



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

# SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

FEBRUARY 2012

**THE MEETING WILL BE THURSDAY, FEBRUARY 16, AT RIVERWIND!!**

## PRESIDENT'S CHATTER

Greetings. Good news, our beloved membership/fun fly/competition grandpa is out of the hospital. Excellent; we'll be looking forward to a fresh Grandpa to put the new event coordinator through the paces. We had two freeze flies. January first and the sixth. One crazy flier kept the tradition and flew in thirty plus mph winds. The second time was blessed with a nice balmy forty five to fifty degree day, with lots of people in attendance. February has a couple nice events, the TCRC auction, and the Duluth auction. I personally have not been to the TCRC auction but I hear it is a great time. I have been to Duluth. It's a little ways away but a nice day trip and there are some pretty cheap items. With that being said hope to see some club members at these events.

Andy Thunstrom

## ACRC COMBAT

Not a whole heck of a lot to talk about. Some of the boys are getting their 25s ready for the new season. It should be interesting. I am also making one combat day for a Friday. That day is Friday, June 15; camp out to follow. Time - 25s, 6:30 PM, 15s follow. I need to have some ideas for a trophy this year for points leader. If you have any ideas post them on the forum. That is all I have for this month, happy building spare parts.

Andy Thunstrom

## Improving Poorly Controlled, Dangerous Takeoffs

By Jim Devine

How often have you seen an airplane that is taking off veer toward the pilot stations? Usually the pilot gives the engine more gas and, using the ailerons, yanks the airplane back to the right. Occasionally, the airplane continues to the left, clears the safety barriers, and heads for the people in the pits and the cars just beyond.

If you have poorly controlled, potentially dangerous takeoffs, try practicing control of your aircraft on the runway. First, check the wheels and make sure they have a little toe-in. Also, the wheels should not continue to spin when given a flick. To create friction and avoid free-wheeling, slip a 3/16-inch long piece of fuel line on the axle and push the retainer collar in tight. With proper adjustment, the wheels will turn only if you push them with your finger. This braking action allows for a high idle speed without the airplane moving, which reduces the chance of the engine dying when the idle is too low. This also helps stop an airplane that might otherwise roll off the end of a runway during landing.

Choose a day when the wind is light and the runway isn't being used. Practice taxiing back and forth the length of the runway, using the rudder for control. Stay within a few feet of the yellow center line. When you have mastered taxiing at slow speed, click the throttle up another notch or two and keep practicing.

Continued on Page 4

# MEETING MINUTES

Meeting called to order at 7:00 pm  
 19 members present

**Board Reports:**

**President:**

Andy gave us an update on Stan. We are all very happy to hear he is doing well. Andy said that Stan would be processing membership applications. There will be no late fee applied until after the February meeting. Please send all applications and dues to Stan's house; the address is on the application.

**Safety:**

Tombstone Parent said that the freeze fly was great and there were no safety concerns. He also said that indoor flying has gotten a lot better after dealing with the safety issues we had there.

**Events:**

John told us the freeze fly was postponed one week due to bad weather conditions. He apologized for the confusion and said any future issues like that will be emailed to everyone. The freeze fly turned out to be a great day and we had 25 pilots attend. The club has no upcoming events. John did say there are some upcoming swap meets:

- 1/28/2012 MARCEE swap meet
- 2/11/2012 TCRC Auction at Crosspoint Church. \$3 admission - planes only
- 2/25/2012 Duluth/Superior Auction

**New Business:**

Andy is having a get together for wing cutting at his place Saturday 2/4/12. He will also be making a new starting stand for combat planes.

**Show and Tell:**

Don McGillivray brought his 1928 Curtiss Robin. It is made out of 2mm foam from 3 view plans. Wing was from a Piper Cub; the tips were cut to make it more scale to a Robin. It weighs in at 6.8 ounces and has 114 sq in of wing. Don is using a 4-channel spectrum radio and GWS wheels.

Darren Bittzer brought 2 foam planes he made from kits. Both kits are from Dynamicfoamy.com. The first is a hellcat that cost \$15.00; the second was a Yak 55 that cost \$39.00. All the electronics in these planes were taken out of E-flite Cubs. Darren said both planes fly great.

**Raffle:**

- 1st Ray Jelinek Hangar 9 Twist 40
- 2nd John Sager 30 min epoxy
- 3rd Mike Dorff 5 min epoxy

Doug Jelinek

# ACRC EVENTS

Hi All! We have set the dates for the 2012 events. It will soon be updated on the website. There were no events since the last meeting but indoor flying continues every Saturday night at the NSC. \$10 to fly and AMA card required.

