



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

NOVEMBER 2013

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

PRESIDENT'S CHATTER

Flying season is pretty much done for the short summer. The silver lining in all of this. You have time to work on kits for next year's events or work on a project you have been eyeballing. This has been a fantastic year as far as I'm concerned. There have been no really bad mishaps at the field or any other issues thanks to the members of ACRC. That is what it takes to be a good club. By the looks of it the election for November is going to be pretty simple. Virgil Okeson is the only change to the board and that will be verified this next meeting. Thanks to John Sager for his time and hard work as a board member; he was involved in training, helping with events and picking up goodies for the raffles. That is it for this month, see you at the meeting.

Andy Thunstrom

MEMBERSHIP NEWS

At the November meeting ACRC will be electing board members for 2014-2015. Four members are finishing their two-year term in December: John Sager, Andy Thunstrom, Phil Vaughn and Stan Zdon. Four members were nominated to run for the four available positions. They are Virgil Okeson, Andy Thunstrom, Phil Vaughn and Stan Zdon. If anyone else wishes to run for the board be sure to let a board member know. Now that nominations are over it will be safe to come to the November meeting.

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

Newsletter editors are always looking for interesting items to put in the newsletter. These can be articles that you have written or articles that you find on line. Pictures and hints are also welcome. Just email me the link and I can copy the information. My email address is szdon@yahoo.com.

There is an application included in this newsletter and there will also be one in the December newsletter. If you lose both of these you will have to pick one up at the meeting or send me a self-addressed stamped envelope. Members who read the newsletter on line can print the application and rules from the ACRC website. Remember, **ALL** current members have to fill out a 2014 application and have their year 2014 AMA verified before they can be issued a 2014 membership card. Dues for 2014 are \$50.00 and if you rejoin after January 31 there is a \$5.00 late fee. Please rejoin as soon as possible after you get your November Servo Chatter and your AMA card for 2014. It is easier to set the budget if the majority of the dues are in by mid-January.

REMEMBER - I need verification of your **2014** AMA. Sending a copy of your 2013 card will only delay the processing of your application. Please also include a stamped self-addressed envelope. It's not that the club cannot afford the stamps, but it makes it easier for me. I do membership for both ACRC and SPMRC. Thanks

THE NEXT MEETING WILL BE AT RIVERWIND ON NOVEMBER 21, AT 7:00 PM. Remember, if you don't come to the meeting you can't win wonderful prizes.

Continued on Next Page

It's not too long until the Freeze-Fly so put your skis on your plane and get ready for some winter flying.

Stan Zdon

FROM THE VEEP

As this will be my final submission as a ACRC board member I'd like to thank all the members of ACRC club for the opportunity to serve. It's been a lot of fun and a worthwhile experience. If you haven't ever thought about serving on the board I think you should really reconsider and try it in the future.

As winter approaches our outdoor flying opportunities become few and far between and many of us turn to our micro-planes and flying indoors. In years past, the National Sports Center in Blaine afforded us the opportunity to do just that but unfortunately the attendance dwindled and it's to financially difficult for the NSC to allow us to fly there anymore. Because we've been unable to schedule any significant time at the NSC I have been looking into alternative locations for indoor flying. To that end, I traveled down to the 10Dome on Saturday November 9 to check out the facilities and to do some indoor flying.

The 10Dome is located at 2465 Wayzata Blvd, Long Lake, MN 55356 which for me is a quick 30 minute drive south on 169 and west on 394 to 12 from my house in Blaine. There is a reasonable sized parking lot and for those of you who flew at the NSC you'll be glad to know it will only be flyers in the lot when we're there. No more searching for a close parking spot only to have to park behind the gym because of all the soccer people parked in the lot. The indoor dome facility is about 1.5 soccer fields in size and has a higher ceiling than the NSC. The one drawback I see is that the most of the domes interior surface is protected by a small mesh net and if you run into the net you may get stuck and be unable to retrieve your model. When I was there this weekend there was a quad-copter stuck nearly in the center of the ceiling of the dome. I was told it had been there for over a year. The only way to retrieve it would be to hire a scissors lift or, as the quad copter

owners opted for, wait for the dome to deflate for maintenance to retrieve it. Also when I was there it wasn't really heated so I kept my zip up hoodie on. It wasn't freezing but it wasn't 72 degrees either.

