



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

AUGUST 2014

THE MEETING WILL BE THURSDAY, AUGUST 21, AT THE FIELD!!

PRESIDENT'S CHATTER

Well, August is here. This is the last club meeting outside then we go back to Riverwind Community Center until next summer. Wow, it feels like a busy summers or should I say it has been a busy summer. I hope everyone has gotten a chance to get out and play before it ends.

It's time to get into some important issues. First is the finance department. The club is in a spot where some improvements can start being made to the field. I know that we have enough to get the low spots filled and feathered beside the runway on both sides and out in the grass. This has been a ongoing complaint that will be addressed very soon. There has also been concern about our lawn care equipment. Thanks to the "Everyday Saturday Guys" for all of their help and input. A question was asked about what happens if our lawn mower pukes; can we get another. Answer is yes we can afford that too, but they have to kill current one first. Driving in to the water ditches don't count (sorry Gary).

While I was at the field on Wednesday morning there was a question about dB levels. I was asked if gasoline engines were too loud. It just so happened that there was a dB meter available to use. I searched on AMA's web for dB testing procedures. They say to measure at 20 ft just behind prop even with engine and in 3 other directions. Add up all four readings and divide by the number of readings taken will give you your dB level. We found that a stock DLE 50 with stock muffler was around 90 dB. Next test was on

a DLE 120 with stock mufflers that is about 100 dB. The AMA recommendation on grass is 96 DB. In a nut shell the 120 is equivalent to a chainsaw or slightly less. The other number for AMA dB is 98 dB in same test fashion off of a hard surface; tar, concrete etc. There may be reason for concern. It will probably be brought up at board meeting for discussion. Another issue was the helicopter hover area. I was approached and asked about this area. This area is located in the very southwest corner of the parking area on the south side of field. This area is for hover practice only. No forward flight or aerobatic maneuvers are to be done in this area. Forward flight or aerobatic maneuvers are to be done on the regular flight line. I knew where this spot was when I joined ACRC but I hardly ever see anybody use it. There was a question and concern was about getting hit by a helicopter over in this area. If it used for hover practice only there should be no problem. We may have to put a pilot station next to the hover area so that the pilots are not facing the pits.

We are going to have some positions up for nomination and election this fall. My thought to the club is if you want to make a difference in your club be a board member. Or come to meetings to bring up issues for discussion. Rules can be changed or made if you think it needs attention. I ask for any new business and nothing is brought up. I find that if club can talk about issues openly there are a lot of ideas and opinions that my or not want to be heard. But people are aware and are willing to solve an issue. You may or may not get

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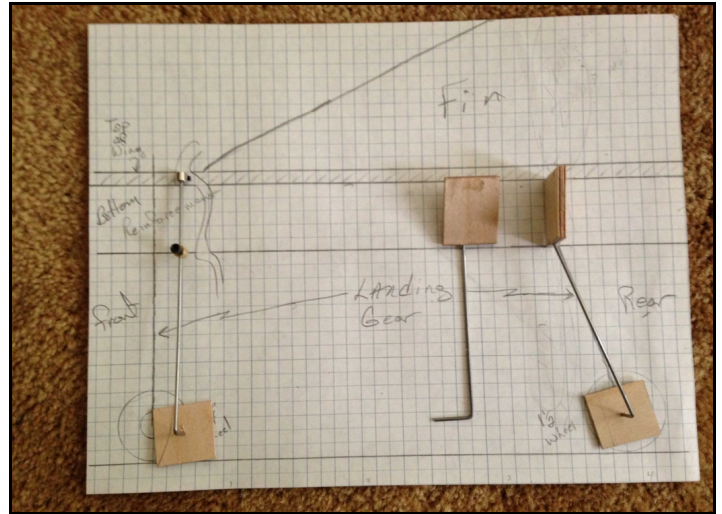
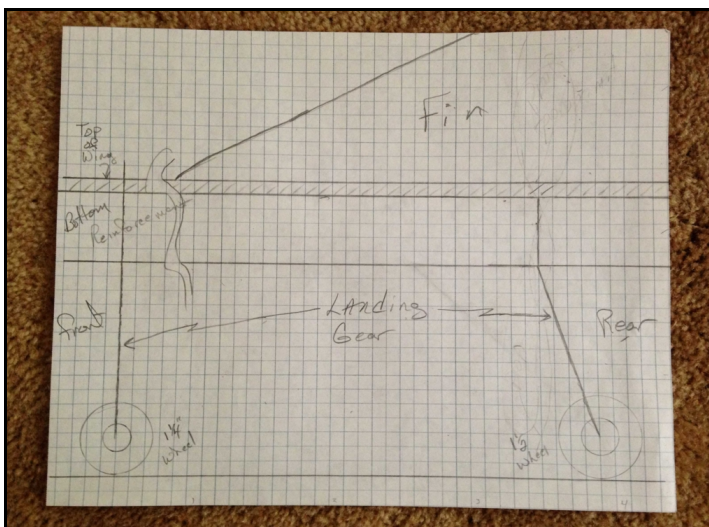
the results your looking for but it is a result. Being on the board can be a lot of work but it is worth the time to me. There is nothing better than going to the field and seeing smiles and talking to the members. It has its days but for the most part it is worth it. Every one should on the board at least once. It is a 2 year term; you can stay on or be done up to you.

