluttered with STUFF. Not junk stuff, oh no. It's all good stuff. Stuff I may need someday. Stuff I can't bear to throw away. I'm not quite to the hoarding stage (says who?) but I may need to bring that snow blower into the house.

I've got some nifty items for this month's raffle. A new PowerMatch device from Electrify. This little gizmo will test all types of batteries, as well

as individual Li-Po cells, and has a power meter capable of 80 amp load (for short duration). Or how about a Great Planes CG Machine? Better yet, a Tactic DroneView mini WiFi camera. Mounts to most anything, has its own battery and a 45-minute memory card. These and a few more are up for grabs at the December meeting.

Tim Karash

MEMBERSHIP NEWS

HOLIDAY GREETINGS!!! I hope that you have been good so that Santa will bring you a lot of goodies this year and maybe a few **EXTRA-SPECIAL** treats. If you haven't put in your request yet, just leave a Tower Hobbies catalog lying around with the appropriate pages marked. You still have a few weeks until Christmas. Just remind your significant other that it takes less money to fly large R/C airplanes than it does to support the local tavern.

There is an application included in this newsletter and if you lose it you will have to pick one up at the meeting or send me a self-addressed stamped envelope. Members who read the newsletter on line can print the application and rules from the ACRC website. Remember, **ALL** current members have to fill out a 2017 application and have their year 2017 AMA verified before they can be issued a 2017 membership card. Dues for 2017 are \$50.00 and if you rejoin after January 31 there is a \$5.00 late fee. Please rejoin as soon as possible after you get your November Servo Chatter and your AMA card for 2017. It is easier

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to set the budget if the majority of the dues are in by mid-January.

REMEMBER - I need verification of your **2017** AMA dues. Sending a copy of your 2016 card will only delay the processing of your application. Please also include a small stamped self-addressed envelope. It's not that the club cannot afford the stamps, but it makes it easier for me as I do membership for both ACRC and SPMRC. Thanks

In 2016 the AMA changed how they handle memberships. Instead of all memberships ending on December 31 of the current year, memberships will now end one year after the membership starts for new members and for members that renew late. For example, if your membership starts in July it will end on July 31 of the following year. To help track this at the field membership cards will have the expiration date at the top of the card and will either have a yellow stripe across the top or not have a yellow stripe across the top. If the card has a yellow stripe it means the AMA membership expires during the calendar year. If there is no yellow stripe the AMA membership is for the entire calendar year. The stripe will help remind members to renew their AMA before it expires and will let other members check to make sure everyone flying has a valid AMA membership. I am also tracking the expiration dates in the club database. I hope this all makes sense and if you have any questions bring them to a meeting and I will explain it to the group.

ACRC rules require the use of either the ACRC card or an AMA card. This is the only way that AMA insurance can be verified. According to the AMA, club rules become part of the AMA Safety Code for that club, and the Safety Code has to be followed for the AMA insurance to be in effect. Let's get those cards on the frequency board!!!

ACRC FREEZE FLY - Put skis on your plane and get ready for some winter flying on January 1.

TCRC ANNUAL AUCTION - The TCRC auction will be on Saturday, February 4, at Cross Point Church on 98th and Bloomington. Registration starts at 7:00AM and the auction starts at 9:00AM. Go to the TCRC website for more information:

http://www.tcrconline.com/pages/auction_seller_registration.htm

The next meeting will be at Riverwind on December 15 at 7:00 PM.

Stan Zdon

ACRC MINUTES

Board members present: Virgil Okeson, Tim Karash, Marc Tellevik, Brett Ohnstad, Tom LaRose - 8 members present plus board

Treasurers report:

Income \$45.00

Expenses \$338.82

Safety Report:

Club cards posting on frequency board has become lax. Posting is part of ACRC Field Rules, which becomes a requirement for AMA insurance coverage. The posting was initially for frequency control and member/non-member identification.

Jeff Flander proposed a redo of our flying site rules to eliminate card posting mainly due to use of 2.4 GHz radios vs. FM. Jeff will send his proposal to the newsletter for all to read.

Also noted was the need for a sign stating "AMA Required" added in the field parking lot and/or road near Highway. Verbiage to be determined. Sign to be in place by spring

Training Report:

Training is over for the season. Tom LaRose will not be able to coordinate training next year.

Old Business:

Used fence material from 3D RC has disappeared. It has been proposed that our safety fence be replaced with 4 ft high chain link. Membership should be able to supply manpower for installation. Material costs are to be presented during winter meetings.

Runway repairs:

Jeff Slater obtained 3 proposals, the best as follows:

Power edge all asphalt edges

Clean and fill all cracks with rubber filler

Commercial grade sealing material

To be performed during hot summer months.