There is a small concrete tarmac on one side on which you can set up your chairs and work on your models. You can also use the surface as a runway. The rest is artificial turf much like the NSC. There are only a couple of outlets that you may need to share or bring enough charged batteries to last the night. It's a smaller location and if there's a crowd it may be difficult to fly as there is a healthy mix of micro and small lightweight foamies as well as helicopters and quads. As far as I know, they didn't really set a limit on the size of anything so just be aware of your airspace when you are flying.

Starting Friday November 15 and continuing all winter long, Control Freaks RC, the local Hobby Shop, will be sponsoring Friday Flydays there. Flying begins at 8:00 PM and goes till midnight or later. It's \$15 per session or you can buy a 10 pack for \$125 or a whole season pass for \$180.

I'd like to see if anyone else is interested in going down there to fly once or twice a month. I was thinking we could go as a group; maybe even car-pool one Friday a month. Possibly the day after our club meeting? I'm just throwing that out there for all you micro-flyers to think about and we can discuss it more at the meeting if anyone is interested.

The 10Dome isn't the only venue for indoor flying; MARCEE also has indoor flying at the Metrodome. Most of those dates are during the week but they do fly from 8:00 AM – 4:00 PM. If you are interested, check out MARCEE webpage for the full schedule and details on flying including where to park and aircraft size limits.

See you all at the meeting. Until then, calm winds and safe landings everyone!

John Sager



ACRC SAFETY

We have finished a very successful season of flying. There were no substantial injuries within our club to report and I noticed a lot of safe flying at the field. (I exclude however any combat sessions that I may have witnessed or even possibly taken part in off-site)

Kudos to the instructors who included safe flying techniques in the training of the new pilots, and a big thanks go out to anyone who saw safety issues and took the time to help the pilot make a correction or adjustment in order to promote safety.

We now enter the winter building and/or rebuilding season. Over the next few months I hope to cover several of the topics directly related to the modeling portion of our hobby as well as safety concerns to take when flying in the winter months.

As a side note I took my little souped-up Super Cub LP out and flew with the winter flakes coming down at a local ball field. Although it was only 4:30 PM it was getting rather dark and seeing that little white airplane against the dark sky amongst the flurries was getting a little difficult. Fortunately I had put some navigation and marker lights into the plane. I am now sold on the idea of trying to make use of some sort of lighting on my airplanes. I was looking more at the colored navigation lights rather than the airplane outline for guidance. That made it easier to relax and fly without fear of crashing because of loss of orientation even in poor visibility. I will still leave the nav lights off of the combat plane. At least for now anyway.

Brett Ohnstad

OCTOBER FUN FLY RESULTS

The first event was 5 timed touch and goes with change of direction in the air, do not break end of runway.

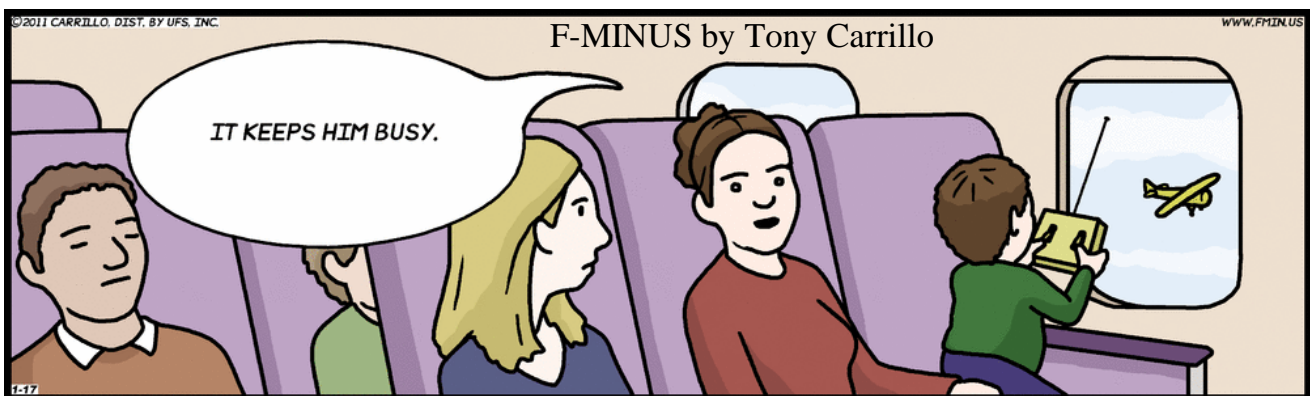
Second, was a cone placed about 4 feet past the numbers on the end of the southern end of the runway. Touch had to be made before the cone and a point was received, if you hit after the cone you lost a point, 5 passes allowed and only on runway counted.

