



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

APRIL 2016

THE MEETING WILL BE THURSDAY, APRIL 21, AT RIVERWIND!!

VOLUNTEERS NEEDED

ACRC Presentation at the Civil Air Patrol Fort Snelling Squadron

by Bob Moser

The Civil Air Patrol Fort Snelling Squadron in Bloomington has asked Anoka County RC to give a presentation during their April 25, 2016 squadron meeting. I would like to have several ACRC members present for this event and I am asking for volunteers. I expect between 15 and 25 cadets at this meeting.

I will give a brief presentation about our hobby, the basics of radio control, safety, discuss "how fast, how high, how far, how much", discuss FAA registration and talk about our club. The squadron has also procured a Flyzone Calypso. We will discuss the setup of that airplane and safety. They will also have at least one RC simulator (Real Flight) setup during the meeting for the cadets to try.

We need volunteers to bring airplanes (any size is welcome, from micros to giant scale). This is mostly a static display, although there should be room inside to fly a micro quad or helicopter. There will not be any outdoor flying because we are on an Air Force Reserve base and also on the perimeter of the MSP airport. If you have a copy of a flight simulator running on a laptop, that would be very welcome too (don't forget your transmitter).

After the brief presentation I would like to give the cadets an opportunity to get some up close time with our models and talk to the ACRC volunteers one on one. You will have the chance to meet enthusiastic young men and women and help them better understand our hobby.

Later this spring ACRC will host the squadron at the field for an introduction to RC, flight training, and getting their Calypso in the air.

This is a great community outreach opportunity for our club.

If you are interested in volunteering please email Bob Moser at rmoserjr@gmail.com. In order to be allowed onto the base, please include your full name as it appears on your driver's license, your driver's license number, and the state in which your driver's license was issued. This information is required for everyone over 18 years old who will be arriving in your vehicle.

When: April 25, 2016 at 6:30 pm

Where: 934th Airlift Wing, Minneapolis Air Reserve Station Building 862 Earhart Ave. Minneapolis, MN 55450

Who: Contact Bob Moser at rmoserjr@gmail.com or 612-325-7942

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



FROM THE VEEP

Minnesota weather usually gives us lots to talk/complain about, but this spring, holy cow! It's been more schizoid than Anne Heche. It's like Mother Nature can't get her act together, low winter snow fall leading to early warm spring temps, then back into cold and bleak. Oh yeah, cold rain one day followed by sunny and warm. Then the next morning, I open the curtains to find an inch of snow on the ground! WTF? All we need is a tornado to hit the weather Trifecta! I guess all of this winter weather misery makes us appreciate our summers that much more. I know I'm looking forward to some time outside in the sun, maybe a few days actually flying an airplane instead of just talking about it.

I'm hoping that those of you who are reading this may have actually completed a project for this year because I sure didn't. Nope, nothing new is coming out of my basement, not for a while anyway. I got loads of stuff started, more still in the box, but none anywhere near ready to fly. Wow, this is really starting to sound like a gloom and doom rant; I guess it is. Maybe I should take up drinking.....

Tim Karash

ACRC EVENTS

I received another invitation from the events coordinator of the East Bethel Booster Days. I voiced our concerns regarding the "venue" and the rather remote location we were assigned last year for our display and flying demo, which resulted in a spectator turnout that could best be described as "minimal". Having said that, I then proposed two stipulations that, if agreed to, would guarantee our participation again this summer. The proposal is this: ACRC would like to have a float to participate in the parade prior to the event. We are thinking that the additional exposure would draw more spectators to the static display and flying portion of the event. The other

stipulation is that we be allowed to set up our display and flying demo on the west side of Booster Park behind the ball fields. This area is larger and open enough to fly some smaller glow and gas airplanes. The event is scheduled for Saturday, July 16 and would likely be a full day event, however any members that wanted to participate would be able to come and go as they pleased without having to commit to an entire day. I have not heard back from the organizers as of this writing regarding our proposal, so hopefully I'll be able to give the membership an update at the April meeting.

See you at the meeting.

Bob Proulx

ACRC TRAINING

Flying season is not far off now. If Mother Nature treats us to less winds than in the last few weeks, some sunshine, and rain after 8:00 PM and before 8:00 AM, that's not asking too much, or is it!

Wednesday April 27 will be the official beginning of the 2016 ACRC training season, weather permitting.

