



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

DECEMBER 2020

THE MEETING ON DECEMBER 17 HAS BEEN CANCELED!!!

PRESIDENT'S CHATTER

Saying goodbye to 2020

What a month this has been. It has been some of the best flying weather for December that I can remember. I have not been able to participate. I am one of the many to test positive for covid. After a pretty rough three weeks I think I am one of the lucky ones to come out the other side. I am hoping you and yours are all happy and healthy for this different holiday season.

There is no indoor meeting scheduled this month. I am looking forward to seeing some of you for our annual Freeze Fly January 1, 2021. Remember to renew your club membership before then and come out for some winter flying.

Let's all pick a winter project for some great Show-N-Tells when we can get together.

Jeff Slater

FROM THE VEEP

Here we are in December and just when we thought things were going to return to some semblance of normalcy we are sent again into a tailspin. Our membership has been hit with several cases of Covid, some mild, but some serious. Prayers for fast and complete recoveries to all those affected.

The field does remain open to those who brave the cold, fortunately it has been a mild one (so far). I have begun a weekly ACRC Realflight session every Wednesday at 9:00 PM. After a bumpy start the first night as we learn how it works it is now running quite well and a lot of fun! If you have realflight simply click on Multi player on the top toolbar and look for ACRC. The password is ACRCMN (all caps). Once you learn your way around Realflight it is very realistic

and great off season practice. The club also has a realflight system to be loaned out for student use.

Tony Hahn

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 2021 application and have their year 2021 AMA verified before they can be issued a 2021 membership card. Dues for 2021 are \$75.00 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 2021. It is easier to set the budget if the majority of the dues are in by mid-January.

REMEMBER - I need verification of your **2021** AMA dues. Sending a copy of your 2020 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

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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 6, 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 December meeting has been canceled. If a ZOOM meeting gets arranged an email notification will be sent.

Stan Zdon

A Look Back

DECEMBER 2002

18 Years ago

Tom Wesley and 5 other members braved the December 1 cold temps at the field by constructing a makeshift wind block. Then a charcoal grill was brought out as a warming station between flights.

New board members (including yours truly) will take over at the December meeting.

A swap meet is scheduled for December 14 at the Kelly Inn.

Greg Classen reminded everyone to inspect and replenish their First Aid Kit. Do you carry one in your vehicle to the field?

Red Scholefield wrote a brief explanation of why batteries develop internal shorts.

Vincent Lipton wrote an excellent primer on soldering, including electrical wires and music wire for landing gear.

DECEMBER 1992

28 YEARS AGO

Jim Svare steps in as club president this year.

Dan Wennberg wrote an interesting piece about the multiple ways your body can lose heat in cold weather: radiation, convection, conduction, evaporation, and respiration are all contributing factors.

Apparently, there must have been a spectacular midair collision as it was inferred no less than 3 times in the newsletter. One description stated "Finally, like magnets, they made contact and burst like a Piñata with money fluttering from the sky, not to mention wings, fuses, servos, batteries, and snow-like balsa flakes. No two flakes alike." Only the first names Dan and John were given.

DECEMBER 1982

38 YEARS AGO

Milt Jewell stepped in as president.

ACRC will co-host the Scale/Pattern Contest with St Paul R/C.

There have been complaints about flyers abusing the 15-minute rule when other pilots are waiting for the same channel.

Tim Karash

ACRC FUNDRAISER

Christmas time is upon us, once again, and this is a gentle reminder that the spectacular calendars from Minnesota Fresh Water Society make splendid Christmas gifts for nearly everyone on your list. Simple, easy, and useful. Not to mention, very beneficial to our club runway fund.

At the time of this writing, it was uncertain if we will have a December meeting. Should that happen, I will be there with calendars in hand, otherwise you can reach me at: tmkarash@gmail.com and I will be glad to set up a meet and greet with you.

Tim Karash

FLYING FIELD NOISE

Understanding that what is a pretty sound to us as modelers isn't necessarily a pretty sound to our neighbors is a reality that we all must come to grips with. The largest contributor to the loss of flying sites, by a wide margin, is the noise we produce. Sooner rather than later, someone is going to build his or her dream country home within earshot of your flying field and, if you don't have noise under a certain amount of control, you will quickly become a target. This should help you to be reactive to a noise complaint. You should use these guidelines to become proactive in getting sound under control before problems arise. After the authorities are alerted to a noise problem is not really the best time to handle it. The best time is long before there's an issue, and if it's done sincerely and adequately, there may never be a problem. There is a difference between what a guideline is and what is legal for a particular piece of property. I'll discuss this difference later.

