ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

SEPTEMBER 2012

THE MEETING WILL BE THURSDAY, SEPTEMBER 20, AT RIVERWIND!!

PRESIDENT'S CHATTER

Fall is among us and the kids are back to school. Only the Fly Out and two fun flies are left. It has been a strange year to say the least; hot, hot, hot. If I were a betting man I would say this has been the number one factor for the poor turnouts. I don't blame you at all. It is no fun trying to enjoy the hobby you enjoy so much and all you do is sweat. If that has been the case how about the opposite? Have you dusted off a kit and worked on that or done some long needed repairs. If so, then the AC got its work out. Hopefully more people get out this fall and enjoy flying, fall colors, and hunting before the other extreme shows up. So until next month get to the field and appreciate your projects.

Andy Thunstrom

FLIGHT INSTRUCTION

It's been a very good year for training. We have had quite a few people in training and there are a couple of trainees that should be finished very soon. While there is still training time available this year, we are in the home stretch. After the Fly-Out next month, I will no longer have a scheduled day for training or Discovery flights. Training can still proceed by calling and arranging time with myself and any other instructor as time and weather permits. It's time to start looking at the simulator.

Until next Month

Dale Anderson

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

ACRC SAFETY

The safety reminders I have for this month are:

1. Full throttle run-ups should be done ahead of the pit area in the run up area.
2. Adjust the needle valve from behind the prop.
3. Pilots should fly from the downwind flight stations only. On crosswind days use the left or right station group, but all pilots should be using the same group at any one time.
4. Flight Line! Flight line! Flight Line! Know where it is and don't fly aircraft behind it!

The Editor

TIPS & TRICKS

I have a trick to using Robart pin hinges. I was installing Robart pin hinges on my T-34 Mentor. I can never get both sides perfect ... no matter how carefully I measure, so I came up with a neat trick to make them perfect.

On the stabilizer I mark out where I want the holes, then I clipped off ¼ inch of T-Pin tip and, using pliers, push the short pin into the stabilizer where I marked. I left about 1/8 inch or less sticking out.

Next I made sure the elevator was perfectly aligned with the stabilizer then pressed the two together. The pins left a mark on the elevator (or rudder) where to drill the holes. I guess you could use the same method with CA hinges.

—Dave Raczka, Brauer's Aviators, Pendelton, New York

AUGUST FUN FLY RESULTS

Name	1st Evnt	2nd Evnt	3rd Evnt	Ttl Pnts	Place	Points
Andy Thunstrom	3	1	2	6	1	25
Stan Zdon	1	4	1	6	1	25
Jeff Flander	4	2	3	9	2	24
Bob Moser	2	5	2	9	2	24
Dale Anderson	4	5	1	10	3	23
Marc Davis	5	6	1	12	4	22
Phil Vaughn	6	6	1	13	5	21
Marc Tellevik	7	3	3	13	5	21

Scores Compiled by Marc Davis

FUN FLY STANDINGS

Name	Apr	Jun	Jul	Aug	Total	Place
Andy Thunstrom	21	21	22	25	89	1
Stan Zdon	18	23	19	25	85	2
Phil Vaughn	19	22	19	21	81	3
Marc Davis	16	17	23	22	78	4
Jeff Flander	21	24	0	24	69	5
Dave Boll	0	25	25	0	50	6
Bob Moser	0	0	24	24	48	7
Dan Thiede	23	24	0	0	47	8
Scott Oleson	25	19	0	0	44	9
John Sager	21	20	0	0	41	10
Dale Anderson	0	17	0	23	40	11
Chris Cone	22	16	0	0	38	12
Chris Elliot	20	17	0	0	37	13
Paul Rono	24	0	0	0	24	14
Christian Cone	22	0	0	0	22	15
Andy Noll	0	0	21	0	21	16
Marc Tellevik	0	0	0	21	21	16
Don Olson	0	0	18	0	18	17
Kris Westerbur	17	0	0	0	17	18
Joe Parent	15	0	0	0	15	19

ACRC EVENTS

Hello All!

