



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

# SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

OCTOBER 2010

***THE MEETING WILL BE THURSDAY, OCTOBER 21, AT RIVERWIND!!***

## PRESIDENT'S CHATTER

We have had great weather the past few weeks and the turnouts for most of our events this year have been big. Our Fall Fly Out was our biggest event yet. With well over 150 cars and over 200 people attending the event was a huge success. We would like to thank the many people helping in so many ways, it wouldn't have happened without everyone's help. If anyone has ideas to add to our 2011 events schedule please let us know. The Board would like to make next seasons event's bigger and better.

October's club meeting will bring the nominations for the open board positions, please consider volunteering your time and efforts to help our club. We will discuss the positions available in detail at the meeting on October 21.

We need to start thinking of a date to start getting the field ready for the winter months. Final maintenance is needed and the start-up benches have to be moved out of the low spots where ice and water settle. Taking down our sign at the entrance requires a few people and a truck to move it to the shelter.

Take advantage of the great weather while you can!

See you at the field

Erik Castrodale



## MEMBERSHIP NEWS

At the membership meeting in October ACRC will be taking nominations for board members for 2011/2012. Four positions will have to be filled. The two-year terms of Dan Thiede, Jake Groetsch, Joe Coleman and Stan Zdon are ending. Start thinking of who would be a good board member and come to the October meeting and nominate them. If you check with them first to see if they will accept the nomination it will make the process proceed more smoothly. You might even consider nominating yourself. ACRC needs members who are willing to help run the club. You cannot just wait for the next guy to do the work while you just fly. Ask not what ACRC can do for you, but rather what can you do for ACRC. Even you can be a FBM. (F----- Board Member) The election is in November and the new board takes over in December.

I have noticed that some members have problems with a couple of the rules. I am not saying that they are purposely breaking the rules, but we all have SENIOR MOMENTS from time to time, especially me. It's called CRS - Can't Remember Stuff. There are pilots doing full RPM run-ups in the pits (Rule 11) and pilots taxiing out with the plane not under some sort of control (Rule 12).

MAAC SWAP MEET – The MAAC swap meet will be January 22 at the B-Dale Club located at 2100 North Dale Street. This is 1/2 mile south of Hwy 36 on Dale. Buying or Selling, admission is \$5.00, no table fee.

*Continued on Next Page*

Weather permitting; the last fun-fly for 2010 will be on Saturday, October 23.

THE NEXT MEETING WILL BE AT RIVERWIND ON OCTOBER 21 AT 7:00 PM.

Stan Zdon

## COMBAT REPORT

What a fun round of combat for the weekend of the fly out. A big thank you is in order for the pilots who brought their planes on the fly out day for the demo. That round lasted along time, guessing about 8 minutes or more. That's a long session, but lots of fun. The final combat was the following day with a whopping 5 guys that decided to show up. I tell you the people that missed the last rounds lost out big with some outstanding rounds being flown. Most of the five flew all five minutes with some bumps and cuts. There were two pretty good mid airs. Dale Anderson decided to flex his muscles early on and cut up my tail feathers, and put me in the dirt for a pretty decent repair in the pit. The second mid air was also with Dale Anderson and me. I think I came out a loser on that one too, as pretty much half my aileron was gone and Dale ended up with minor wing damage. Other than that, competition was pretty stiff.

The total points winner for the year is Andy Noll, with pretty consistent flying and staying away from trouble, to earn that title. Congratulations goes to Andy, which also got him a gift certificate for King Kong Hobbies, for season points leader. Andy Thunstrom won the Big prize in the championship round, which was a new Battle Axe plane. I tell you what folks it was all luck for me. These guys are tough to fly with because of their persistence and ability to make utter chaos in the air. Marc Davis had the most points in this round until the last minute when he ran out of sky and flew into the ditch. If it wasn't for that mishap he would have had it. The guys flying combat gave a huge compliment to Dale Anderson for being the most improved flyer of the bunch. He started a little on the questionable side to being a guy who can mix it up with the best of us. Good Job Dale, hope you can play next year.

One last thing, a special thank you to our judge, Roger Jeffery for every thing that you helped with, it is greatly appreciated. A big thank you goes out to the folks who showed up to help throw our fuel soaked beaters in the air time after time. That is it for this month. Great season guys!

Andy Thunstrom

## The Club Corner

*by Jim Wallen, AMA Insider Club Editor*

How involved are you in your local club? Perhaps you just want to pay your dues and go fly your planes when you want. Maybe you volunteer to cut the weeds on a tidy-up day at the field but you don't want to do much more. Maybe you seldom go to a club meeting or perhaps you make it a point to attend all of them.