Cost: \$2300.00

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This will require the shutdown down of runway use for 48 hours. One other possibility is overlaying another layer of asphalt on top of what we have now, however doing so requires extra thickness of asphalt material to prevent telegraphing of previous imperfections into new layer. Cost becomes prohibited at that point.

Motion was made by Tim Karash, second by Jeff Slater to accept proposal from Real Blackjack Seal coating for \$2300.00. Motion carried.

Motion was made by Jeff Slater, second by Andy Noll, to spend \$1500.00 on replacement fence material. Motion carried.

Adjustment of dues and runway fees were discussed. ACRC is in the top 25 clubs in member size in USA per AMA. We have a deluxe location and could become a premier flying site. General feeling is to raise to \$75.00 with possible reduction to \$65.00 for senior members.

Advertising of events needs to improve.

Landing fees and lunch fees should be assessed for all events.

New Business:

Board members deficit, how do we get more people on the board?

Dates for indoor flying at dome near the Brooklyn Park Fleet Farm - 7:00 PM to 9:30 PM

12/8/2016 & 12/27/2017

1/12/2017 & 1/24/2017

2/9/2017 & 2/28/2017

3/9/2017 & 3/28/2017

4/13/2017 & 4/25/2017

Cost is \$15.00 per session or \$10.00 with MARCEE membership (\$20.00/yr)

Club clothing orders have not been placed so far this year.

Jeff Slater brought multiple planes for sale. Liquidation of liquid power.

Raffle prizes:

- | | | |
|-----|---------------|--------------------------------------|
| 1st | Andy Noll | 12" drill bit set |
| 2nd | Virgil Okeson | Sandpaper cutter |
| 3rd | Jeff Flander | CA glue |
| 4th | Tom LaRose | Christmas Stocking of modeling tools |
| 5th | Bob Barton | Corsair Christmas tree ornament |

Tim Karash

ACRC INSTRUCTION

The colder weather has rolled in and the airfield is quiet. If you're looking for some stick time, don't forget the flight simulators out there. If looking for one, check out the following:

- | | |
|-------------|---|
| Phoenix | www.phoenix-sim.com |
| Real Flight | www.realflight.com |
| AeroSim RC | http://www.aerosimrc.com |
| ClearView | www.rcflightsim.com |

It's a great way to keep your RC pilot skills up.

Don't forget the full size aircraft simulators:

- | | |
|-----------------|--|
| Xplane 10 | www.x-plane.com |
| Virtual Pilot3D | www.virtualpilot3d.com |
| Flight Gear | www.flightgear.org |

It's not only stick time for RC flying skills, but also a good way to increase your FPV (First Person Video) time.

If you all ready have the Phoenix Simulator and are looking for some flying time check out the (Online Multi player Area). You can fly and interact with people from around the world or catch someone from the club on them. If some one from the club is online, look for Janes Field. Enter it and use ACRC for the password

As always if you have suggestions for training in the upcoming 2017 flying season, please bring it up at the club meeting or send to the club email.

instruction@anoka-rc.com

Wishing Everyone a Happy Holiday Season

Tom La Rose



ACRC Forum - <http://anoka-rc.com/forum>

ACRC EVENTS

Just a reminder to the ACRC membership about the annual Freeze Fly coming up on New Years Day 2017. This is our first “official” event for the 2017 flying season and with any luck we'll have weather like the last two years, with fairly mild temperatures and light winds. As usual, we'll try to get started around 9:00 or 10:00 AM with free coffee and donuts for all in attendance. If the weather is nice enough we may even have a pot of soup or chili and a few other “goodies” for lunch. Depending on snow conditions, wheels may work but skis are better and floats seem to provide the best over-all performance, so if you have a plane you'd like to convert, now's the time!!

We've been fortunate enough in the last two years to have a club member with a plow truck to make sure the road out to the field is passable, so hopefully that will be the case again this year. If you have any questions, or would like to volunteer to help out with this event, come to the December meeting, or e-mail me at ACRC Events.

Bob Proulx

ACRC SAFETY

I was working on one of my airplanes in the garage the other day when I accidentally knocked a bottle of beer off of the workbench and onto the floor. Fortunately the bottle hit a old jug of Nitro fuel preventing the bottle from shattering all over the floor but it did not prevent spilling most of the contents of the bottle all over the bottle of fuel. As I was wiping up the spilled brew I started reading the label on the fuel and that got me thinking about the high powered suds in that bottle instead.

Radio control airplanes (and R/C cars and boats for that matter) derive their main power source from either an electric or a liquid fuel-powered engine. The electric powered vehicle use a battery in conjunction with an Electronic Speed Controller and either a brushed or brushless electric motor. Fuel powered vehicles use either a methanol-based fuel in a glow engine or gasoline

in an engine with a spark plug. The methanol-based fuel contains nitromethane. The term nitro is often used to describe the fuel and the vehicle that uses it as a power source

The three main components of nitro fuel are methanol, nitromethane, and oil. Many of the modern fuels also contain additives such as degumming agents and anti-corrosion agents to aid with wear on the engine. While the methanol is the main source of energy used in combustion in the engine, the nitromethane delivers oxygen into the combustion mix adding more power. The oil, be it castor oil or a synthetic blend lubricates and helps to keep the engine cool.