What is "dB"? It is the abbreviation for decibels, which is a measurement of sound wave impact; it is also a measurement that increases exponentially on the scale.

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In layman terms as the number increases, the impact increases by several times over. To bring it down farther, 45 dB is just above a whisper, 96 to 98 dB is tolerable, and at 107 dB and up, noise starts to do damage to your hearing. The easiest way to measure sound/noise is with a decibel meter. They are now relatively inexpensive and are mostly battery-operated, so using them at remote locations is easy. The one most often used is a small handheld model sold at the nearest Radio Shack for less than \$50; so all clubs should have at least one. They can also be mounted on a camera tripod, which will make testing, and consistency simple.

Sound Limit Recommendations

96 dB measured from 20 feet distance over soil field (sod).

98 dB measured from 20 feet distance over hard surface (pavement/concrete).

The decibel meter should be held approximately 2 feet above the surface in the direction of the aircraft and take a few readings at different angles to the aircraft (front, back, side, etc.) and take an average. This method should adequately measure the real sound level being put out by a particular aircraft engine/muffler combination. These recommendations are not quiet by any stretch but are normally tolerable to most people in the vicinity, pit area, and spectators. These recommendations should also be adequate for controlling the sound level outside your overfly area while in the air.

What Is Actually Legal

Unless you live in the middle of no-man's land, all property will fall under the jurisdiction of a set of ordinances of some type. Whether it is state, county, township, etc., there will be a set of rules for what can and can't be done with or on a particular piece of property. In these ordinances there are rules for fence lines, building set-backs, types of building, and so on. There are also rules concerning how much noise (dB) is allowed to cross the property line. It may be hard to find, but if you look deep enough or ask the right person, you'll find it. Normally somewhere between 50 and 65 dB is the amount of noise that's allowed to cross a property line. After you find the information pertaining to your property, checking to see if you're legal is easy by setting your dB meters at different places on the property line and taking the readings. Other factors can add to the dB readings you get. If your field is located close to a major highway or busy road, the tire noise and other road noise can make a big difference. This may sound trivial, but knowing where

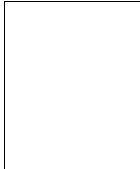
your flying site stands legally regarding noise can and will give you a leg up if and when the need arises. Think of how handy it would be if you were to be confronted with a complaint, and you know and are able to state that your flying site is within the noise ordinance limits.

Ways of Abating Noise Problems

Try a three-bladed propeller. The most important thing to remember about airplane noise is that most of what you hear does not come from the engine; it comes from the propeller. What you hear when your engine unloads in the air is the propeller tips going supersonic, so getting the engine RPM down will limit much of that. So you think that having a bigger two bladed propeller will slow the engine down? It *will* slow the engine down, but now you have longer blades and the tips are actually going faster (physics). The answer is to *add blades* so you keep the diameter down while also reducing the rpm. The reason you see most of the big International Miniature Acrobatic Club (IMAC) pilots now using three-bladed propellers is not for performance, but noise control. If you don't know how to figure for a three-bladed propeller, you might ask your engine manufacturer for a recommendation. A rule of thumb is to reduce diameter by 1 inch, pitch by 1 inch, or both if needed. Use as large a canister-type muffler if possible. Nearly all glow and gas engines sold in the US market today are supplied with a large canister-type muffler. Most of these supplied mufflers will do an adequate job of controlling the combustion noise coming from the cylinder. Adding a piece of rubber hose to the outlet pipe can also help stop some of the ringing sound that the muffler can produce. The rubber hose doesn't have to extend past the pipe, just cover it like insulation.

Soft-mount your engine. Often there can be quite a bit of noise coming from your airframe, especially if it contains a lot of fiberglass or is an open structure covered in plastic film. When the engine is hard-mounted to the firewall, the vibration will be carried back through the airframe and essentially act as a drum unless there is some type of absorption material in there to soak it up. Many of the newer 30% and 40% acrobatic aircraft have foam turtledecks and other foam parts that absorb much of the vibration noise; if not your beautiful machine will sound more like a drum kit than a purring kitten. There are several soft-mount systems on the market today. As far as I am aware, all full-scale piston engines are soft-mounted. Take a lesson from the big boys.

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ACRC SPONSORS
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CALENDAR OF UPCOMING EVENTS

Thursday – December 17
 • ACRC Meeting Canceled

Friday – January 1
 • ACRC Freeze Fly

Thursday – January 21`
 • ACRC Meeting-Riverwind

Thursday – February 18
 • ACRC Meeting-Riverwind

Thursday – March 18
 • ACRC Meeting-Riverwind

Thursday – April 15
 • ACRC Meeting-Riverwind

Saturday – April 17
 • ACRC Fun Fly #1