Have you ever submitted an article for your club newsletter? Do you go to some of the club social functions? Have you ever cornered your club field marshal to share with him or her some ideas you would like to see implemented? Do you show up for your training night at the field to help out? Keep in mind that all skill levels can find a role to help out with the new guys and kids!

Have you ever had the urge to put together a fund-raiser for the club? Can you find a way to show up early for club meetings and help with setting up refreshments? Have you ever thought about setting up a Valentine Day Fun-Fly to get some of the ladies involved? Did you ever think about becoming a club officer?

You get the point. The list goes on and on. You will find that the clubs that have more people involved tend to prosper and those that don't tend to stagnate and even fail. We all know that 10% of the members do 90% of the work. It doesn't have to be that way!

If you are in any sort of leadership role in your club, think about ways to motivate some folks and change that ratio. Things do not just happen by themselves. It takes you to initiate change. Take that first step and watch how your club benefits.

## Meeting Minutes

Meeting called to order at 7 P.M.

23 members present. New Members: 3

### Board Reports:

**Vice President:** Dan Thiede reviewed the raffle prizes for the evening, which included a Great Planes RV4 kit and various field items.

**Safety:** Joe Coleman reports that things have been going well. No safety issues.

**Membership:** Stan Zdon tells us that the club now has 111 members.

**Events:** Marc Davis gave us a report on the Scale Fly In that was very well attended and an overall big success this year. Marc also reviewed the Fun Fly standings to date.

**Treasurer:** Jake Groetsch reviewed the club finances and informed us that we are ahead of last year.

### Old Business:

Discussion of the Fall Fly Out arrangements. Northwood Hardwoods is sponsoring the pig roast. We were encouraged to arrive early and that there would be a pilots meeting before things got underway.

### New business:

Roger Jeffrey asked the club to show their appreciation for all the work done by Amy Thiede this year. Thank you Amy!!

Tim Karash discussed the issue of the safety fence and suggested that we consider a change in the future to improve protection to the pilots.

Saturday, October 9 King Kong Hobby will have a club appreciation sale from 8 AM – 10 AM.

Chris Cone repaired the weather vane for the club. Thank you Chris!

Members were reminded that there would be a field clean up prior to the Fall Fly Out. Look for an e-mail with the details.

### Show and Tell:

Stan Zdon brought in his recently completed Klemm KL-35. This is a pre World War II trainer. The model has a wingspan of 84" and is covered in 21st



Century fabric. The wing is orange and the fuselage is black. Stan had some beautiful custom graphics made and he described how they were applied. The model weighs in at 10 3/4 lbs. and is powered by an OS Surpass 91. This is a beautiful 1/5th scale model!

### Raffle:

1st	Bob Nagel	Great Planes RV4 kit.
2nd	Darren Bitzer	Battery checker
3rd	Eric Castrodale	Allen wrench set
4th	Chris Elliot	Parts box
5th	Steve Ulrich	Prop
6th	Stan Zdon	Epoxy
7th	Darren Bitzer	Center finder jig
8th	Chris Elliot	Fuel pump
9th	Phil Vaughn	Parts box
10th	Jim Taylor	Prop

Steve Ulrich

## FLIGHT TRAINING

This year has been fairly steady with new members and training. As the season slowly comes to a close we have a couple trainees squeezing in some last minuet flights. We also have a couple new solo pilots to announce. They are Andy LaBine, Larry Small and Joe Parent. Congratulations on the big accomplishment. Also as the season comes to a close anybody with club buddy boxes please call me so I can get them back. Once again, thank you to the people who helped with training this year, it was greatly appreciated. That is it for this month.

Andy Thunstrom

## ACRC EVENTS

It feels like just a few weeks ago we were gathering at the Spring Fly-In to open the flying season. It's hard to believe that there is only one official club event left for the ACRC 2010 flying season. This was my first year as an event coordinator and I had a lot of fun doing it. I would like to take this opportunity to thank all those who have in putting on the events throughout the year. There are a few club members that I personally owe a debt of gratitude to for all their help. Rodger Jeffery has to be at the top of that list, Rodger has been there and helped put on almost every fun-fly, combat and club sanctioned event. The season fun-fly winner has enjoyed taking home the Fun-Fly trophy with their name on it, all thanks to Rodger. If you have been to an event with food there is a good chance you can thank Amy and Dan Thiede. For the last few years they have been kind enough to organize and store all of the items that we use at the cookouts. There are many more club members that help with the events and although I did not name each and everyone thank you very much for all you have done.