The Instructor training night has also been set up for Wednesday April 13 at 4:00 PM to be held at the ACRC Flying Field, rain or shine.

Proper Landing Techniques for Warbirds

Who does not like a Warbird!

Properly landing a warbird is one of the most rewarding moments in all of RC flying. Warbirds have a timeless, majestic quality that spans generations and most RC pilots will tell you that there's just something special about a warbird. When you successfully "grease" a 2-point or 3-point landing, it sticks with you for the rest of the day. On the other hand, no matter how great the flight was, if you goof up the landing - or worse, damage the plane - upon touchdown, the whole flight feels ruined.

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Here are some techniques and tips to help keep your warbird landings a happy event worth celebrating.

Plan Your Approach

Just like with any plane, you want to establish a pattern. Takeoff leg, crosswind leg, downwind leg, base leg and final. This rectangular flight pattern is common throughout all of aviation and helps you visualize when to perform certain tasks in the air. Since this article is about landing specifically, we will focus on the portions of the pattern relative to that action.

When you are ready to land, you want to drop your gear (assuming your warbird has retracts as most do these days) somewhere around the entry into the downwind leg. This is also a good time to drop your first level of flaps (assuming your warbird has flaps and you have more than one setting of flap degree programmed). Manage your throttle and elevator accordingly.

As you prepare to enter the base leg, drop your flaps to their full setting assuming there's not an overabundance of headwind. The flaps increase drag and lift. This allows you to slow the plane down as well as not gain too much speed if you are establishing a steep approach.

Final Approach - Manage The Throttle

The key with warbirds is keeping some speed all the way to the ground. Dead-sticking on final approach is asking for trouble as warbirds don't generally have gentle stall characteristics. If you hit stall speed well above the ground, the wing - and the warbird - will simply stop flying and come crashing to earth like a wet brick. To avoid this, you want to keep 20% to 25% power on. Throttle is also used to control altitude. If your warbird is properly trimmed with flaps, you can manage the approach with throttle and very little use of elevator.

If you find yourself using the elevator aggressively or quite a bit on final approach, you are likely not using the throttle to your advantage. One of the key misunderstandings of power is that it is simply to increase speed. The truth is, the

throttle is also meant to adjust altitude. The elevator is there to adjust pitch with authority, such as flaring right before the touchdown.

Fly The Plane To The Ground

Okay, you have established a good glide slope and speed on your final approach path. You have flaps according to your environment (less flaps are needed in higher head winds) and your gear is down. This is the point that you simply fly the plane to the ground. How do you do that? Keep the nose relatively parallel to the ground. Manage your throttle and elevator to achieve a speed that is flying comfortably just above stall speed. If the plane begins to feel "mushy" on the sticks, increase your power a bit. You don't want the nose too low or too high above the horizon line.

Once you get the plane close to ground effect (half the total wingspan's length between the ground and the warbird) begin to lower your power. Once you are under a foot or so from the ground begin to decrease your power even more and ever so gently raise the nose with elevator to establish a good flare. You don't want to literally fly the warbird into the ground, but you do want to be committing the act of active flying all the way until touchdown and then throughout the rollout.

Grass or Paved?

Both surfaces provide their own challenges. Some folks don't have the luxury of a long, paved runway surface to fly their model aircraft. Often grass is the only choice. The general rule of thumb when considering if you can fly your warbird on grass is if more than 1/3 of a wheel's height is covered in grass, the model likely will not takeoff due to too much resistance. If the grass is mowed regularly and short enough, grass takeoffs and landings aren't generally a problem. Rollouts are shortened due to the general resistance grass allows.

Paved surfaces allow no resistance so rollouts are extended. Ground looping is more prevalent with paved runways so don't take it necessarily as an assault on your piloting skills.

Summary

So to summarize, establish your pattern, drop your gear and flaps according to your environment and location in the pattern, line the warbird up on final approach and manage the throttle to adjust altitude and a safe speed just above the stall speed. Fly the warbird all the way to the ground, easing off on the throttle as you slowly raise the nose for the flare inches (not feet) above the ground.

Like with anything, a good warbird landing requires practice. Once you have established the fundamentals, the muscle memory will follow and before you know it, you're thinking less and reacting based on sound principles that should satisfy for years and years to come.

Happy Landings!