Third, Loop & touch 5 times, timed wheels to wheels, do not need to break ends of the field, no other rules except must touch runway.

Name	1st	2nd	3rd	Ttl	Plc	Pnts
Paul Rono	1	1	1	3	1	25
Jeff Flander	2	2	2	6	2	24
Dan Thiede	4	2	3	9	3	23
Mark Tellevik	5	2	4	11	4	22
Andy Thunstrom	3	3	5	11	4	22
Chris Cone	6	2	5	13	5	21
Dale Anderson	6	3	7	16	6	20

It was another exciting year of good times for all those who attended the club fun fly events. we were missing some regulars this year but gained some new members; so all in all I think we enjoyed ourselves! I congratulate Speedy Thiede who takes rights to claim the ever-sought after trophy this year, and not too far behind was Jeff Flander who continues to push the limits of his fine Twist flying skills.

I thank you all for your sportsmanship and entertaining flying skills! I'm already looking forward to spring!



2013 FUN FLY RESULTS

Name	April	May	June	July	Aug	Sep	Oct	Total	Place
Dan Thiede	25	25	23	25	24	25	23	170	1
Jeff Flander	19	24	25	23	25	23	24	163	2
Mark Tellevik	22	18	22	20	20	19	22	143	3
Chris Cone	18	22	22	19	20	18	21	140	4
Marc Davis	25	20	23	22	23	22	0	135	5
Dale Anderson	22	18	19	18	16	18	20	131	6
Andy Thunstrom	24	21	18	0	22	21	22	128	7
Stan Zdon	20	23	21	21	19	17	0	121	8
Bob Moser	23	25	24	24	18	0	0	114	9
Paul Rono	21	0	20	0	0	24	25	90	10
Kris Westerbur	21	0	0	0	21	20	0	62	11
Chris Elliot	17	0	17	21	0	0	0	55	12
Christian Cone	0	19	23	0	0	0	0	42	13
John Sager	0	0	0	20	17	0	0	37	14
Kevin Barko	0	0	0	24	0	0	0	24	15
Dan Codner	0	0	0	19	0	0	0	19	16
Bob Nagle	0	0	0	17	0	0	0	17	17
Bud Durant	16	0	0	0	0	0	0	16	18

Eliminate the Bounce in Your Landings

Twin City Radio Controllers, Minneapolis MN

In order for a taildragger not to tip over on its nose, its wheels must be ahead of the center of gravity (CG). As it is further forward, it can tolerate rougher ground, but the tendency to bounce is worse. But when a taildragger lands, the impact of the main wheels tends to push the nose up, increasing the angle of attack, lowering the tail, and increasing the lift—and the airplane is flying again.

Eventually, air speed is reduced and it falls to the ground again, maybe harder. The nose rotates, and the airplane becomes airborne once again. This process will continue until all flyable airspeed is exhausted. The aircraft may continue bouncing because of a phenomenon known as “loping.”

Loping occurs in a taildragger when the bounce of the main wheels causes the tail wheel to slam into the ground while the main wheels are still in the

air. Then, the tail wheel bounces, slamming the main wheels onto the ground. This argument between the front and rear continues until momentum is lost. But the severity of the loping can increase in the interim.

Loping can occur in trike-geared aircraft as well. If the nose wheel strikes the ground before the main wheels do, the nose is pushed up severely, slamming the main wheels onto the runway. Being behind the CG, the rebound of the main wheels rotates the airplane forward so the nose wheel slams down again, maybe harder than the first time.

The process repeats. Loping in a trike airplane can start with taxiing. If the main wheel hits a bump, weight is shifted forward onto the nose gear. It rebounds, returning weight backward. This ping-ponging can grow, especially if the airplane is accelerating. The only way to stop it is to stop the airplane. The longer the distance between the main wheels and the nose wheel, the greater the tendency to lope. Loping also increases if the

Continued on Next Page

main wheels are too far aft of the CG. Stiff struts and bouncy wheels aggravate matters.