John Sager

**ACRC 2012 Events**

Combat	April 15
Fun Fly	April 21
Combat	May 6
May Fly In	May 19
Fun Fly	May 20
Pattern	June 2
Combat	June 15 - 6:30PM with campout and bonfire to follow
Fun Fly	June 23
Warbird	June 30
Fun Scale	July 7
Combat	July 15
Float Fly	July 18
Fun Fly	July 21
Combat	August 5
Fun Fly	August 18
Scale Fly In	August 25
Combat	September 9
Fun Fly	September 22
Fall Fly Out	October 6
Combat	October 14
Fun Fly	October 20
Electric Fly	To be determined

## MEMBERSHIP NEWS

**IT'S GETTING CLOSER TO SUMMER. LET'S GET THOSE NEW PLANES BUILT !!!!!!!!!!!!!**

About 50% of last year's members have rejoined for 2012. This is a little less than last year at this time when it was about 60%. If any of your friends have not rejoined, please encourage them to do so ASAP. The 2012 budget is based on a projected membership of 100 fully paid members. If we drop much below that number we will have to cut services somewhere.

Last year at this time ACRC approved a change to Rule 10 to allow high speed passes over the runway. Some restrictions were part of that change. The new version of Rule 10 and the related wording from the ACRC Flying Site Courtesy are reprinted below so that all members are aware of this change.

### Revised Rule 10

10. When student pilots are receiving instruction all high-speed passes and aerobatics maneuvers shall be done in the vicinity of the ditch east of the runway or to the east of that ditch. (08/19/04). (See ACRC FLYING SITE COURTESY, #2, for more information.)

### ACRC FLYING SITE COURTESY

2.)The airspace over the runway is normally restricted to Take-offs, Landings, Touch and Goes, and landing pattern practice; with high-speed passes, aerobatics and hovering\* done east of the runway. High-speed passes, aerobatics and hovering\* can be done over the runway in certain instances such as:

- a.) Only 1 aircraft is in the air.
- b.) At Fun Flies.
- c.) For flight demonstrations at ACRC events.
- d.) With prior agreement of all the on the pilots on the flight line.
- e.) For any other instances pre-approved by the ACRC Board.

\*Helicopter hovering practice is to be done in the southwest corner of the parking lot.

If you have any pictures that could be used in the newsletter send them to me. If they are digital, email them to szdon@yahoo.com. If they are prints mail them to me and I will scan them and return them to you. If you come across any articles on the Internet that could be use in the newsletter send me the link and I will download them and use them.

The TCRC auction will be on Saturday, February 11, at Cross Point Church on 98th and Bloomington. Registration starts at 8:00AM and the auction starts at 10:00AM. Go to the TCRC website for more information:

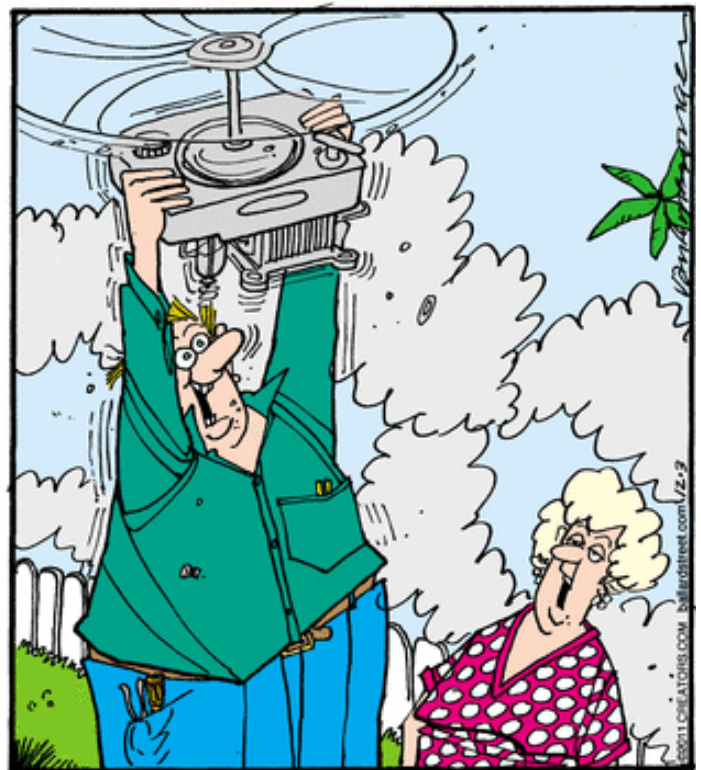
[http://www.tcrconline.com/pages/auction\\_seller\\_registration.htm](http://www.tcrconline.com/pages/auction_seller_registration.htm)

Sky Hobbies and Hobby Warehouse will be at both events to take your hard earned money.

