ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

AUGUST 2010

THE MEETING WILL BE THURSDAY, AUGUST 19, AT THE FIELD!!

PRESIDENT'S CHATTER

With the warmer weather be aware of heat exhaustion and heat stroke. Enjoy flying but find some shade on hot days and keep hydrated. On August 28 our Scale "Fly In" will be starting at 10:00 AM and go most of the day with a potluck lunch at noon. Of course, as always, it is weather dependent. If you would like to contribute to the potluck here is a link to our forums to let us know what you will be bringing.

http://anoka-rc.com/forums/viewtopic.php?f=28&t=55&p=165#p165

ACRC has new members that are requiring training and I have noticed that the few trainers we have are constantly busy. They deserve our many thanks. If anyone has some spare time and is willing to help with the training please contact Andrew Thunstrom or any board member. With that said, please understand that when trainers are at our field flying on days other than training day (or days set up with trainers) that they are flying to relax and enjoy their aircraft. Please respect that we all need our down time. Remember, having your aircraft ready to fly and all the necessary equipment available and ready is very important to make useful the time in which you have for training.

The "Fall Fly Out" is fast approaching on October 2 and we are planning on having a pig roast. We will keep everyone informed on the details as we come closer to the event. There will be a potluck planned for the same event to provide the side foods. See you at the field.

Erik Castrodale

Battery Shorts, How They Occur

A short develops in a **Ni-Cd** when conductive particulates bridge the separator or the separator itself deteriorates to the point where it allows the positive and negative plates to touch. Rarely does the short occur all at once but rather building up a very small conductance path termed a "soft short". In a charged cell the energy in the cell will blow away any short as it tries to develop. You've heard about "zapping" cells. The cell actually zaps itself before the short can develop. Only in cases of severe overcharge at high rates when the cell heats up significantly can the separator melt down to the point where the plates contact each other (hard short). In this case the energy in the cell then dumps and we have what is referred to as a hot steamer, the electrolyte boils, nylon in the separator melts down and is forced by the steam through the vent. On some occasions the vent is clogged by the molten nylon separator and becomes inoperative causing the cell to rapidly disassemble. So under normal circumstances a cell maintained at some state of charge is much less likely to short than a cell that is completely discharged. It should be noted however that the self-discharge increases rapidly in cells where there is a short building (high resistance - soft short) due to separator deterioration and/or cadmium migration. One other shorting mechanism is a manufacturing defect where the positive or negative collector tab bridges the opposite plate. These usually are detected before the cells are shipped or assembled into batteries.

C. L "Red" Scholefield

Meeting Minutes

Meeting called to order at 7 P.M.
27 members present.

Board Reports:

Vice President: Dan Thiede reviewed the evenings raffle prizes that included a Seagull Zero ARF along with various field items. He also mentioned that MARCEE had donated $100 for the use of the club field.

Membership: Stan Zdon informed us that the club now has 103 members.

Events: Marc Davis reviewed the results of our recent events and also the standings for the club Fun Fly. He reminded everyone that the next Fun Fly would be the following Saturday.

Training: Andy Thunstrom brought us up to date on the summer's training activities and mentioned that there was a need for an additional instructor. Overall, good progress has been made with the training activities. Andy also reminded the members that the next Combat event would be held Sunday, August 1.

Treasurer: Jake Groetsch reviewed the clubs finances. All OK.

Old Business:

No old business.

New business:

Roger Jeffery suggested that the club have a pig roast for the Fall Fly out. Andy Thunstrom said he knew a butcher that does these.

Dale Anderson requested more pictures for club events to use on the web site. Several members offered to send him what they had.

Show and Tell:

Ken Dinkel brought in his Aeroworks 260 Extra. It is powered by a Saito 91 and finished in red and white with checker trim. A very nice looking addition to Ken's hanger!

Andy Thunstrom brought in a Great Lakes Special that he has been working on for the past several months. It is scratch built. The wingspan is 48" and is powered by an OS46. Andy painted the model with white and red acrylic and top coated it with a polyurethane clear coat. The model weighs in at 5 lbs. Andy did a great job on this scratch built model!

Raffle:

1st	Eric Castrodale	Seagull Zero ARF
2nd	Larry Hounsell	Epoxy
3rd	Eric Castrodale	Straight edge
4th	Paul Castrodale	Glow lighter
5th	Darrin Bitzer	Fuel dots
6th	Andy Thunstrom	Fuel dots
7th	Steve Ulrich	Glow wrench
8th	Phil Vaughn	Prop reamer
9th	Ken Dinkel	Magnetic tray
10th	Roger Jeffery	Magnetic tray
11th	Dick Rambow	Flashlight
12th	Phil Vaughn	Thermos

Steve Ulrich

Anoka County R/C Instructor List

Please note that it is up to the new pilot to contact an instructor for flight lessons. It is good practice to get a hold of an instructor prior to a training session.

