



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

# SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

MAY 2013

***THE MEETING WILL BE THURSDAY, MAY 16, AT THE FIELD!!***

## PRESIDENT'S CHATTER

I don't know what to say! We are going to be busy at the field. People are getting excited to get out and fly but Mother Nature has had other ideas. Be patient, it will get better you know. I have the mower blades and battery and the mower should be yard worthy by the 10th. Then those of you who are excited to fire up that hot rod mower at the field can have at it. During your trips out to the field, keep in mind the safety code that makes our field safe. It makes it a joy to fly and watch. I realize that everyone has the itch; I'm just as guilty as the next guy, but pay attention to all happenings around the field. Call out your intentions; coming out, taking off, landing, touch and go, etc. The latest craze is flying on the pit side of the flight line beyond the ends of the runway. You all know that is a NO NO! Stay east of the west edge of the runway please. *(Editor's Note - See Rule 9)* Also **USE THE DRIVE WAY IN OR OUT OF THE PARKING LOT; DO NOT DRIVE ACROSS THE GRASS.** It has been that way for years so lets keep it that way. Just some reminders, nothing big, so go to the field have fun and enjoy your self.

Andy Thunstrom

## FROM THE VEEP

Hi Everyone! I hope that everyone has had a chance to get out and do some flying when the weather was somewhat nicer. The forecast is starting to improve so I'm looking forward to getting out more frequently myself.

We do have some events coming up. Our Fly-in was rescheduled to May 11 and then the following weekend is the fun-fly again. Hope to see you all out there!

John Sager

## MEMBERSHIP NEWS MAY 2013

The meeting this month will be **AT THE FIELD**. The starting time is 7:00 PM and if you get there early you can get in some flying before the meeting. Remember that you should be using your current membership card to mark your channel and guests should be using their AMA card to verify their AMA membership.

ACRC members should remember and follow the safety rules. We all have mental lapses from time to time so gently remind others when you see them having a SENIOR MOMENT. Starting engines with the plane faced other than toward the runway and full RPM run-ups in the pits seem to be the most frequent violations of club rules. If you just visualize where the prop blades will go if the blades break off it will help you remember why the club has these rules. The plane should be started in the pit area and moved to the run-up area for the high RPM run-up.

The flight stations are close enough so pilots can communicate their intentions concerning take-off, landings, etc. Be sure to let other pilots know what you are going to do. Shout out "coming out", "taking-off", "landing", "on the field" etc.

*Continued on Next Page*

Remember, if the wind is from the north, you should be flying from the 5 stations by the south half of the runway and vice-versa.

Be sure that you are standing on or behind the flight station blocks. If you stand ahead of the blocks you could be blocking the view for someone who is landing and if you are standing way ahead of the blocks you are definitely in a Danger Zone. All flying is to be done beyond the runway. This even applies to Micro-Electric planes (See Rules 9 & 10). Once you land, clear the runway and taxiways as quickly as possible. If you have to do maintenance on your plane or change the battery, it should be taken back to the pits.

ACRC Fun-Scale Contest will be held this year on June 2. The ACRC Warbird Fly-In will be on June 29 and ACRC Pattern will be on July 13. The ACRC Float Fly is scheduled for July 24.

**THE NEXT MEETING WILL BE AT THE FIELD ON MAY 16 AT 7:00 PM.** The summer meetings will be at the field until August. The fun-fly will be on Saturday May 18 at 10:00AM.

Stan Zdon

## ACRC TRAINING

Training is off to a slow start this year and Wednesday nights have been a wash so far. Our new pilot count was up to 15 last month and is currently at 14 as one has soloed. Last Friday, 5/3/13, I called as many of the new pilots as I could just to see if anybody had any questions. I had some pretty good conversations with many of the new pilots. Sounds like everybody is excited to get things going. Many of the pilots indicated that they would be at the Wednesday training nights, which is great!! With that said, the ACRC instructors will be quite busy and it will be all the more important to have your airplane charged, fueled and ready to go. If your airplane has never been flown or has not flown this year, please have an instructor take a look inside before installing the wing. No new trainers will be test flown without having a instructor or experienced club member verify rigging, CG, tight hinges etc.

I don't want anyone to loose a new airplane for something that that should have been caught in a pre-flight inspection. This is important for everyone's safety.