Tom La Rose

MEMBERSHIP NEWS

I hope you will take time to read the flying site rules and refresh your memory now that the flying season is close at hand. This is especially important because a few years ago some changes were made to rule 10 and high-speed passes are now allowed over the runway in certain instances. The rules will be attached to the email you get with this newsletter. You should print a copy and keep it handy. If someone mentions to you that you are violating one of the safety rules please do whatever it takes to correct what you are doing. It is considered bad form to give them a hard time and then continue doing what you are doing. If it means that you have to stop flying and make repairs or go home to get something that you need, that is what the club expects you to do. The AMA insurance for you and the landowner provides coverage only if you are following the rules. It would be a shame to lose our field because of the ignorance and arrogance of a few fliers.

Part of Rule #2 states that members are to put their membership card on the frequency board and guests are supposed to use their AMA card. The reason for this is so that we can be sure that the fliers are either current ACRC members or guests

with a current AMA. Fliers are not to use last year's cards, driver's licenses or business cards. If you lose your 2016 ACRC card and need a new one let me know. I will mail you a new card - FREE.

Don't forget that the first Fun Fly of 2016 is on Saturday, April 23.

The next meeting will be at Riverwind on April 21 at 7:00 PM. This is the last indoor meeting until September. The summer meetings will be AT THE FIELD.

Stan Zdon

ACRC SAFETY

It's now April and the weather is starting to turn nice. Sure, it can snow one day and be in the 70s the next, but that's what living in Minnesota is like. That makes this the perfect time of year to prepare for the flying season. Cold and blustery days are perfect for working on your aircraft followed by the warmer sunny days that are perfect for getting out and starting things up to make sure everything is working properly.

This is where safety begins for the season, and now is not the time to take any shortcuts.

As you're bringing aircraft out of storage there are a couple places to start. The first thing you should do is visually check your aircraft for any signs of hanger rash or other damage that may have incurred during the off-season. Check the aircraft for any signs of damage to the coverings or any structural damage that may have occurred. Any damage or other problems that could bring your airplane crashing to the ground, no matter how minor, should be addressed at this time.

Your workbench is a better place to check for loose screws and bolts in your airplane rather than doing so at the flying field. It is amazing how during the off-season screws can become loose and fixtures can become unhinged. Doing your inspection here helps you resist the temptation to try to fly the aircraft before it is totally ready.

Before firing up your electrical system make sure that your battery is properly charged and that there

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are no loose or exposed wires in the aircraft. If you stored your battery over the winter you should have had it on a storage charge that will need to be fully charged before you put it back inside the aircraft. This goes for both electrically and fuel powered aircraft,

Next you need to ensure that your radio is bound to the correct aircraft and that all the control surfaces are moving in the correct direction. I once took an airplane out of storage and could not get the radio to connect with the receiver. After re-binding the radio to the airplane I checked and all the control surfaces moved in what appeared to be the correct direction. Upon take off, I pulled back on the elevator only to have the airplane nose into the ground rather than leap to the sky. As it turned out I had two airplanes that had similar descriptions on the radio with the only difference between the two airplanes being the elevator servo. I had bound the airplane to the radio with the wrong parameters. Had I done a thorough inspection I would have noticed that the control surfaces were not moving in the correct direction.

This is also good time to check that all the control surfaces are moving freely and are not ready to break off or pull out of the slot where they're connected into the main surface. The off-season is a good time for the hinges to possibly dry up and lead to eventual failure. Also, if you notice any of the servos are not moving correctly, be it hesitation in movement, making strange noises, or not moving at all, make sure that you check that all servo wires are connected properly. If that does not fix the problem it might be time to put in a new servo.

If you're flying an electrically powered airplane either remove the prop or take the airplane outside and check to see that the motor is spinning correctly with no unusual vibrations. We have had a member who had been injured when an airplane that he was testing while indoors moved forward resulting in a prop striking an object, breaking and bounced off the wall hitting the operator causing a nasty little cut that could have been much worse.