Andy Thunstrom	(763) 291-2088
Lead Instructor	
Dale Anderson	(612) 508-2668
Mike Flander	(763) 439-6959
Dan Thiede	(763) 227-3173
Jim Taylor	(612) 868-0419
Jim Wright	(763) 786-7047
Doug Lewis	(763) 670-7678
(Helicopter and Plane)	

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

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!!!!!!!**

So far ACRC has 9 new members for 2010. Their names are listed below. Some of them are first year fliers. Please give them all the assistance that you can when you see them at the field.

Chris Cone
Christian Cone
Phil Dailey
Keith Ferenc
Bruce Martin
Joel Parker
Gregory Sherwood
Steven Stroh
Kris Westerbur

The 2010 ACRC Fun Scale and the ACRC Float Fly are now history. The only events still to occur this year, other than Fun-Flies, are the ACRC Scale Fly-In on August 28, the ACRC Electric Fly on September 4 and the Fall Fly-Out on October 2.

The next meeting will be at the field on August 19 at 7:00 PM. This is the last meeting at the field for 2010. **THE SEPTEMBER MEETING WILL BE AT RIVERWIND.** There will be a fun-fly on Saturday August 21.

Stan Zdon

FLIGHT SAFETY

MA's - Safety Comes First Articles

From the Safety Coordinator

There's always something good in MODEL AVIATION (MA) magazine and the September 2009 edition has several good topics. The "Safety Comes First" column highlighted electric flight and the need to "make sure that aircraft batteries are removed, disconnected, or otherwise disarmed." We sometimes think electric powered planes are harmless since we can't hear the noise from the engine. We forget that the prop is still as sharp and dangerous as a nitro or gas powered model. Any member who flies electric has probably experienced a prop that started spinning because we mistakenly advanced the throttle. Be cautious and disarm the battery as soon as you land.

MA columnist Dave Gee also discussed the importance of making sure you have the proper center of gravity (CG) for your plane. He mentioned how he had made a mistake using his CG balancer that resulted in his plane being very tail heavy and doing a vertical climb-out and how he almost lost the plane. A recommended secondary CG check is the old-fashioned "fingertip under the wings at about 30% behind the leading edge."

A good pre-flight inspection is also important. He discusses an airplane that took off, flew over him, and smashed his car's windshield. The likely cause - a bad servo or stripped or broken gear teeth. I can relate to this! I recently was going to fly my .60 size "Twist". On the flight preparation bench I initially had a no-start problem that I traced to a hole in the small fuel line that runs from the high-speed needle to the carburetor. Once fixed, the Evolution .61 started right up. Next I performed a flight control check on the bench and noticed the rudder was hesitating moving left. It moved fine to the right. I initially thought it was minor and was even considering trying to fly it. Fortunately I did the right thing and put it back in the car. When I got the airplane home and put it on the bench, I found the rudder servo had a broken plastic tooth on one of the gears. I also found the same problem on one of the aileron gears. The lesson here is simple. We all transport our planes to the airfield in our cars and sometimes we don't pack them well, which results in damage that may be hard to find. A good pre-flight check of all control surfaces is important to saving your plane and maybe preventing property damage or injury to a fellow club member. Do the right thing - do a good pre-flight!

ACRC EVENTS

The July Fun Fly is in the books and it proved to be one of the more interesting events. The weather was great and we had 17 flyers!

The first event was a series of 5 touch and goes. Dave Dentz came up with the idea of marking the runway for points. The center 10 feet of the runway was worth 20 points and every 10 feet out from that in both directions was 5 points less. Anything outside of the 5-point marker on the runway was worth 1 point. Andy Noll scored the highest scoring 85 points in his 5 touch and goes.

The second event was a combination taxi and fly event. Contestants first had to taxi a figure 8 around two cones at each end of the runway. They then took off and then performed a loop, roll, touch and go, then flew a flat figure 8 and finally landed. Fastest time took this event and that was Paul Rono with a blazing 1-minute 13-seconds!

The final event was the ring toss. This consisted of strapping a stick vertically on your plan and sliding a silver 2-inch aluminum ring over it. Contestants then had to takeoff and then using whatever maneuver they wished try and land the ring closest to a cone placed in the middle of grass landing area. Dale Anderson was the closest with the ring landing only 3 paces from the cone. I was happy to report that there were no planes lost this year in this event.

The overall winner of the July fun fly was Andy Noll with Kevin Carlson pulling away from the pact in overall points. Kevin now has a 3-point lead over Phil Vaughn and the word on the street is Phil will be missing the August fun fly! There's only three more months left in this year's Fun Fly season. All pilots and spectators are welcome.