We only had 8 pilots for the Fun-Fly on August 18. The 3 events for our Fun-Fly this month were: guess your time to do 3 loops, 3 rolls, and 3 horizontal figure 8's; The number of spot touch and goes in 2 minutes; and everyone's favorite (if you're a spectator) Limbo.

Stan Zdon took 1st place in the guess your time event, Andy Thunstrom took 1st place in the touch and go event, and there was a 4 way tie for first for Limbo with Dale Anderson, Marc Davis, Phil Vaughn, and Stan Zdon all managing 2 full passes and an attempted 3rd pass.

After totaling up all the scores it turned out Andy Thunstrom and Stan Zdon tied for 1st , with Jeff "SpeedProp" Flander and Bob Moser tying for 2nd, and Dale Anderson in 3rd.

I was unable to attend the Scale Fly but from what I heard there were about 35 people in attendance and a good time was had by all.

The Electric Fly was postponed to Sunday, September 9 due to the high winds on Saturday. Overall for that event we had about 15 pilots in attendance and few spectators as well.

Events coming up are:

September 22	Fun-Fly
September 30	Combat (rescheduled from 9/9)
October 6	Fall Fly-out

John Sager

ACRC BIG THANKS

If you have been out to the field this summer you have probably noticed that the field is always mowed and trimmed. You may not have noticed that the mower has received some much-needed maintenance too. Thanks to the members of the "Everyday is Saturday Club" (Gary Breitenbach, Gary Titus, Charlie Elg, Ken Dinkel and Tom LaRose) for their time and effort keeping our field and equipment in such great shape.

The Board

MEMBERSHIP NEWS

Membership in ACRC is currently at 120 members. There are 101 members that pay full annual dues. The remaining members are Life Members, junior members and family members. This is the highest the membership has been in the last 5 years. Each year ACRC gets some new fliers. One of the ways that you can help the club is to become an instructor. If you are interested in becoming an instructor you can contact Dale Anderson at (612) 481-6405.

At the membership meeting in October ACRC will be taking nominations for board members for 2013/2014. Four positions will have to be filled. The two-year terms of Dale Anderson, Jeff Flander, Doug Jelinek 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 entering you own name into nomination. 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. Remember, you too can be a FBM.

The Scale Fly-In held on August 25 was a huge success. There was a total of 35 pilots and spectators. The club supplied turkey and ham sandwiches with members bringing salads and desserts. It was a great lunch and the donation jar was filled.

THE NEXT MEETING WILL BE AT ***RIVERWIND*** ON SEPTEMBER 20 AT 7:00 PM. Don't forget the fun-fly on Saturday September 22.

Stan Zdon

ACRC MINUTES

August 16, 2012

Meeting came to order at 7:00 PM with 26 members present.

1 new member 1 guest

Training

Training night is progressing well and will end after the Fly-Out

Safety

No problems last month

Membership

118 members total, 99 fully paid

Show and Tell

Chris Elliot showed a Chip Hyde Extra 300 powered by a DLE 111.

Raffle Prizes

Stan Zdon	Thunder Power Charger
Phil Vaughn	Servo
Phil Vaughn	Servo
Dale Anderson	Servo
Jeff Flander	Servo
Chris Elliot	Futaba pullover

Stan Zdon

EVENTS CALENDAR

Sept 15	SPRC Septemberfest - 10:00 AM
Sept 15	Grassfield Big Bird Fly-In
Sept 15	TCRC Fall Float Fly-Bush Lake
Sept 22	ACRC Funfly - 10:00 AM start
Sept 22	TCRC Scale Fly-In and Camp-out
Oct 6	ACRC Fall Fly Out - 10:00AM
Oct 13	SPRC Chili Fly - 10:00 AM
Oct 20	ACRC Funfly - 10:00 AM start
Nov 23	SPRC Turkey Fly - 10:00AM
Jan 1	SPRC Freeze Fly - 10:00AM-?
Jan 1	ACRC Freeze Fly - 10:00AM-?
Jan 1	MRCSS & MARCEE Freeze Fly

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

PILOT QUIZ

1. T or F An airplane is climbing at 200 feet per minute flying directly into the wind. With the same power and trim settings it would also be climbing at 200 feet per minute directly downwind.