The next meeting will be at Riverwind on February 16 at 7:00 PM.

Stan Zdon

### Ballard Street by Jerry Von Amerongen



Yes, you're hovering nicely Paul, now what?



*Takeoffs - From Page 1*

With enough practice and a slow, smooth application of power, you can approach takeoff speed while moving down the center of the runway. You also can practice aborting the flight by shutting off fuel when you're about to lose directional control of the airplane.

With this improved directional control and practice at aborting a poorly controlled airplane, your takeoffs will be much safer and a pleasure to watch. Q

## ACRC SAFETY

As the flying season draws closer it is time to start getting those new projects going or finished or just get all of your planes checked out for the upcoming season. Some of you are keeping your thumbs in shape by going to the indoor flying sessions; everyone who has been there knows how much fun controlled chaos can be. Just remember that even a little micro can still hurt if it hits you. I hope everyone stays safe while working on their new projects and while flying during the winter months.

Joe "TOMBSTONE" Parent

## Put Skis on Your Models

*by Bob Karasiewicz, Roxbury Model Airplane Club, Chester NJ*

You've probably noticed it's gotten pretty cold and unfriendly outside. That only means that it's time for the winter duds. Did you ever think how cool it would be to fly from the snow?

Get some skis, dress warmly, and go flying! I like the DuBro line of skis because they have a good torque rod set up to keep them at the proper angle to the airplane. The proper angle means the front of the skis is higher than the back with respect to the airplane fuselage. This means when you land, the skis won't dig in and flip the airplane.

There are other commercial skis out there so don't hesitate to use them. Look for a sturdy spring system to keep the skis at the proper angle. Also,

look for a reliable way to put the skis on the landing gear.

If there are several inches of snow, don't think dressing for cold weather will keep you warm for hours. Waterproof boots, double socks, and long underwear are needed. Hunters already know this. If your flying field has a heated shed, that is the best way to keep warm. You can run out and fly for 15 minutes, then run back inside to warm up. If you have floats, you'll find that flying off snow with them is easier than flying off water. Snow can be an abrasive, so if your floats are painted, using them on snow may require another coat of paint later. I wouldn't use molded fiberglass floats in the cold as the material gets brittle. Plastic floats work great, such as the ones made by GeeBee Products. Taking off and landing on snow is as easy (or as hard) as doing it on grass. And it is often much prettier.

Stan Zdon

## USEFUL WEBSITES

Ever get frustrated trying to figure out how many inches are in a 1,980mm wingspan? Or convert a 94.6 g/dm<sup>2</sup> wing loading to something you understand. Or, just how big is a 2.5 cubic inch engine? I'm used to seeing engine sizes in cubic centimeters (cc's)? Here are a couple web sites that I've found useful for converting measurements from metric to US. For most folks, [www.onlineconversion.com](http://www.onlineconversion.com) will have a simple conversion that will do the job and is pretty simple to use. If you're an engineering type person, you might like [www.engineersedge.com](http://www.engineersedge.com).

Ever wonder if there's a less expensive option to that expensive servo recommended by your airplane manufacturer?

Look at [www.servodatabase.com](http://www.servodatabase.com). I've found it quite useful in finding alternative servos. But be sure to research prices. Don't take their price as the gospel. There may be better deals if you're willing to do a little searching. And, sites like this may not have the latest new servos in their list.

Phil Vaughn

## PINNING HINGES

*Miramar Radio Control Flyers, San Diego, CA*

If you've ever had a control surface come loose in flight and lost an aircraft as a result, you've probably given serious consideration to pinning hinges for added security.

Sometimes you get away with a detached control surface, but when you have no elevator, or an aileron is partially pulled out at an angle, you can lose an aircraft quickly.

The most common hinge types used today are the nylon hinge and the flexible CA hinge that Sig markets as the "Easy Hinge." You'll also find metal hinges used in some of the Almost-Ready-to-Fly (ARF) airplanes. Nylon and metal hinges are normally glued into position using epoxy glue. To avoid epoxy from getting on the hinge joint, modelers sometimes coat it with Vaseline or oil.