The Fall Fly-Out is behind us and it was a great success. I have only been a member of ACRC for 4 years and it was the biggest event that I have seen at ACRC and from what I'm told it was the biggest event that ACRC has ever done. I really think that WE put on an event that our club can be proud of. While I didn't count I think we had more guest flyers then we had ACRC members and all appeared to have a good time. There were so many guest that I'm told we almost ran out of parking. Everyone that was there pitched in to help from parking cars, running the flight line, and organizing and serving all of the people. Thanks to everyone who brought an item for lunch. Special thanks goes to Troy for coming out to the field at 2:00 AM to cook the pig, and Jake Groetsch and his company for donating the pig. We also received a very special gift from Kris Westerbur's mother who made a donation for a new sound system! We will be looking for volunteers next year to run the sound system.

## September Fun Fly

One more month left and the race to the end is very tight. Last month Phil Vaughn and Dan Thiede stole the lead away from Kevin Carlson.

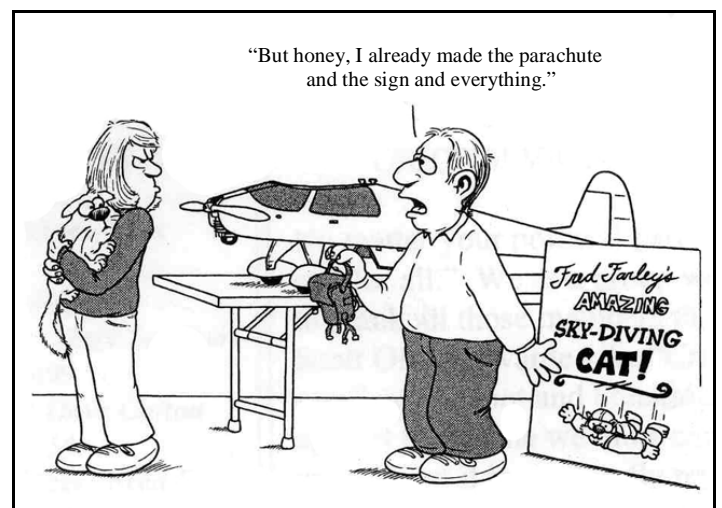
The first event was a 30-second climb followed by a glide at idle. The flyer with the longest time wins. A Bonus 5 seconds was given for each 360-degree circle. Dan Thiede won this event with his Something Extra with a time of 5 minutes and 2 seconds.

Continuing with the 30-second climb theme the second event consisted of a 30-second climb followed by the flyer attempting the most number of spins before throttling back up. No flat spins were allowed. Stan Zdon crushed the group with a whopping 41 spins after the 30-second climb.

For the third event the group wanted to play blackjack again. The runway was divided up into 10-foot sections that represented 2 through Ace. Flyers built their hand by performing a touch and go, where their plane first touched was the card they received for that pass. Fliers could make as many passes as they wished until they either busted or made a pass without touching. We have some good flyers in our club as 4 fliers made a 21.

The overall winner of this month's fun-fly was Paul Castrodale! Congratulations Paul.

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October 23 is the final fun-fly and it should be a good one as the race for the season fun-fly trophy is very close between Phil, Dan, Kevin and Stan. Come on out and watch as these four battle it out for the 1st-ever ACRC Fun-Fly Championship!

Marc Davis

# FUN FLY RESULTS

Name	Place 1st Event	Place 2nd Event	Place 3rd Event	Place Final	Points
Kevin Carlson	6	5	7	7	19
Phil Vaughn	4	5	1	4	22
Dan Thiede	1	3	5	3	23
Stan Zdon	12	1	1	5	21
Marc Davis	9	7	2	7	19
Chris Cone	5	7	4	6	20
Doug Jelinek	10	9	3	9	17
Paul Rono	2	4	1	2	24
Paul Castrodale	3	2	1	1	25
Kris Westerbur	7	9	7	10	16
Lee Cravens	8	6	6	8	18
Dale Anderson	11	8	6	11	15
Andy Thunstrom	12	9	7	12	14
Steve Ulrich	12	9	7	12	14

# Fun Fly Standings

Name	Sept.	Total Points	Current Standing
Phil Vaughn	22	136	1
Dan Thiede	23	135	2
Kevin Carlson	19	133	3
Stan Zdon	21	129	4
Paul Castrodale	25	120	5
Marc Davis	19	118	6
Dale Anderson	15	101	7
Doug Jelinek	17	101	7
Andy Noll	0	100	8
Paul Rono	24	90	9
Jeff Flander	0	83	10
Steve Ulrich	14	76	11
Dave Boll	0	71	12
Andy Thunstrom	14	65	13
Ray Jelinek	0	63	14
Bob Nagle	0	54	15
Chris Cone	20	54	15
Dave Dentz	0	52	16
Eric Malkerson	0	41	17
Lee Cravens	18	38	18
Darren Bitzer	0	16	19
Kris Westerbur	16	16	19
Jason Proffit	0	14	20
Ken Dinkel	0	13	21
Mike Dorff	0	11	22



### REAGAN QUOTE

“The most terrifying words in the English language are: I’m from the government and I’m here to help.”