2. T or F Assuming the same power and trim settings, an airplane has a higher angle of climb, as measured with the ground, flying into the wind compared to flying downwind.

3. T or F The wing on a nose heavy airplane has to generate more lift for level flight than if the plane was properly balanced, even if the weight of the plane is the same in both instances.

4. T or F Assuming level flight and the same bank angle, a plane flying at 120 mph will take twice as long to make a 360^0 turn as a plane flying at 60 mph.

5. T or F If a plane has a groundspeed of 50 mph into the wind and a groundspeed of 100 mph downwind with the same wind, its airspeed is 75 mph.

6. T or F Your Cub is flying at a true airspeed of 75 mph. If you fly 100 miles into a 25 mph wind and then return the 100 miles in the same wind, your average speed will be less than 75 mph.

7. T or F If you fly with a 90 degree crosswind your average groundspeed between two points will be less than if there is no wind.

8. T or F If you were flying above a smooth cloud layer and there were no gusts or turbulence, you would not be able tell the difference between an upwind turn and a downwind turn.

9. T or F The prop that gives the most static thrust, as measured with a scale, will usually not produce the highest airspeed.

10. T or F Once the wheels have left the ground, a steady crosswind will not lift a wing or flip a plane over.

ANSWERS - *Bottom of Page 7*

NAME THE PLANE #1

NAME THE PLANE #2

ON THE SAFE SIDE

From AMA District VIII

Safety Incident Reporting
by Chuck Waller

What is a model airplane pilot's worst nightmare? To me, it is the sight of a model aircraft out of control, or with no radio response, heading for a parking lot or spectator area filled with people.

As this unfortunate incident occurs, everyone who sees it starts yelling, "Heads up!" to get the attention of every one at the field and, hopefully, in the parking lot or wherever the airplane is heading. All non-flying pilots are focused on the airplane and do their best to help people get out of the way. The pilot never stops fighting. He keeps the throttle all the way back in case he gets one more command in before the inevitable.

I have personally witnessed this event at least four times and had it happen to me once. Fortunately, no people were injured in any of these events.

So what would happen if we were not so lucky? What happens next when an incident, with or without personal injury, occurs?

Obviously, the first thing is to take care of any injured persons, if there are any. Your club should have a first aid kit available if the injury is minor. For major injuries you should immediately call for emergency services (911) and give them directions to your field. (These directions should also be posted at your flying field.)

Now what do you do next? It is very important at this point to gather as many facts regarding the incident as you can. You should immediately appoint one person as the "investigating" official. This may be the club safety officer or another club officer. It is actually better if the investigating official did not actually witness the incident. This way, his report will not be "clouded" by his own recollections.

Immediately talk to any one who witnessed the event. Make sure to get their name, address, and phone number for future interviews. Take down a statement of events and facts from each witness. Try to do this before the witnesses talk to each other if at all possible. You may want to assign several people to assist in getting statements at this time. It is very important to take pictures of any damage that was caused to any personal property including autos, buildings, trailers, other models, etc. Do not spare the film! You can always throw out or delete repetitive or nonessential pictures.

As soon as possible, you should contact AMA to report the incident and to request a claim form. Even if the incident results in no personal injury or property damage, all incidents (close calls) should be reported so they can be evaluated for any possible corrective actions.

From the AMA membership manual: During regular business hours (Monday-Friday, 8 a.m. to 5 p.m. EST) please call (765) 287-1256. To report an incident involving serious injuries after hours or on weekends please call (765) 749-9210 or (765) 212-0793.

I sincerely hope you never have this type of incident happen at your flying site, but if it does, keep cool and follow these steps as closely as possible.

Fly safely and remember to have fun!

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

ON THE SAFE SIDE

3-D Vision

by Jim Tiller, On the Safe Side Author

My home overlooks a small lake. This summer, with the continuing drought, the lake is nearly empty. The fish are pretty concentrated in the remaining water. For the past couple of weeks the pond has been visited each morning by a red-tailed hawk looking for an easy breakfast. I have been fascinated watching him glide back and forth, drop to the water, and come up with a silvery meal.