The installation of nylon or metal hinges is a more time-consuming and tedious process than the installation of the Easy Hinge. The Easy Hinge is slipped into slots in the control surface and in the wing or tail structure after which CA is dripped on to the exposed portion of the hinge and wicked into both ends of the hinge by capillary action.

In order to provide assurance that control surfaces won't detach in flight, many modelers pin their hinges. There are two basic methods.

The first is the use of the classic, round toothpick. Using a  $\frac{3}{32}$  size drill, drill through the hinge on both the control surface side and wing or tail structure side. Install the toothpicks using epoxy or white (aliphatic) glue. When the glue sets, clip the toothpicks as close to the surface as possible and then sand the ends flush.

Because sanding is impractical when covering is already on the aircraft, you can carefully grind the toothpick ends flush using a Dremel tool. Cover or paint as appropriate. Note: Some articles recommend the use of CA glue. I don't use it because CA can set so quickly the toothpick may not be properly installed.

Another method for pinning hinges involves using two types of steel pins in combination. This method won't work well with metal hinges because of the difficulty of drilling through the metal with the larger pin used as a drill bit, but I have used it with nylon hinges and it is especially suited for the Easy Hinge. I've found using the steel pin method with Easy Hinges is the quickest and most secure method.

Here's how the steel pin method works. First, you need two types of pins; a box of "Tailor" pins and some modeler's T-Pins. You can get the Tailor pins from any store that carries sewing items. Modeler T-Pins can be found at your local hobby shop.

You may encounter some difficulty drilling through nylon hinges. Conversely, your T-Pin drill bit will go through the Easy Hinges like butter. Note: You might use a  $\frac{1}{16}$ -inch drill bit versus the T-Pin bit. The diameter is slightly bigger than the T-Pin shaft but it should work and may make the job easier when dealing with a regular nylon hinge, and especially a metal hinge.

Now that you've drilled your pin holes, it's time to install the Tailor pins. Since the shaft of a Tailor pin is thinner than the T-Pin, the Tailor pins fit easily into the drilled holes. Install them in the holes from the top down so the pin top will appear on the upper wing, tail, and control surface.

Leave roughly  $\frac{3}{8}$ -inch of the pins exposed. Mix up a batch of 30-minute epoxy. Dab some epoxy on the exposed portion of each pin and slide all the pin tops flush. Let the epoxy set. Then, clip off protruding pins on the underside of the wing, tail structure, and control surfaces (or one side of the vertical stabilizer).

This method is fast! When you get done, the tops of the Tailor pins will show but they are quite small and far neater in appearance than the toothpick method, particularly when used to pin the hinges of an ARF.



## ON THE SAFE SIDE

### It's an Attitude

by Jim Tiller, *On the Safe Side* Author

After my last column I received a few emails. In that column, I remarked how lucky I was to be surrounded by fliers who stressed safety, forgave the brief lapse that caused my recent injury, and came to my aid when I needed them. The response was that this attitude among my fellow fliers was important enough to warrant an entire column.

It is very important to surround yourself with the right kind of people in any enterprise. At the field, you should surround yourself with fliers who stress and practice safety. One gentleman, who sent an email, recounted a well-respected member of his group who was proactive on the flightline and was not afraid to step up and tell another flier if he was endangering himself or others. This is an admirable trait but his style probably would get little traction if the fliers, in general, did not put a high value on safe operation.

These are the kind of people you want in your group: those who not only "walk the walk," but "talk the talk." We all have lapses in memory or good judgment—this is how accidents happen.

Those kinds of safety-related suggestions should not be taken as criticism or as a reflection on you personally. Accept the help. None of us are perfect. We all need help at some time, as in Hilary Clinton's book titled "It Takes a Village."

You report the name of a safety officer for your club each year as your club renews its charter. Is that position in your club just another title or is it a dynamic club responsibility? The person who receives the nod for that job should be the type of person described in the previous paragraphs.

I am not saying the safety officer should be a tyrant or a policeman. That person should be a combination of a mentor, guidance counselor, and motivator. And it is the responsibility of all club members to respect that position and do their best to set a good example.

Safety in your club should not be an issue, it should be an attitude.

There are actually a couple of other issues here, so now to the second one. There is one other concern I'd like to express about the attitude toward safety among the members of your flying group.

There is a classic behavioral psychological study concerning the animal's adaptation to his environment. In this experiment, a test animal was placed on a wire screen and given a certain level of electrical jolt that would make it jump. That same test animal was then put in a cage where frequent small jolts of electricity were run through the cage volume. In the beginning the jolt was only enough to be noticed. In a relatively short time, the animal ignored the shocks altogether. Over time, the voltage was gradually increased to the point that the animal was routinely ignoring shocks that made it jump before the test began.