Andy Thunstrom

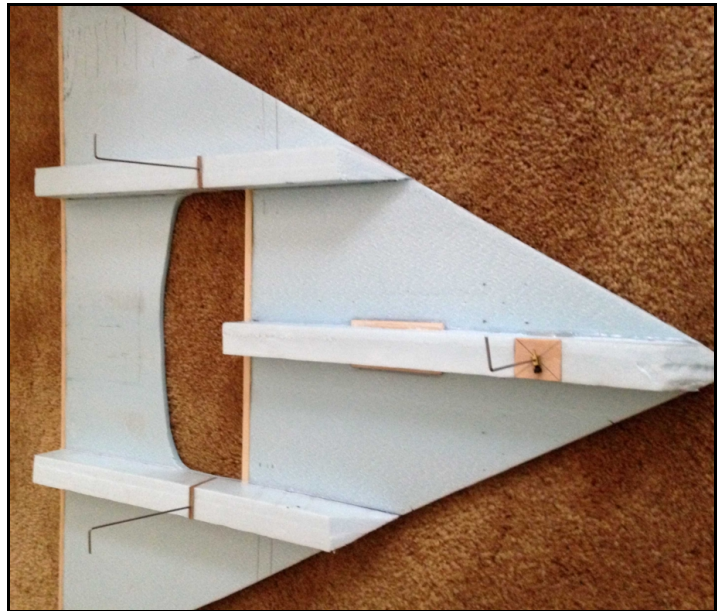
FROM THE VEEP

I missed writing a column for last month's newsletter. My excuse is I was at the lake. I have been asked to ask the membership if there is interest in sharing modeling know-how before or after at club meetings, or even at Wednesday training night at the field. We could discuss transmitter programming, applying and repairing iron on covering, kit and ARF building, motor adjustment, how to fly 3D, crosswind landing, and anything else you could suggest. This could be an informal setting or structured depending on the subject being discussed. I think it would be good to publish a notice of the format on the web site and also the subject to be presented. It might take time to prepare for the subject and get someone to lead the discussion. So if there is interest please send me a email and let me know your subject of interest and we will see where it leads us.

I have been putting landing gear on a blue foamy. The first picture is of the scale drawing for landing gear struts (1/4 inch scale).



The second picture shows the landing gear struts completed. The square looking wheels are the



supports for the front gear (can be seen in pix # 3). The third photo is of the foamy upside down; all three struts can be seen as installed (note the front strut plywood support). This was done to prevent foam frame member from being damage during landing. There is a second plywood support between wing and frame member.

It might make interesting fun fly plane.

That's it for this month.

Virgil Okeson



ACRC EVENTS

Thanks to all who came to the scale fly, we had a great turn out. Although it was a touch muggy was a great day for flying!

Our club has been getting some good attention. We were asked to provide a mini fly in/demonstration at the East Bethel Days next year and a local elderly care facility has asked us to come provide a small demonstration for the residents. As these community outreach mini events happen we will be sending out dates and times and would enjoy having members involved.

See you all at the next fun fly!