### 2013 SOLOS

Congratulations to Chris Swentkofske!! Chris soloed Monday April 29 and was officially signed off by Bob Moser. Thanks Bob!! Chris and his son Jack are new members this year. Welcome guys!!!

### TIPS AND TRICKS

Last month I reviewed slow flight and stalls. This month I am going to talk about stalls again except they will be "High Speed or Accelerated Stalls." Yes there is such a thing. In fact they can be pretty nasty especially on the bottom side of a maneuver close to the ground. An accelerated stall is where the stalling angle is achieved at a higher-than-normal stalling speed. The aircraft stalls at higher speeds than it would during a normal stall in straight and level flight. With model airplanes, I find it fairly easy to achieve High Speed Stalls because of the massive amount of elevator throw some of us have in our airplanes. Performing 3D maneuvers requires a lot of throw because the airplane is moving relatively slowly or not at all in a hover. Now take the same airplane fly straight and level wide open, briskly pull full up on high rates and watch what happens. Either the wings fold!! or the airplane snap rolls. I have personally smashed two airplanes because of high-speed stalls. In both cases I was doing looping maneuvers too close to the ground and basically ran out of room, aka, the figure 9. My Laser 200 stalled violently, rolled inverted and went right into the runway. Yes I needed a broom!!! That was the end result of an avalanche too close to the ground.

Think sunny skies and calm winds.

Scott Oleson



## MEETING MINUTES

ACRC Club meeting April 18, 2013

The meeting was small and short due to the late April snowstorm. Seven brave members were in attendance. The only business was to postpone the raffle for the month of April and use the prizes for the month of May.

### April Fun Fly Results

Name	1st Evnt	2nd Evnt	3rd Evnt	Total Pnts	Place	Pnts
Dan Thiede	6	1	4	11	1	25
Marc Davis	7	3	1	11	1	25
Andy Thunstrom	5	6	2	13	2	24
Bob Moser	2	7	5	14	3	23
Dale Anderson	10	2	3	15	4	22
Marc Tellevik	9	5	1	15	4	22
Paul Rono	1	8	7	16	5	21
Kris Westerbur	11	4	1	16	5	21
Stan Zdon	3	7	8	18	6	20
Jeff Flander	4	8	8	20	7	19
Chris Cone	8	8	6	22	8	18
Chris Elliot	11	9	7	27	9	17
Bud Durant	11	9	9	29	10	16

1<sup>st</sup> Event: Takeoff, three loops, three rolls with a touch and go. This was repeated 2 more times. The winner was the pilot with the fastest time.

2<sup>nd</sup> Event: A 15 second climb and glide at idle. Flyers then made a spot landing on the runway without powering up, closest to point wins.

3<sup>rd</sup> Event: An oldie but goody, Blackjack. Closest to 21 without going over wins. Cards were drawn on the runway; flyers performed a touch and go to select their cards. If a flyer missed a card on a pass they could not select another.

Marc Davis

## ACRC SAFETY

The 2013 flying season started with the fun fly that was held a couple weeks ago. By the time you read this the Spring Fly-In will have occurred. As I can't see into the future I can only talk about safety issues that I observed at the fun fly.

During the spot-landing contest it was noted that one of the judges was attempting to measure the landing marks while the contestant's airplane was still in the air. Although it is necessary to mark the spot immediately after touchdown it was not prudent to attempt to measure the distance from center until the pilot had landed and the runway was secure. I am sure that this judge was overly excited about the competition and completely forgot about safety etiquette and I promise never let it happen again.

I also noticed two events that could have combined to create a potentially dangerous situation. A lawn chair had been set up close to the center entrance to the runway. One of the pilots has, after starting his airplane, walked the airplane to the runway while crouching over and holding onto the tail of his airplane in what appeared to be an awkward and precarious position. Had the pilot tripped or lost his grip on the airplane and accidentally hit the throttle, this airplane, which was pointed directly at the person sitting in a lawn chair at that time, could have accelerated prop first at that person, resulted in a nasty mess. At the very least it could have damaged a very nice lawn chair. If it anytime you're moving your airplane to the runway and you can't do so without it pointing at someone else, ask for assistance. Someone will always be glad to help.