I was reminded of a biology lecture on depth perception. Some birds and many mammals have both eyes in front of the head so they have binocular vision. That means when both eyes, some distance apart, focus on the same object they can judge the distance to that object by comparing the two slightly different views. Picture a triangle with the base of the plane on your face and each eye being one triangle corner. The apex of the triangle is the object in question. This stereoptic view of a single point creates what is called parallax. For animals, it is particularly useful when determining the immediacy of a threat or the distance to prey. Humans use it for everything from hitting the cup with poured coffee to successfully making a right turn onto the taxiway.

If you think about this method of triangulation, it should be apparent that parallax is limited to objects that are fairly close. The distance between your two eyes is just a few inches and as an object gets farther away, the parallax triangle becomes less and less visually accurate quite quickly. Most humans can only judge depth, with any accuracy, to about 75 feet.

So how do we fly our airplanes in a 3-D world where we must determine the distance to objects much farther away?

Since you were a baby you've been gathering information that you use to supplement your binocular visual cues. We learn that the apparent size of an object increases as it comes nearer and decreases as it goes away. We learn that near objects are colorful and far objects fade to grayer shades. We learn that water towers are generally taller than trees. We learn that objects that block our vision are closer than the objects they hide. These are just a few examples of how your brain deals with distances in your visual world.

But this also means that our eyes can easily draw a wrong conclusion if they are given conflicting visual cues. You have all seen optical illusions. This is the reason our brains can see depth in two-dimensional pictures or photographs. Artists have mastered the ability to make two-dimensional objects appear to have depth, by manipulating those visual cues.

So much for the biology lesson, what does this have to do with safety? By and large, the only sense you use when flying RC is eyesight. You will have to be constantly aware that your 3-D vision is limited and you must learn a new set of rules for dealing with depth or the lack of it.

Keep some daylight between your landing airplane and the field fence until you are sure it is inside the fence perimeter.

If you fly your giant-scale airplane just after a small one, be aware it may appear closer than it really is. Try to glance away from your model occasionally and search your peripheral vision for other objects that can give you visual cues.

Adjust your flight path to keep daylight between you and any other airplane in the sky.

Never fly directly over anyone when your airplane is close to the ground, regardless of how distant they may appear to be from you.

When you range test your radio, make a mental note of its apparent size when you are 100 feet and 200 feet away from it.

Darker colors will appear farther away than brighter colors. Make the pattern on the top of the wing different than the bottom.

A person with 20/20 vision has no better depth perception than the person wearing trifocals.

It is our binocular vision and our accumulated knowledge that keeps us safe, but in the same breath, never forget how easily our human eyes are fooled.

TIPS & TRICKS

Winter Aircraft Storage Tips

With the weather turning colder, many of us will be storing our airplanes for the season. Here are some tips that will make a happy aircraft and a happy flier come next spring.

The engine

When you finish flying for the day, you should always get the unburned fuel out of the engine. Do this by pulling off the fuel feed from the carburetor, attaching the glow driver, and flipping the propeller. The engine may run a little, or it may just pop. When there are no more pops, all the fuel is gone. Next, make sure all the fuel is out of the tank. You would not believe the green, slimy crud that grows inside a tank with fuel left in it!

After removal from the airplane, the outside of the engine should be cleaned off. Block the carburetor inlet and the exhaust outlet with some wadded up paper towel. Grab an old toothbrush and some engine cleaner (Formula 409, Fantastic, Windex, Comet, etc.) and scrub the engine. When everything is clean, wipe it down with a rag.

Oiling the inside of the engine comes next. Use Marvel Mystery Oil or plain automatic transmission fluid for this. For two-stroke engines, squirt some oil into the exhaust outlet, then remove the glow plug and squirt some into the combustion chamber. For four-stroke engines, squirt oil into the crankcase vent and for the top end, remove the glow plug and lubricate the valve train by squirting oil into the combustion chamber.