Chris Cone

ACRC TRAINING

There is not a whole lot to report on this month. Training is staying pretty steady with about 3 to 4 new pilots each Wednesday. Thanks to Dan Thiede and Dan Stahn for their help with the discovery flights at the Scale Fly In. Having the club trainers on hand during our larger events for the discovery flights seems to be a hit.

2014 SOLOS

I am happy to announce our first solo of the season. Paul Patton soloed Wednesday evening August 8. Paul started his training with us last summer flying his Tower hobbies Trainer .40. Paul has had an excellent attitude towards his training and is a pleasure to fly with.

Scott Oleson
(Cell) 952-201-3352
smo47@live.com

MEMBERSHIP NEWS

HOSPITAL REMINDER - The closest hospital is Fairview in Wyoming, just north of Forest Lake. Go east on Hwy 22 to Hwy 61, which is just a ways beyond Hwy 35, and south on Hwy 61 to the hospital. The hospital is on the right side of 61 as you are going south. **FLY SAFELY!!!!!!!**

If you have to call 911 the GPS coordinates of the field are:

Hwy 65 and 197th	45.326927	-93.236293
ACRC shelter	45.328692	-93.230971

FIELD CLEAN UP REMINDER - ACRC does not have a garbage service that comes to the field. The barrels at the field are used mainly for events. If you have pop cans or water bottles or other trash please take it home with you.

The events still to occur this year, other than Fun-Flies, are the ACRC Electric Fly on September 6 and the Fall Fly-Out on September 27.

The next meeting will be at the field on August 21 at 7:00 PM. This is the last meeting at the field for 2014. **THE SEPTEMBER MEETING WILL BE AT RIVERWIND.** There will be a fun-fly on Saturday August 23.

Stan Zdon

ACRC SAFETY

I just have a couple of quick notes for this month's safety article. The first has to do with guests and visitors to the field. Any spectators to the field need to stay to the far west of the field in the spectator area. This area includes the picnic benches. We do not allow any starting of engines or arming of electrics in this area to keep members and guests safe. Those activities are performed in the area farther towards the runway. This does not mean that we cannot have guests of the club in those areas; they just need to be accompanied by a member of the club, or be an approved AMA member who is flying as a guest of the club. This would of course include people who may be getting a Discovery Flight or who may be acting as a spotter for a club member.

Recently we had a couple young people who, after being allowed on the flight line for a Discovery Flight, ended up running around the pits, starting area and even on to the flight line afterward. This ended up causing some problems as one of these people ran out toward the runway at the same time that a member was landing his airplane. The pilot

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maneuvered to avoid any problems but to do so ended up resulting in some damage being caused to his airplane. We as club members need to make sure that we are aware of who is at the field and where they are on the field to be safe. We can do this by greeting anyone we do not know and explaining who we are as a club, what we do, and how we take safety seriously by letting them know what areas are off limits.

Another problem I would like to address has to do with the sod farm employees. It has been reported that several airplanes have been flown in the vicinity of the ground crews while they were working out in the field. I would hope that this is not being done on purpose, but it should not even be happening unintentionally. If a crew is working on the field, do not fly anywhere near them. If they are working on the field directly to the north or south of the runway, it may mean that flying at the field is temporarily suspended until they move. Whatever you do, you must give adequate room for safety to anyone who may be out in the general flying area.

Lastly, several airplanes have been lost recently due to various problems but one notable problem appears to be caused by a loss of signal between the transmitter and the receiver. Make sure that you performing a range test on your system prior to flight and that both your radio and receiver battery packs are fully charged. If your radio system is so equipped you should set up yours into a "failsafe" mode. Spektrum radios call this the SmartSafe Failsafe system. This involves setting up your receiver to go into a failsafe position should the RF signal get interrupted. Typically this might have you set the sticks to neutral with a low throttle setting. If your radio and receiver are set up like this and you lose signal, the plane will throttle back and will enter a shallow glide slope with desired effect of bringing the airplane to the ground as safely and as quickly as possible with no pilot input.

Brett Ohnstad

ACRC CRASH OF THE MONTH TROPHY

The entrants for July are shown below.