When we are at the field we need to make sure that we are aware of our own actions and the actions of those around us. Don't be afraid to let someone know about safety violations or potential dangers at the flying field. I can speak from first-hand experience that I was a little embarrassed when someone had told me to get off the runway, but I'd rather feel embarrassed than feel an airplane to the noggin.

Brett Ohnstad

## PROPELLER SAFETY

*From the Rouge Eagles R.C. Club, Medford, Oregon*

Respect and alertness are mandatory if you want to keep all your fingers. If you continually ignore safety, you or someone close to you will be injured eventually. By adopting good safety practices we can minimize risk and enjoy our wonderful sport for many years.

The most destructive type of propeller injury, aside from being struck by a flying aircraft, is when the engine is operating at or near full throttle. At full speed, a .40-size, two-stroke engine with an 11 x 6 propeller can generate as much power as a 10-inch table saw. Just as a table saw demands your respect and attention, so does an aircraft propeller.

Before you mount your propeller or even start your engine, you should take a moment to review some basic pre-flight recommendations for propeller safety.

### **General Propeller/Rotor Blade Inspection and Preparation:**

1. Look over for obvious nicks or gouges.
2. Flex it gently back and forth along its length and look for cracks.
3. If you find any damage, other than some minor scuffs at the tip, discard/destroy immediately.
4. Wood propellers cause less damage than composite propellers.
5. Remove the sharp edges from composite propellers using fine sandpaper. Just take off the edge. Do not alter airfoil.
6. Always use a balanced propeller. Vibration is the enemy.
7. Make sure the propeller arc is visible by painting the tips a contrasting color.

### **Ground Safety:**

1. Always have someone hold the airplane while starting.
2. Use some form of eye protection, like safety glasses.

3. After starting, move around behind the propeller to remove the glow plug igniter and to make other engine adjustments.

4. Never ever reach over a spinning propeller.

5. Be conscious of the propeller arc. Do not let spectators stand in line with, or in front of, the spinning propeller and don't you stand there any longer than necessary.

6. If starting by hand, use a thick glove or chicken stick.

7. Use an approved spinner or propeller hub.

8. Before starting, be sure the propeller is on tight. If the engine came with backup safety nuts, use them.

9. Have a first aid kit stocked and available.

It's easy to forget these safety items when at the field and some say it's just too much trouble. But safety is everyone's responsibility!

Contributed by Stan Zdon

## TIPS & TRICKS

How many times have you used the household iron and been jumped on for leaving sticky stuff on it? Have you used iron-on film and had the color pigment stick to the iron and bleed to another section leaving streaks and marks on the second color (red on white, for instance)?

Solution: Heat the iron, put some salt on any sheet of paper and rub the iron over the salt. PRESTO! Iron face back in pristine condition.

—*From the Tingalpa Transmitter in Australia*



## NAME THE PLANE



# How is a Good Preflight Check Performed?

by Bill Cummings

from the East Valley Aviators, Apache Junction, Arizona

You might think this is a simple thing to do, but each time I'm at the field, I see mishaps that could have been avoided if the pilot would have only taken the time to make some routine checks. A good preflight check should start before your airplane is assembled. You should go through a meticulous check of all parts of the airplane before assembly, because some very important things cannot be accessed afterwards. Start at the front of the airplane and proceed to the rear.

1. Propeller/Spinner - Check the spinner for cracks, especially around the screw holes. A cracked spinner could come apart when the engine is started and injure you or someone standing close by. Also check the propeller for cracks and nicks. Propellers take a beating. A damaged propeller can be very dangerous if the blades come off at speed.

2. Throttle linkage - Check to make sure that the screws are secure and the pushrod (or cable) is firmly attached and not damaged.

3. Engine mount bolts - Make sure all bolts are present (obvious) and they are tight. Do not forget to check the bolts that hold the motor mount to the firewall!

4. Muffler - Check to make sure the muffler bolts are tight. Also check that the tailpiece is tight and will not rotate.

5. Firewall - Grasp the airplane by the propeller and fuselage, and rock back and forth to make sure the firewall is not loose.

6. Landing gear - Check the wheel collars and axles to make sure they are tight. Spin the wheels to make sure they rotate freely. If you have wheel pants, check that they are secure and tight. Check the landing gear attachment bolts to make sure they are tight.