Castor oil found in the fuel tends to break down at higher operating temperatures and creates a lubricating film, the downside being that while desirable it is somewhat messy. Synthetic oils lubricate well at lower temperatures but can burn off at higher operating temperatures providing little protection. One of the differences between fuel used in cars and fuel used in airplanes can be attributed to the fact that airplanes have more efficient cooling for the engine than R/C cars and as such you might find a larger percentage of synthetic oil as compare to the fuels used for R/C cars.

In the jug of fuel that you buy for your nitro airplane methanol will be the largest portion. The rating on the fuel will however be based on the percentage of nitromethane that is included in the mix. The percentage of nitromethane is usually somewhere between 10% and 40% depending on the intended application but it is typically about 20%. The nitro fuel requires special precautions for safety and to avoid evaporation and contamination of the fuel.

Changing the percentage of your nitro fuel may require retuning your engine in order to get best performance and to minimize damage to the engine. Typically smaller engines will use a lower rated fuel while larger engines may require a larger percentage of nitromethane in the mix. Increasing the percentage in a tuned engine may require leaning out the air/fuel mixture whereas

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dropping the percentage will reduce performance and may require richening the air/fuel mixture to maximize performance. On the other hand, changing fuels may be what is necessary to get better performance out of a particular engine.

Nitro fuel has two enemies that can breakdown the fuel making it unusable, moisture and sunlight. Methanol in the fuel can attract moisture. Water in your fuel can damage a glow engine. Keeping the fuel sealed tightly against moisture and humidity can extend its shelf life. Sunlight on the other hand can break down the nitromethane in the nitro fuel decreasing its performance. When storing your fuel, try to keep it covered in the dark to avoid exposure.

Just like nitro fuel, which needs to be stored in a dark safe place, it is said that beer that is sold in dark brown or green glass bottles make for a better beer. This is true in the fact that UV in sunlight can break up the acids in the hop plant resulting in the beer becoming skunk. There is nothing that can save a beer that was stored in a safe place and instead ended up being spilled over an old jug of nitro. fuel

Brett Ohnstad

Tips & Tricks

From the newsletter of the Rocky Mountain Modeleers, Ft. Collins, Colorado

Vinegar

To remove epoxy from yourself safely, use white vinegar. It's smelly, safe, and very cheap!

Flexible sanding block

A flexible sanding block can be made by contact cementing sandpaper to one side of a urethane sponge. Your sanding block can conform to any curve.

Handy soldering jig

Here's an easy way to solder a threaded coupler. Place the coupler in the jaw of a wire stripper and stretch a rubber band around the handle. This provides the needed tension to hold the coupler (or whatever else) in place while soldering.

Installing landing gear

When installing landing gear onto the fuselage with plastic or nylon bolts, place a thin 1/16-thick sheet of light plywood or balsa between the aluminum gear and the bottom of the fuse. This way, if by chance you land hard and shear the plastic screws, you have a better chance of getting a grip on a section of the broken plastic for easier removal. *[Tech editor's note: Possibly. But better would be to heat the tip of a screw driver in a butane touch and push the hot screwdriver into the broken bolt, it will make a very nice screwdriver slot.]*

Wire bending

When bending identical parts from small gauge wire, tape the wires together and bend both simultaneously.

Radial engine cowling

Some two-liter soda bottles have a black plastic reinforcement on the bottom. This piece makes an excellent radial engine cowling for your next project. *[Tech editor's note: The rest of the bottle can be used for canopies and emptying the bottle first can be fun, too.]*

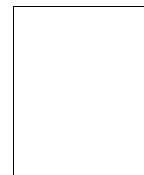
Ballard Street by Jerry Von Amerongen



"If there's some kind of trouble, Stephen, remember it's our only step ladder."

SERVO CHATTER

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ACRC SPONSORS

King Kong Hobbies
Abraham Technical
Aerospace Welding
Cambridge State Bank
T & G Hardwood

CALENDAR OF UPCOMING EVENTS

Thursday – December 15

- ACRC Meeting-Riverwind

Sunday – January 1

- ACRC Freeze Fly

Thursday – January 19

- ACRC Meeting-Riverwind

Thursday – February 16

- ACRC Meeting-Riverwind

Thursday – March 16

- ACRC Meeting-Riverwind

Thursday – April 20

- ACRC Meeting-Riverwind

Saturday – April 21

- ACRC Fun Fly #1