Dale Anderson's T-34



Marc Tellevik's CUB



Unknown jet at Pot Luck Fly



July Fun Fly Results

Name	1st Evnt	2nd Evnt	3rd Evnt	Ttl	Pfce	Pnts
Paul Rono	1	1	4	6	1	25
Stan Zdon	4	1	3	8	2	24
Mark Tellevik	6	3	2	11	3	23
Phil Vaughn	5	6	1	12	4	22
Christian Cone	2	1	9	12	4	22
Marc Davis	6	2	6	14	5	21
Scott Oleson	3	4	8	15	6	20
Chris Cone	4	6	5	15	6	20
Andy Thunstrom	6	5	7	18	7	19

Current Standings - 2014:

Name	Apr	May	Jun	Jul	Ttl	Pfce
Paul Rono	25	22	24	25	96	1
Stan Zdon	24	15	23	24	86	2
Chris Cone	18	24	22	20	84	3
Mark Tellevik	21	17	19	23	80	4
Jeff Flander	23	20	25	0	68	5
Andy Noll	24	23	19	0	66	6
Kris Westerbur	20	25	21	0	66	6
Andy Thunstrom	22	21	0	19	62	7
Phil Vaughn	0	18	20	22	60	8
Dale Anderson	18	16	17	0	51	9
Scott Oleson	24	0	0	20	44	10
Roger Jeffery	19	19	0	0	38	11
Dan Thiede	0	0	24	0	24	12
Christian Cone	0	0	0	22	22	14
Virgil Okeson	0	0	18	0	18	15
Marc Davis	0	0	0	21	21	15

July Fun Fly Results

First Event was a 30 second Climb and glide with the most number of spins before throttling up. Flyers must land on the Runway. Paul completed a massive 42 spins!

Second Event was blackjack, a deck of cards was drawn on the runway and flyers received the number of points based on the card that they landed on. Up to three passes. Three people scored 21; Paul Rono, Christian Cone and Stan Zdon!

Third Event was a ring toss, in this event flyers rubber banded a stick on their plan an took off with a ring. The idea is to drop the ring closes to the cone. Phil Vaughn was the closest at 11 feet.

Fun Fly results compiled by Marc Davis

ACRC MINUTES

July 17, 2014

Members: 21 and 2 visitors. Joe Coleman finally rejoined and flew!

President: Next month is the last meeting at the field. Andy Noll is out of the hospital and is recovering well now after a few minor complications.

Vice President: Presented raffle prizes. Prizes and winner were:

Membership: 112 members with 6 or so Juniors

Treasury: Phil reported that the treasury is doing well.

Safety: Please keep in your flight station when flying. Also remember to call landings and takeoffs. Please tell the pilots when you are on the field and when you clear the field.

Training: Has been quiet, only two people on last Wednesday. The training season is winding down a bit.



Events: August 2 is the scale fly event. Food will be walking tacos. We need people to bring the rest of the goods. Taco sauce, lettuce, cheese, beans tomatoes. Maybe 45-50 people if you're binging something. We will have the forums for the signup.

It was decided that we will be doing a Pig Roast for the Fall Flyout. Troy has already been lined up and the Flyout is scheduled for September 27.

Old Business:

None

New Business

The Float Fly has been postponed due to high water. Stay tuned for an update.

Show and Tell

Don McGillivray – Bought parts of a plane at Jeremy's swap meet. The plane was very tail heavy and the fuselage was plywood and spruce stringers. In rebuilding the plane, the wing was kept as is but the fuselage is 100 percent newly constructed out of foam. The before weight was 2.5 lbs, the new weight is just over 1 lb. The plane has a 3 cell 500 mA battery and an outrunner electric motor. The wing already had the pockets built in for the flying wire but the wires were added during the rebuild. The wing was covered with yellow fabric, the fuselage was painted with water based paints from Michaels.