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

FUN FLY RESULTS

Name	Place 1st Event	Place 2nd Event	Place 3rd Event	Place Final	Points
Doug Jelinek	9	7	6	8	18
Phil Vaughn	2	5	8	4	22
Kevin Carlson	2	6	2	2	24
Andy Noll	1	2	5	1	25
Dave Dentz	4	9	7	6	20
Ray Jelinek	13	14	10	12	14
Dan Thiede	3	8	7	5	21
Chris Cone	12	12	12	11	15
Marc Davis	8	4	11	9	17
Paul Castrodale	5	11	13	10	16
Ken Dinkel	11	17	10	13	13
Dale Anderson	7	13	1	7	19
Stan Zdon	3	3	9	4	22
Steve Ulrich	10	16	13	14	12
Paul Rono	9	1	3	3	23
Jeff Flander	6	8	4	5	21
Bob Nagle	4	10	8	8	18

In July we also had the club's annual Fun Scale Contest. This event was a lot of fun for all, we had some great planes, great flying and great food. If you have not participated in this event before I encourage you to do so next year. It's a very low-key event that is meant to be fun.

By the time that this is published the August combat meet will be over with but we still have two more events this month. August 21 is the fun fly with the Scale Fly-In a week later on August 28. The Scale Fly-In is for any kind of scale airplane so come on out and see some nice models. That's all for this month!

Marc Davis

Fun Fly Standings

Name	Total Points	Current Standing
Andy Noll	82	6
Andy Thunstrom	51	14
Dale Anderson	70	9
Dan Thiede	89	3
Dave Boll	46	15
Dave Dentz	52	13
Doug Jelinek	69	10
Eric Malkerson	41	17
Jason Proffit	14	24
Jeff Flander	83	5
Kevin Carlson	93	1
Marc Davis	76	7
Mike Dorff	11	26
Paul Castrodale	74	8
Phil Vaughn	90	2
Ray Jelinek	63	12
Stan Zdon	86	4
Bob Nagle	35	18
Darren Bitzer	16	22
Steve Ulrich	45	16
Paul Rono	66	11
Chris Cone	15	23
Ken Dinkel	13	25

REAGAN QUOTES

"I have wondered at times about what the Ten Commandments would have looked like if Moses had run them through the U.S. Congress."

"The taxpayer: That's someone who works for the federal government but doesn't have to take the civil service examination."

FLIGHT SAFETY #2

From the A.M.A. Insider and the Mid-Missouri Radio Control Association

Improving Your Helicopter Flying Skills

by Bob Ackerman

I have watched most of the helicopter pilots around the area over the past few years and I have seen great improvements with their flying skills. And this is great. But I have noticed that many helicopter pilots are rushing to get into forward flight and on to aerobatic flight without working on the basics. With any helicopter, every flight starts in a hover and ends in a hover (hopefully). Everything in between doesn't matter. To improve your flying skill you need to practice hovering.

If you watch most helicopter pilots at the field, they place their helicopter on the ground 20 to 30 feet in front of them, bring the helicopter up to a stable hover, then quickly turn around and head off to fly around. For the most part that is okay. Approach to landing is another story. Many pilots come in too short or too long and end up hovering backwards to in front of the pilot, and then landing. Other pilots enter a high hover in front of the pilot and then descend backwards to a lower hover for landing.

I propose to all the helicopter pilots out there to spend some time on the hover circles just hovering. There are a couple of skills you need to do while hovering. Some of these are real basic, but they lead to harder elements of hovering.

Start in your normal hover with the nose pointed away from you. Don't watch the tail; you should watch the nose because that is the direction the helicopter normally flies in. Now turn the helicopter so that it is 45° from you and hold that hover. Now turn back to the other 45°. Work your way up to 90° on both sides.

Now here is the hard part. Do you know where you just placed your helicopter on the

Continued on Next Page

ground for the first takeoff? Do you know where you stand all the time? Good. From now on you stand at the same spot. From now on you do not place your helicopter on the ground at the same spot. Spend your practice time by practicing taking off and landing at different spots on the field.

Next, take the two elements mentioned above and practice that 45° and 90° turn at different places around the field. Hard, isn't it? How about changing the altitude? Instead of five feet in the air, try the hovering at three feet, or 10 feet. Helicopter pilots get comfortable with their helicopter in a hover at a certain altitude and a certain distance in front of them. The idea here is to move around and try different locations. The above is all good but you would be surprised at the number of helicopter pilots who do not, or have not, practiced any of the above.

Now we take hovering to the next level. Pick several points around the field. Hover the helicopter to that location and stop over the mark. This could be a clump of grass or an imaginary spot on the ground. Slowly bring the helicopter straight down and land on that spot, then back up into a hover. Move to another point. You will be surprised how really hard that is at first.

Next make it more difficult. As the helicopter move from point to point, the helicopter must fly in a hover motion only. You must keep the helicopter pointed in the direction of flight. After stopping at a selected spot, turn the helicopter to face the new direction of flight and then fly at hovering flight to the next stopping spot. Yes, I know, it can be difficult.