## ON THE SAFE SIDE

# Airplanes for Flying in Windy Weather

*From the A.M.A Insider*

*By Ivan Cankov*

All too often, on an otherwise nice but windy day, folks just don't fly. Obviously, for a beginner, that's common sense - but for someone who has some experience, the wind can be a challenge that adds some spice to flying.

While it's easy to see that experience level has a lot to do with how much wind is too much, it may not be quite as apparent that the type of model you're flying also can have a great effect on your ability to handle winds. Let's go through some airplane design features to see which ones give us the best flying characteristics to handle winds and the resulting turbulence:

**Size:** In general, the larger the airplane, the better it will handle winds of all kinds; large models don't "flop around" as much!

**Dihedral:** The more dihedral in a model's wings, the more they are going to be affected by crosswind gusts; it is hard to keep the wings level, therefore lineup to the runway is difficult in a crosswind situation.

**Wing Loading:** The higher the wing loading, the less an airplane will be affected when hit with a gust.

**Aspect Ratio:** Lower aspect ratio (stubby) wings will be less bothered by gusts; there is less leverage for side forces to upset the airplane, and lower aspect ratio wings have a greater tolerance to changes in angle of attack caused by gusts.

**Power:** Having the power to overcome the force of wind is necessary. The same thing goes when you get into a sticky situation.

**Lateral Control:** Ailerons are beneficial in crosswind landings and takeoffs. The ability to dip a wing into a crosswind without changing heading is essential, as is the ability to rudder the airplane parallel to the runway heading while keeping wings level with ailerons while landing.

**Landing Gear:** Models with tricycle landing gear are easier to land and take off in a crosswind than tail draggers; in addition, the wider the spread on the main gear, the better.

**Maneuverability:** This one is a bit harder to quantify. You want a model with stability, yet you do need good maneuverability to cope with gusts. Therefore, you want a model that is stable, yet responsive.

**Wing Mounting:** Generally, a low-wing airplane will handle crosswinds better. This is because the center of gravity of the airplane is nearer, in a vertical sense, to the aerodynamic center of the wing. Therefore, a side gust does not roll the model as easily. Moreover, by mounting the main landing gear on that low-wing model, they can be spread wider.

It's unfortunate that almost every preceding item is in direct opposition to the characteristics found in many popular trainers. The main exception is the requirement for tricycle landing gear. But even with trainers, there are differences. Compare a Seniorita with the Kadet Mk2. While the Seniorita may be a bit slower and a bit easier to fly, the Kadet, with its ailerons, higher wing loading, lower aspect ratio, and lower dihedral, is a far better airplane when flying in windy conditions. Going a step further with the same kit manufacturer, the Kougat(.40) / Kobra(.60) kits embody all the right characteristics for windy flying.

In closing, I offer Confucius' only known saying about RC flying: "To learn to fly in wind, one must fly in wind!"

Contributed by Stan Zdon



## Servos Arms

*From the Rocky Mountain Flying Machine,  
Albuquerque, New Mexico*

by Richard Lindberg

“Those pesky servos - why can't I ever find one that's properly centered? Every time I attach an arm, it seems as though the servo center shifts! What's going on here?”

Sound familiar? What causes this and what can you do about it?

All (standard-sized) servos today have splined shafts on which those servo arms are bolted. The problem arises because of the number of splines (teeth) on those shafts - Airtronics and JR use 23 splines, Hitec uses 24, and Futaba uses 25. Your radio may be different - grab a servo and count the splines on the shaft to find out. Use a magnifying glass! This is a really neat feature, and you should take advantage of it when you set up your airplane!

Put a servo arm on a servo. Now, every time you lift and rotate the arm by one spline, you change its position by a fixed number of degrees: for Airtronics or JR, this is  $15.65^\circ$ , for Futaba its  $14.4^\circ$ , and for Hitec it's an even  $15^\circ$ . The formula is simple:  $360^\circ$  divided by the number of splines. Now consider that your servo arms have an even number of fingers - two, four, even six. You can see by experimenting that rotating the servo arm and putting each finger as near as possible to where its predecessor was (about  $90^\circ$ , or  $180^\circ$ , or  $60^\circ$ ) will result in a shift in position of  $3.91^\circ$ ,  $3.6^\circ$  or  $3.75^\circ$  for Airtronics/JR, Futaba, and Hitec respectively. The formula is equally simple:  $360^\circ$  divided by (the product of the number of splines times the number of fingers). So, for Futaba, finger one is assumed at  $0^\circ$ , finger two (rotating clockwise) is placed at  $3.6^\circ$  offset, finger three at  $7.2^\circ$ , and finger four at  $10.8^\circ$ . (For Airtronics/JR, use multiples of  $3.91^\circ$ , and for Hitec use  $3.75^\circ$ .)