7. Servos/Linkages - With the wing off (or through an access cover) check each servo to make sure the attachment screws are in place and tight. Check each control-rod linkage to make sure it is firmly attached and bolts, screws, and connectors are tight. While in this area, check any wire connections you have access to such as battery, switch, etc. You should also check wing-attachment points to make sure they are solid and tight.

8. Check the batteries with a load test-type checker. The batteries must remain in the safe zone even under load. If they do not, recharge before you fly. Make sure the load test meter is the proper type for the kind and number of cells you are testing. If you have mixed batteries in your airplane (for example a Lithium Ion on the receiver and NiMH on the ignition) it is a good idea to put a note on the charge jack as to type and size as a reminder for both charging and testing.

9. Horizontal stabilizer - Grasp and pull on the stabilizer to make sure it is attached solidly. Pull on the elevator (both halves) to make sure the hinges are tight. Check the control horn and the control rod to make sure they are attached solidly. Also check that you have a "safety device" (i.e.. piece of fuel line) to make sure the linkage cannot come loose from the control horn. If you use flying wires, check to make sure they are tight.

10. Vertical stabilizer - Grasp and pull on the fin to make sure it is attached securely. Pull on the rudder to make sure the hinges are tight. Check the control horn and the control rod to make sure they are attached solidly. Also check that you have a "safety device" (i.e.. piece of fuel line) to make sure the linkage cannot come loose from the control horn.

11. Antenna - If your antenna is accessible, check it for nicks or breaks.

12. Wing - Check the wing for obvious damage such as tears in the covering, broken ribs, etc. Grasp and pull on each aileron and flap to make sure the hinges are tight. Check each control horn to make sure they are tight and the control rods are attached solidly.

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Make sure you have a "safety device" (fuel line) on each clevis to ensure they cannot come loose during flight. Check wing bolts or any other means used to attach the wing. Now attach the wing, and check to make sure the bolts have the correct torque to hold the wing solidly.

13. Check controls - Once the wing is in place, turn on the radio and, with the antenna collapsed, check all controls for ease of movement and correct direction of travel.

14. If this will be the first flight on the airplane, verify that the Center of Gravity (CG) is within the safe range. If you are unaware of what that range is, it is usually safe to test fly at 25% of the chord of the wing from the leading edge. That should leave the airplane a little nose heavy, which is a safe way to test fly. Remember: A nose-heavy airplane flies poorly - A tail-heavy airplane flies ONCE!

15. Range check, engine off -With the antenna still collapsed, walk about 60 to 80 feet away while moving the controls. There should be no interruption or chattering from the servos. It is helpful to have someone stand near the airplane to listen for chattering.

16. Range check, engine running -**MAKE SURE YOUR AIRPLANE IS RESTRAINED BEFORE STARTING THE ENGINE!** Start the engine, and with it running and the antenna collapsed, walk around the airplane checking controls. This should be done at idle and at full throttle.

I know some of you will look at this list and say, "If I do all that before each day of flying, I will not have time to fly!" In fact, if you make this checklist a part of your "routine" every time you put an airplane together, after a while you will find it will only take a few minutes to complete.



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

## EVENT CALENDAR

- May 11-18 Joe Nall Fly-In
- May 11 ACRC Spring Fly-in-10am
- May 18 TCRC Float Fly @ Bush Lake - 11am
- May 18 3DRC- Ice Breaker (heli and airplane)
- May 18 Hobby Warehouse Swap Meet 8am
- May 18 ACRC Funfly - 10am start
- May 19 Big Sky Swap Meet 8-12am
- May 25 CPA Pattern Contest (at St Paul RC)
- May 24-27 North Country Model Controllers Spring Fun Fly (NCMCRC.com) - Landing Fee \$20
- May 28 SMMAC Memorial Day Fly In
- June 1 Grassfield E-Fly-10am-3pm
- June 1 ACRC Fun Scale Contest 10am - ?
- June 1-2 Blaine Aviation Weekend (Jane's Field)
- June 8 Northwest RC Scale Heli Fly 9-10 am start, \$12 Landing Fee
- June 14-16 XFC @ AMA National Flying Site - Muncie, Indiana
- June 15 SPRC Scale Fly -10am-5pm
- June 15 TCRC Electric Fly & Campout
- June 15 Sodbusters Float Fly
- June 22 ACRC Fun Fly - 10am start
- June 22 Grassfield Heli Fly 9am-2pm
- June 28-30 MARCEE 3M E-fly
- June 29 ACRC Warbird Fly-10am
- June 29-30 North Country Model Controllers Collective Madness (NCMCRC.com) - \$20 Fee
- July 11-14 SLED WORKS Aerotow ORMC Field
- July 13 ACRC Pattern Contest
- July 13 SPRC Frankfurter Fly
- July 20 ACRC Fun Fly - 10am start
- July 20 Sodbusters Float Fly
- July 20 TCRC Big Bird Invitational Fly-In
- July 24 ACRC Float Fly
- July 27 SPRC Heli Fly 10am-5pm(?)
- July 31 IRCHA Heli Jamboree- Muncie, Indiana