If you think about it, you should be able to come up with dozens of drills to practice your hovering. Flying side to side for most beginners is the first thing they learn. Turning the helicopter and flying in a forward direction is more difficult. Flying backwards, except when pointed away from you (the nose that is), can be very difficult. But the more you practice the better you get. And the more different types of practice you do, the better you become.

Another area I would like to discuss is flying pattern. Many helicopter pilots start from a hover and head off almost straight up to have some fun. Helicopter pilots should concentrate on a hover taxi out onto the runway, just like our fixed-wing friends do, turn to face down the runway, and fly out in a pattern.

When done flying around and after doing whatever you want to do while in forward flight, you should practice arriving in the pattern. Fly downwind just like the airplanes, turn onto the runway, and in a controlled approach descend and slow down so that the helicopter flies into a hover right in front of you. Once you have a nice hover in the middle of the runway, turn the helicopter to the side of the runway, hover fly to the sideline, turn to face the runway, and land.

The general point of this entire article is to practice what you don't do, and practice what you normally do but in a little different fashion. Helicopters are all about the hover, and the helicopter can hover anywhere on the field. The problem is most pilots have not practiced hovering all over the field.

Attitude recognition gained from all that hovering practice will to become second nature. Knowing how to correct the attitude of the helicopter from any attitude will help the pilot to progress with aerobatics many times faster than relying on sheer luck, which is what most people do rushing into forward flight. The hard work up front will pay off later learning aerobatics because every angle of the helicopter will be familiar and therefore more easy to correct, carry-out, or bail from to avoid a danger.

Contributed by Stan Zdon

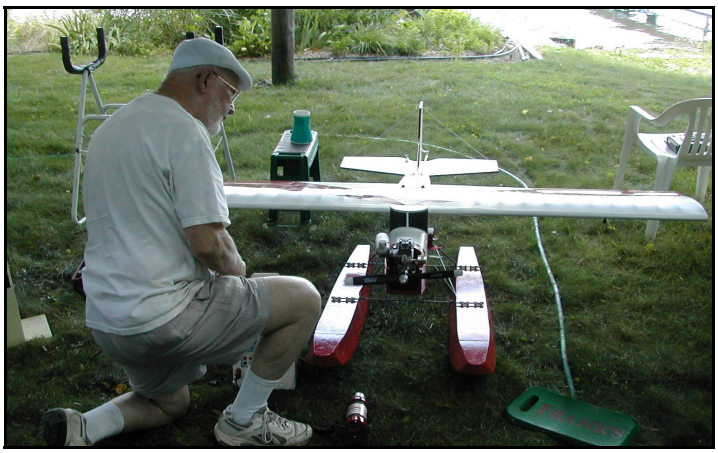
PILOT TALK

Student Pilot: "I'm lost; I'm over a big lake and heading toward the big E."

Controller: "Make several 90 degree turns so I can identify you on radar."
(short pause)... Controller: "Okay then. That big lake is the Atlantic Ocean. Suggest you turn to the big W immediately ."

2010 ACRC FLOAT FLY

PICTURES BY KEN DINKEL



SERVO CHATTER

902 - 88TH LANE NW
COON RAPIDS, MN 55433

Jim Taylor's Cub being retrieved after falling from the airplane eating tree in background.

ACRC BOARD MEMBERS

PRESIDENT
Erik Castrodale

ecastrodale@gmail.com

TREASURER
Jake Groetsch

jgroetsch@comcast.net

VICE PRESIDENT
Dan Thiede

warbirdflyer@earthlink.net

INSTRUCTION COORDINATOR
Andrew Thunstrom

andrewthunstrom3@q.com

MEMBERSHIP SECRETARY
Stan Zdon

szdon@yahoo.com

FIELD SAFETY OFFICER
Joe Coleman

joseph.coleman@comcast.net

RECORDING SECRETARY
Steve Ulrich

ulrichs@comcast.net

CONTEST COORDINATOR
Marc Davis

flying_davis@yahoo.com

ACRC Website - www.anoka-rc.com

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

SERVO CHATTER EDITOR
Stan Zdon
szdon@yahoo.com

CONTRIBUTORS THIS MONTH
Erik Castrodale
Joe Coleman
Marc Davis
Ken Dinkel
Steve Ulrich
Stan Zdon

ACRC SPONSORS
King Kong Hobbies
Abraham Technical
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Cambridge State Bank
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Deadline for the next newsletter is: September 1, 2010

CALENDAR OF UPCOMING EVENTS

Thursday – August 19
- ACRC Club Meeting

Saturday – August 21
- ACRC Fun Fly

Saturday – August 28
- ACRC Scale Fly-In

Saturday – September 4
- ACRC Electric Fly