Raffle:

Knob Creek	Virgil Okeson
#8 Glow	Neal Olson
F Glow Plug	Stan Zdon
F Glow Plug	Tim Karash
F Glow Plug	Ken Dinkel
F Glow Plug	Stan Zdon
Fuel Tubing - Glow	Don McGillivray
Fuel Tubing - Glow	Dave Dents
Fuel Tubing - Gas	Tom Larose
Fuel Tubing - Gas	Tom Larose
Charger	Tom Larose
Allen Wrenches	Mark Tellevik
Allen Wrenches	Steve Williamson
Hobby Vise	Bill Kuhlmeier

Marc Davis

When Epoxy Doesn't Harden Properly

The Rockland County Radio Control Club, White Plains NY

Epoxy is one of the best modeling materials available. It's useful as an adhesive for wetting out fiberglass cloth, as a filler, and as a finishing material. It can be thinned or thickened for a variety of purposes. Even though it is useful, epoxy can be a pain when it doesn't harden properly.

There are two important issues when dealing with epoxy, proportioning and mixing. Of these two, mixing is the most critical. Mis-proportioning the hardener to the epoxy generally leads to slow hardening, but lack of proper mixing can lead to permanently sticky epoxy.

One hundred quick, hard strokes are recommended when mixing any amount of epoxy. Count them to make sure that your mixing is adequate. Always mix your epoxy before putting in any additives. Both thinning and thickening agents can keep epoxy from mixing properly. Give the epoxy 100 strokes first and then put in the additive.

Thinning: Epoxy can be thinned using acetone or denatured alcohol. Either of these can be added to make it more watery. A mix of up to 50% doesn't seem to have any effect on the final strength of the epoxy. Thinning the epoxy will slow down the curing time and make it wet out fiberglass and carbon fiber better. Thinned epoxy also can be wiped onto balsa or obechi as a finish.

Thickening: Epoxy can be thickened by adding almost any inert, fine-grained solid from sand to cotton fiber. Modelers usually use micro balloons for thickening epoxy because they are readily available and add little weight. Thickened epoxy can be used to make fillets or to fill gaps.

Five minutes, 15 minutes, 30 minutes, more? Epoxy comes in formulations for different curing times. The times listed on the packages are strictly nominal and generally refer to curing time.

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Five-minute epoxy does not give you five minutes of working time. At best, you will get 20 seconds of working time in which to place five-minute epoxy before it starts to “hit”. Thirty-minute epoxy gives you around one to three minutes before it starts to hit. These times will vary with temperature, mix proportions, and proper mixing, but they are good reference points. In general, five-minute epoxy is only for spot gluing. It is great for small, quick jobs, but not for involved tasks. A general rule of thumb is the working time for epoxy (after 100 strokes of mixing) is about 10% of the time listed on the package. Keep in mind that epoxy mixed and left in the cup will hit faster than epoxy that is spread out immediately.

LANDINGS

by Bob Wilson, Franklin NC

Not wanting to be outdone by my friend Gerry Goepfert, who wrote about attaching a bubble canopy, I’m going to write about how to making a better landing with your RC model. I still occasionally draw a few haw-haws when I make three landings in one, but at my age I’m entitled.

As a full-scale pilot, I learned that it was most important to enter a downwind leg, which should be more or less parallel to the runway, followed by a turn to base leg and then to final approach, all of which is known as the landing pattern. For our models, the downwind leg should not be too high and usually 100 feet is plenty and as close in as practical. Our airport, called OTX in Franklin, North Carolina, is 400 feet of groomed Bermuda grass with an additional 100-foot over-run and we commonly land 42% gassers with no problems.

But, allow me to review some of the mistakes I see in making a landing approach.

Either because of stubbornness, or embarrassment, newbies often attempt to force their airplane to land regardless, rather than performing a missed-approach and go-around, and simply try and jam the airplane into the ground. Ouch! Teach

yourself that if you aren’t lined up - too high, too low, or whatever - hit the throttle and make a go-around. Take an afternoon and practice nothing but repeated landings and takeoffs or touch and gos. With enough practice, your brain will learn so that things become instinctive.

I often see pilots feed in power and grab for as much altitude as possible during a missed approach. The problem here is that they are now way above landing altitude and to get to the runway again, they have to dive, which builds up too much speed and often overshoot the runway again.

Another mistake I see often is failing to slow down during the downwind leg. In a full-scale aircraft, if you haven’t already done so, this is where you want to get your flaps and gear down and start slowing for landing. The same thing applies to our model aircraft. How much power to use depends on the aircraft, but I usually cut power to roughly one half during the downwind leg and when on final, I cut it even more and then cut to idle at touchdown (assuming I haven’t bounced). If you find yourself in a bad bouncing situation, feed in power and make that go-round. (My buddies will tell you I have been known to bounce pretty high but don’t listen to them.)