# R/C Airplanes - Having Fun and Keeping It Safe

## Things Not to do when flying RC airplanes.

To help keep you safe and get the most fun out of flying RC airplanes, here is a short list of things NOT to do before you take to the air:

Don't buy a nitro jet RC airplane that looks great, flies super-fast and needs flight skills you don't yet have. You'll get there, but it's not a good place to start. At best, you'll probably crash and maybe total your plane first time out; at worst, you'll damage someone's property or hurt yourself or another person.

Don't think when it says Ready to Fly (RTF) on the box that it means you're ready to fly without training or instruction (and I don't mean skimming through the owner's manual). RTF just means the plane needs little or no assembly but before you're ready, you need to put in a few hours with an experienced flier and/or spend time on a flight simulator.

Don't ever fly RC airplanes without going through the pre-flight checklist. This is really important and applies to your first and every other flight. Make sure your plane is properly balanced, there are no loose nuts or bolts and all connections are secure. See that batteries are fully charged and your transmitter antenna is extended all the way (unless you're using a 2.4 radio transmitter). Check control surfaces to see that they are moving properly.

Don't fail to check your radio range. This is done to determine that you can fly within the plane's normal range without losing radio signal. This is also very important - if you do go out of range, it's almost certainly coming down and coming down hard. Instructions for performing range checks are found in your manual.

Don't guess that you've done the pre-flight check properly, make absolutely certain. If you have any questions or doubts, ask for help. It's perfectly OK to ask someone to do this with you the first

few times or to check behind. In fact it's the smart thing to do, so ask for assistance. The number 1 rule for flying RC airplanes is "don't be sorry later--err now on the side of safety."

*Article content from: Joe W Bennett*

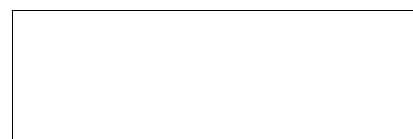
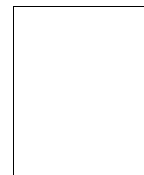
## SIMPLE TIPS TO KEEP YOU SAFE

- Treat every propeller as if it may turn at any moment.
- Treat every propeller as if it will fail structurally at any moment. Keep all body parts clear of the propeller arc at all times.
- Remove the propeller from the motor whenever you are doing ESC/motor setup, testing and programming.
- Properly secure your electric aircraft before you attach any power source; remember, it may start at any moment.
- Be sure to properly secure your model with a tie-down or have a helper hold it before you start its engine or motor.
- Between hand-props, give glow and gas airplanes a firm tug to ensure that the tie-down is holding them securely. One of my friends lost a few fingers when his model jumped forwards after starting with a loose tie-down rope.
- When tuning your engine, you must stay clear of the propeller arc. Preferably, tune the needles with the engine shut down.
- If it's available on your transmitter, use a throttle lock or a throttle kill function to avoid an unplanned application of throttle until you're ready to fly. I use this function religiously— but I never trust that it is activated! Check!
- Always tell spectators not to touch or move your model's propeller.
- Never, ever reuse a damaged propeller. The cost of an injury far outweighs the cost of a new propeller, even if it takes a quick drive to the hobby shop.
- Keep a first aid kit in your workshop and in your car.

*By Scott Stoops/FlyRC*

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*Deadline for the  
next newsletter is:  
June 1, 2013*

## CALENDAR OF UPCOMING EVENTS

Thursday – May 16

- ACRC Meeting

Saturday – May 18

- ACRC Fun Fly

Saturday – June 1

- ACRC Fun Scale Contest

Thursday – June 20

- ACRC Meeting