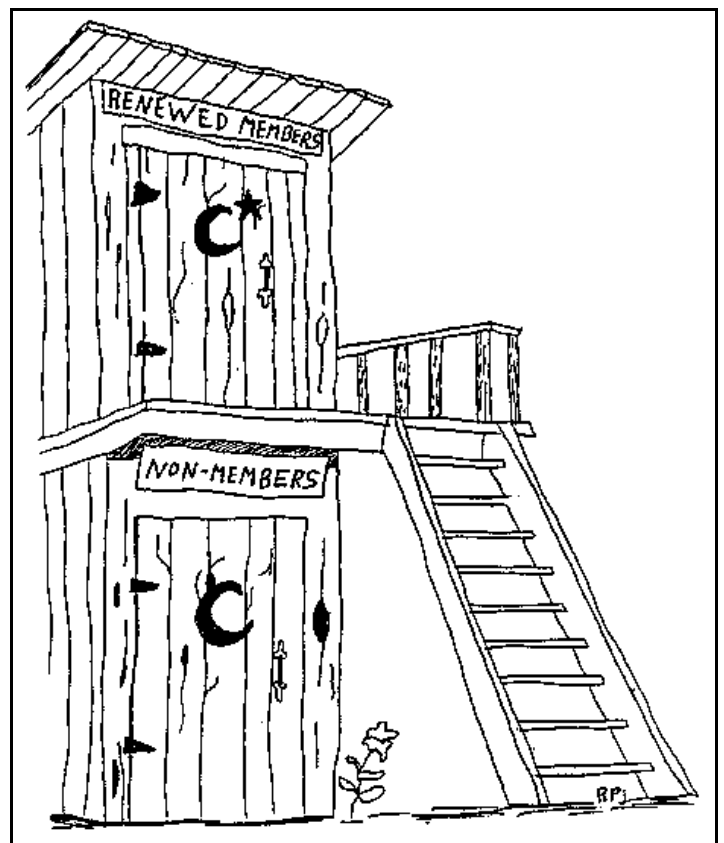
If you are flying a fuel-powered aircraft, of course you're going to be doing that outdoors. It is

probably best to replace all fuel lines at the beginning of the season. Whether you do or don't is up to you but this is the time to check for any obvious fuel leaks, old fuel, or plugged components like a fuel filter or valve. Repair and replace as necessary

Make sure your radio's battery is also fully charged and still functional. Don't forget to perform a range check even at home with each plane before you're totally ready to go out into the field at the start of the season. The radio check will help to determine if everything is going to be working correctly between your radio and the airplane when you finally go out for that first flight. If you can do the range check while the motor is running you might be able to induce some in-flight vibrations that will give you real world conditions that would have remained hidden otherwise.

And finally make sure you have cleared all the rust off your fingers. Get some practice on a simulator before you go into the field. That should build a little confidence in your abilities that you still have got it, and of course you do have it, don't you?

Brett Ohnstad



ACRC MINUTES

March 17, 2016

Meeting called to order at 7:00 PM.

15 members were present, plus visitor Duane Orson. Duane joined ACRC this evening.

Treasurer: Report as of 3/15/16:

The income was greater than the expenses and we have money.

Membership: Stan Zdon reported that 78 members have renewed so far.

Instruction: Tom LaRose reported that the AMA Instructor Program is almost ready to start.

Events: Bob Proulx noted that turkey sandwiches would be served at the MARCEE electric fly in May.

Safety: Brett Ohnstad showed safety fences for the flight stations and took suggestions from the members.

Old Business:

Lawn tractor search continues. New vs. used discussed.

A locked shelter for the lawnmowers was proposed.

New Business: None

Show-and-Tell: None

Raffle:

1 st	Bob Gallagher	Hacker ARF
2 nd	Duane Orson	Tool kit
3 rd	Duane Orson	Charger leads
4 th	Ron Riley	30 Minute epoxy
5 th	Tom LaRose	Run up oil
6 th	Bob Gallagher	Red spinner
7 th	Ron Riley	Yellow spinner
8 th	Tom LaRose	Red spinner
9 th	Bob Nagle	White spinner

Stan Zdon

TIPS & TRICKS

From the newsletter of the Rocky Mountain Modelers, 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 propane torch and push the hot screwdriver into the broken bolt, it will make a very nice screwdriver slot.)*

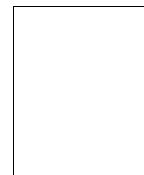


NAME THE PLANE



SERVO CHATTER

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Cambridge State Bank

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*Deadline for the
next newsletter is:
May 1, 2016*

CALENDAR OF UPCOMING EVENTS

Thursday – April 21

- ACRC Meeting-Riverwind

Saturday – April 23

- ACRC Fun Fly #1

Saturday – May 7

- MARCEE Electric Fly In

Thursday – May 19

- ACRC Meeting-At Field

Saturday – May 21

- ACRC Fun Fly #2

Thursday – June 16

- ACRC Meeting-At Field

Saturday – June 18

- ACRC Fun Fly #3