So here’s my advice to the newbie:

- Make your downwind leg parallel to the runway.
- Keep the downwind leg as low as practical for your airport. 100 feet is good.
- Begin slowing down during the downwind leg.
- If you have to dive to land, you’re too high and/or too fast.
- Teach yourself to automatically go around if you mess up the approach.
- Work that throttle continually during your landing, using power as needed.
- Visualize a railway track in the sky and stay on the track. Downwind, base, and final.



Pictures from the Pot luck Fly In



ON THE SAFE SIDE

by Jim Tiller, *On the Safe Side* Author

DISPOSING OF BATTERIES

You can't be in this hobby without using batteries. With the proliferation of electric flying, even more batteries entered our lives. These batteries eventually go bad, so we are faced with how to dispose of them. For many years it was the trash can. Now, with all the exotic combinations, it is more of a hassle. "Green" environmental laws and regulations are also a consideration. In some states, it is illegal to dispose of any kind of battery, even alkaline cells, in the trash.

The easiest and most environmentally friendly way to dispose of all your batteries is to put them in a plastic bag, and when you've collected enough, take them to a battery recycler. Many hardware stores or homes centers have boxes or bins that will take batteries. There are also battery retailers such as Batteries Plus or Interstate Batteries that will take them. There is even a website that will

send you a box to put your batteries and other hard-to-dispose-of items such as fluorescent bulbs. When it's full, you just drop it in the nearest FedEx box. (www.lamprecycling.com/)

LiPo cells are the ones that are the biggest concern for most fliers. There is plenty of Internet information about the care and feeding of LiPo batteries. You simply *cannot* charge LiPo batteries without a proper peak charger and a fireproof container. If they overcharge, they build up gases. If those gases produce enough pressure, the cells will rupture energetically (notice I did not write explode), releasing those gases that then combust mixing with air. Most have read and heard the horror stories associated with LiPo batteries.

But this essay is on disposing them. If you simply must dispose of them yourself, here are some simple instructions, but you can search the internet for a more complete set.

Before you dispose of a LiPo battery, you should discharge it. Don't try to discharge a damaged pack. If it is damaged, skip down to soaking the cells in salt water. Many LiPo chargers also discharge the same packs. If so, just discharge the battery to the lowest point allowed on your charger (less than 1 volt per cell). Follow the same safety instructions while discharging as you do for charging.

If your charger won't do it, a 12-volt light bulb wired between the poles will do the job for smaller packs of three cells or less. Let the pack discharge an hour or so after the light bulb goes out.

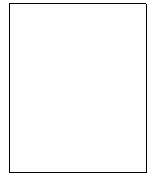
Soak the cells in salt water ($\frac{1}{2}$ cup of salt per gallon) for a few days. Soaked and discharged LiPos are safe to put in the trash or the recycling bag depending on local regulations.

The biggest environmental concern is the Nickel Cadmium (Ni-Cd) and Nickel Metal Hydrides (NiMH) batteries. First of all, the metallic residue can be recycled and reused. Second, they are toxic waste if they find their way into the landfill and/or our water supply.

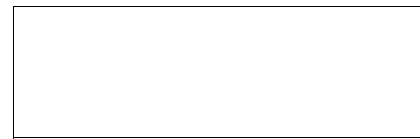


SERVO CHATTER

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Hobby Warehouse
7144 Chicago Ave S Richfield MN
Fall Swap Meet
Saturday, Sept 13, 2014 8:00-??
(Total rain-out make-up day is Sept 20—call to confirm 612-861-5587)
Come help us Celebrate our 20th
Year In Business!!!!
In store specials and refreshments.



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ACRC SPONSORS

King Kong Hobbies

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

CALENDAR OF UPCOMING EVENTS

Thursday – August 21

- ACRC Meeting

Saturday – August 23

- ACRC Fun Fly #4

Saturday – September 6

- ACRC Electric Fly

Saturday – September 27

- ACRC Fly Out