The same thing can happen in your flying group. Small infractions of the normal safety codes can often be ignored. "There are only a few of us here, so I guess it's okay," or "he's just learning, he can't control his plane very well." Wouldn't it be better to follow the rules regardless of the numbers present or give a hand to the new pilot who is struggling with control?

The lesson here is that, if you have the right attitude toward safety in your club, you would not ignore even the small things. You should try your best to correct them. That way, over time, you do not live in the world where the "constant shocks" are being ignored.

Once again, I am not suggesting a police state at your field, but rather an atmosphere of high expectations supplanted with a healthy dose of respect and understanding of those who fly with you.

Safety is an attitude. Maybe that message should be on a sign at your field.

And now to the last of these attitude issues. This one is designed to head off the emails I expect to get from this diatribe. What about the member of



*Continued on Next Page*

your group who simply won't listen to reason? We all know there are a few of those out there.

The answer is quite simple. You have to get rid of that person. He or she can infect the rest of the members in short order.

You should have a section in your bylaws that outlines the procedure used to get rid of a troublesome member. Review what you have written there and if you need help, there are documents and samples in the AMA document library you can use as a guideline.

Basically, the general rules are quite similar to those in the workplace. The offender should be informed of his actions and told what needs to be corrected. He should be given a reasonable time to correct his actions and, if no positive results are exhibited, he should be summarily removed.

## TIPS & TRICKS

### Hinge Installation is Critical

If you are working with an almost-ready-to-fly (ARF) aircraft or are building from a kit or scratch, you will be installing hinges. This is a critical step in model construction. If the control surface binds or has too much of a gap, your baby is going to be a dog and you will have definite control problems.

There are two basic types of hinges: the "living" hinge that is installed using CA glue and the "pinned" hinge that is put in with epoxy. There are advantages and disadvantages to using either type. I have used the living hinge for several years and like the fact that it only takes a few drops of CA to set the hinges in the control surface; however, I have had these hinges break and always seem to get the CA all over the covering, no matter how careful I am. I also have glued the control surface to the wing and tail.

Recently, I went back to pinned hinges. These hinges move with much less resistance and are more durable. I cover the hinge pin with lip balm before installing it with 5-minute epoxy. When the

epoxy dries, the excess can easily be removed from around the hinge.

The Great Planes Slot Machine is a good investment, and it makes hinge installation much easier. Just hang on tight when you start it or you'll have a hinge slot where you probably don't want it.

Finally, after you have a control surface that moves easily and permits adequate throw, don't forget to seal the gap. It is amazing how much difference this will make in the performance of your aircraft. A roll of clear MonoKote will seal the control surfaces of all the aircraft you have. It also keeps the hinges secure and helps prevent control surface flutter.

—Jim Bronowsky, Mid-Missouri Radio Control Association, Columbia MI

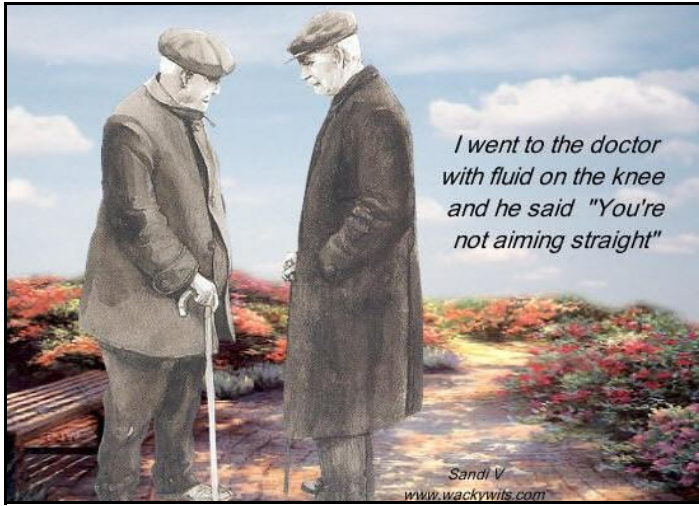


## 2012 FREEZE FLY



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*Deadline for the  
next newsletter is:  
March 1, 2012*

## CALENDAR OF UPCOMING EVENTS

Thursday – February 16

- ACRC Club Meeting

Thursday – March 15

- ACRC Club Meeting

Thursday – April 19

- ACRC Club Meeting

Saturday – April 21

- ACRC Fun Fly