“Whoa, that's too complicated for me!” I hear you exclaiming. Don't worry about it - just keep rotating and pressing on the servo arm until you get a finger as close as possible to a  $90^\circ$  position.

One of those fingers will be right. (Actually, Futaba makes it simple - the fingers are numbered! Choose number one and you're there. JR has a raised dot in the lower right of its number one finger. It doesn't matter as much with Hitec, as there are even numbers of splines, and two of the fingers (out of four) will be right at any time.

Incidentally, the number of splines being different is the reason why servo arms are not interchangeable between servos of different brands - don't try to use Futaba arms on JR servos, etc.

This also clears up the apparent servo-centering shift. Most of the servos today have electronics that are so good that mechanical centering is a thing of the past and isn't necessary. If you in fact have a servo that won't center properly, or consistently, it's probably bad! Send it back for repairs!

## YOU'RE ADDICTED TO RC, WHEN...

*From the Sacramento Valley Soaring Society,  
Novato, California*

1. You read nothing but transmitter and model manuals in the bathroom.
2. You have converted a mobile home to have room for all your airplanes with just space enough to sleep.
3. Your R/C insurance costs more than your car's insurance.
4. You have something R/C within a radius of 5 feet from you at all times.
5. You've heard, “Hey that looks just like the airplane I tossed in the bin after crashing last week,” more than once at your flight field.
6. A full-scale airplane passes overhead and you move your thumbs to match its movements.
7. If you plan to go outside for any reason and it's windy, you go back inside again and find out when it's due to be calm next.
8. When the power steering goes, you tell the people at the garage to change the servo.

## Reach Out to Curious Observers

by Dave Mathewson, AMA President

We've all heard the saying "You only get one chance to make a good first impression." That holds true no matter if you're meeting someone in a causal setting for the first time, in a job interview, or maybe even when you're at the field getting in a couple of flights and a spectator or two stop by to watch.

Most all of us want our clubs to be active, viable, and thriving organizations. We want that new blood - and the enthusiasm that comes with it - found in new members. It's that enthusiasm that supplements and compliments what the more longtime members of the club bring to the table. For a club to reach its potential it takes the guidance of its experienced members coupled with the zeal and passion found in its newer members.

Many spectators who stop by the field already have an interest in model aviation. After all, they've taken the time to stop by to see what's going on. Sometimes all it takes to turn that spectator from an interested observer into a new modeler and member of your club is to simply take a few minutes to walk over and say hello. Chances are the spectator will have some questions about model aviation. And, since we all like to talk about our hobby, my bet is that you will enjoy the conversation.

Many of us have been in the hobby for so long it's hard to remember what it was like when we first decided we were interested in modeling. But I'll bet for many of us we got involved after visiting a local hobby shop and then taking a trip to the local field. And I'll also bet, for many of us, when we visited that field, we were befriended by one of the club's members and that's what really sparked our interest in becoming modelers. For many it was that first contact that resulted in a lifetime of enjoyment as modelers, and the friendships and camaraderie that resulted from belonging to a club.

The next time someone stops by your field to watch the action, why not take a moment to greet them? That one simple act may result in gaining a new member of the model aviation community, a new member of your club, and quite possibly a new friend. All of this is possible with just one simple act of outreach. You only get one chance to make a good first impression.



**Even the big boys scrape a wingtip every so often!**

## Argyle Sweater by Scott Hilburn



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



# 2010 ACRC FLY-OUT

PICTURES BY STAN ZDON



# 2010 ACRC FLY-OUT

PICTURES BY STAN ZDON



# SERVO CHATTER

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## ACRC SPONSORS

King Kong Hobbies  
Abraham Technical  
Aerospace welding  
Cambridge State Bank  
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*Deadline for the  
next newsletter is:  
November 1, 2010*

## CALENDAR OF UPCOMING EVENTS

Thursday – October 21

- ACRC Club Meeting

Saturday – October 23

- ACRC Fun Fly

Thursday – November 18

- ACRC Club Meeting

Thursday – December 16

- ACRC Club Meeting