Trike gear have less potential for bounce because the main wheels can be placed closer to the CG. When the main wheels touch down, the impact lowers the nose and the angle of attack, reducing lift. Some trike-gear designs actually have negative angles of attack when sitting on all wheels. This holds the airplane on the runway. Trikes have more positive ground steering because the nose wheel makes firmer contact with the runway than a tail wheel, especially at higher speeds.

Another little-known cause of bounce is main wheels that are too far apart. This may be shocking because this practice is generally considered good for ground handling. It usually is because it improves directional stability when rolling along the ground. What happens when the airplane lands and one wheel hit the ground before the other? A lateral form of bounce occurs from one wing to the other.

One might think that soft tires and springy struts would increase bounce. Not so. More often, bounce is aggravated by the landing gear that is too stiff. Rigidity does not absorb energy; it reflects it. The hardness of the runway contributes to bounce for the same reason. Some early racing airplanes, such as the Howard Ike, had landing gear so rigid they could not land on concrete runways because of the uncontrollable bouncing that occurred.

Moving the main gear close to the CG reduces bounce and improves tracking. The Spitfire, for example, is quite bounce resistant, but it tips over easily on rough ground.

Moving the nose and main gears closer together reduces bounce and loping, but it degrades tracking and increases the tendency to tip over on rough ground and in crosswinds.

Oleo struts help absorb impacts, but the spring tension must be just right—stiff enough to keep from bottoming out, soft enough to absorb shock. The same may be said of tires.

If your airplane rebounds into the air after a severe impact, head off further bounce by inching up the throttle slightly. Apply down-elevator if necessary to level the nose. This increases air speed, prevents a stall, and lowers the rate of descent.

TIPS & TRICKS

Winter Spruce Ups

With the flying season at and end for a lot of folks, its time to think about other winter activities.

While you're planning your winter build, it's also a good time to go over your old machines and repair all those things that you swore that you'd get at right away back in July.

Some things to think about are:

- Repairing torn covering.
- Checking engine mounts for loose fasteners and firewalls.
- Have a plan to test and recycle your transmitter and receiver batteries once or twice.
- Stock up on propellers now while you have plenty of time to balance them.
- Clean gunk from that old engine.
- Redo the plumbing in your fuel tanks.
- Send in your transmitter or receiver for a checkup, either to the manufacturer or to a third-party vendor such as Radio South RC.

There are more things to think about, but this will give you a good start!

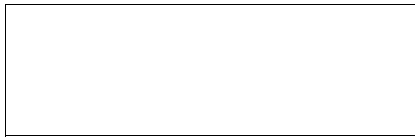
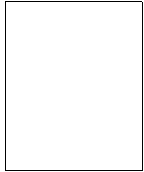
— *From the Wing Busters Model Airplane Club, Massachusetts*

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



SERVO CHATTER

902 - 88TH LANE NW
COON RAPIDS, MN 55433



ACRC BOARD MEMBERS

PRESIDENT

Andrew Thunstrom

president@anoka-rc.com

TREASURER

Phil Vaughn

treasurer@anoka-rc.com

VICE PRESIDENT

John Sager

vicepresident@anoka-rc.com

INSTRUCTION COORDINATOR

Scott Oleson

instruction@anoka-rc.com

MEMBERSHIP SECRETARY

Stan Zdon

membership@anoka-rc.com

FIELD SAFETY OFFICER

Brett Ohnstad

fieldsafety@anoka-rc.com

RECORDING SECRETARY

Marc Davis

secretary@anoka-rc.com

EVENT COORDINATOR

Chris Cone

events@anoka-rc.com

ACRC Website - <http://www.anoka-rc.com>

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

SERVO CHATTER

EDITOR

Stan Zdon

newsletter@anoka-rc.com

CONTRIBUTORS THIS MONTH

Chris Cone

Brett Ohnstad

John Sager

Andy Thunstrom

Stan Zdon

ACRC SPONSORS

King Kong Hobbies
Abraham Technical
Aerospace Welding
Cambridge State Bank
T & G Hardwood

*Deadline for the
next newsletter is:
January 1, 2014*

CALENDAR OF UPCOMING EVENTS

Thursday – November 21

- ACRC Meeting

Thursday – December 19

- ACRC Meeting

Wednesday – January 1

- ACRC Freeze Fly

Wednesday – January 1

- SPMRC Freeze Fly