Use your electric starter to turn the engine over for a second or two. This will distribute the oil throughout the inside of the engine (including the front bearings). Be sure to lubricate the carburetor too so it doesn't get stuck. Put the glow plug back on and wrap your engine in a clean cotton rag. This will allow it to breathe over the winter. Don't put it in a plastic bag because it could trap moisture and cause rust and corrosion.

The airframe

Build some more wing racks, if needed, and store your wings on them. Don't stack them in a pile or lean them in a corner. You'll end up with warped wings. Hang the fuselage somewhere up out of the way.

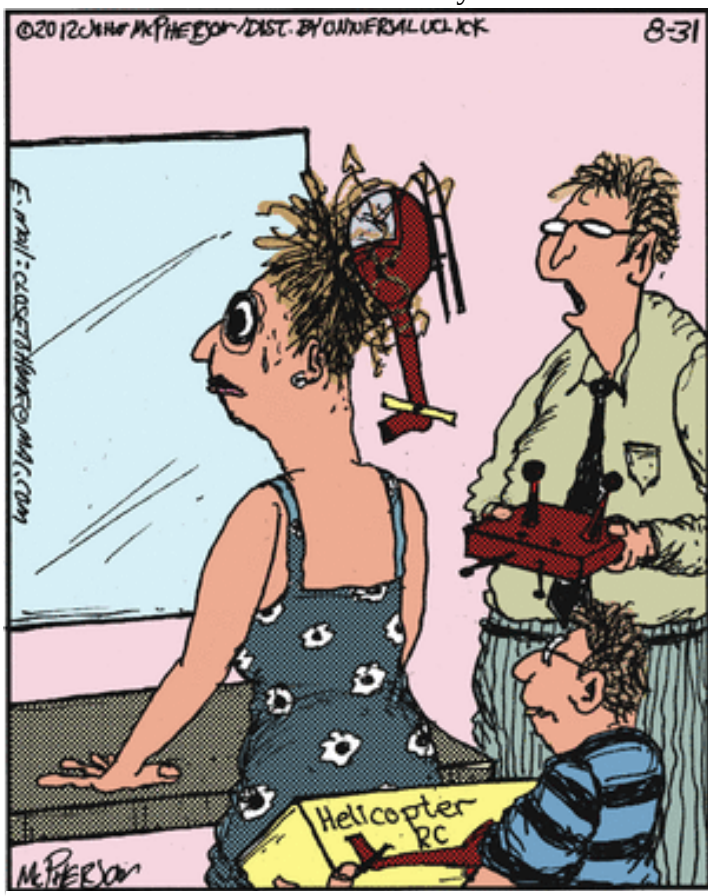
The radio

Once a month, charge your system overnight. Keep a log book to record when you do this. Once every two months, after you finish the overnight charge, use a ESV, battery cycler, or just run the system for 1½ to 2 hours. Charge the system overnight again. Don't store the radio in a place where it will get too cold, such as an unheated garage.

—First State R/C Club, Hockessin, Delaware

PILOT QUIZ ANSWERS - *All True*

CLOSE TO HOME by John McPherson



"Look, I SAID I'm sorry! Besides our dinner guests won't be here for another 10 minutes."

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

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
Jeff Flander
vicepresident@anoka-rc.com

INSTRUCTION COORDINATOR
Dale Anderson
instruction@anoka-rc.com

MEMBERSHIP SECRETARY
Stan Zdon
membership@anoka-rc.com

FIELD SAFETY OFFICER
Joe Parent
fieldsafety@anoka-rc.com

RECORDING SECRETARY
Doug Jelinek
secretary@anoka-rc.com

EVENT COORDINATOR
John Sager
events@anoka-rc.com

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

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

SERVO CHATTER EDITOR
Stan Zdon
newsletter@anoka-rc.com

CONTRIBUTORS THIS MONTH
Dale Anderson
Marc Davis
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: October 1, 2012

CALENDAR OF UPCOMING EVENTS

Thursday – September 20
- ACRC Meeting

Saturday – September 22
- ACRC Fun Fly

Saturday – September 29
- ACRC Combat

Saturday – October 6
- ACRC Fly-Out

Thursday – October 18
- ACRC Meetingt