



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

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ANOKA COUNTY RADIO CONTROL CLUB, INC.

MAY 2017

THE MEETING WILL BE THURSDAY, MAY 18, AT THE FIELD!!

PRESIDENT'S CHATTER

Here it is, May already. You may have noticed the new fence and runway resurfacing. I want to thank Jeff Slater for getting the estimates and following through the completion of the projects. I would also like to thank other members (too numerous to list here) who help clean up after the project, pulled out the old fence and got rid of excess dirt. The sod on the edge of the runway had overgrown it by about 12 inches all the way around. Cracks were filled and sealcoat added. About 300 gallons of Sealcoat and 5 gallons of crack filler were used. Lets us take care of it ongoing in the future. Along the lines of taking care of the runway, please do not do preflight runups on the asphalt approach pads, you will noticed fuel spots in those areas now, that will erode the asphalt. So in the future please do run-ups on the grassy area near the approaches. Use the grass behind the center fence for the center approach. The excessive fuel will be released on the grass instead of the asphalt. To minimize this problem we can install concrete pads at those locations. (The electric Flyers are complaining about their tires losing traction because of the oil spills on take off) For carburetor tune-ups please do so at the extreme north and south end of the field and point your aircraft in the northeast and/or the southeast direction while doing carburetor tuneups and high-speed run ups. You guys who fly electric airplanes please don't be spilling electrons all over the grass. The fuel guys are tired of having their airplanes contaminated by them and causing glitches that sometimes results in an airplane crashes. Bad enough that the new fence and the flagpole are working together causing interference.

If you missed the last fun fly you missed a good time. We had five contestants; they were Bob Moser, Stan Zdon, Jeff Smith, Rick Teteak and Dale Anderson. Jeff Flander would've been the sixth contestant but unfortunately he drilled it into the ground on warm up (good job Jeff).

The first event consisted of take off, loop, touch and go, roll, touch and go, stall turn, touch timed wheels to wheels. There was a five second penalty if you miss the runway and touched on the grass.

Rick took first place 0:32.47 minutes (he did a heck of a fast loop and touch, you should've been there to see it, it was fast.)

Bob placed second	0:44.35
Stan placed third	0:56.53
Jeff placed fourth	1:02.8
Dale placed fifth	1:23.62

The second event was takeoff, five 360 turns reverse direction do five 360 turns and touch, timed wheels to wheels, with a five second penalty if you miss the runway and touched on the grass.

Jeff took first place	0:37.81
Rick took second	0:44.31
Bob took third	0:54.88
Stan placed fourth	0:59.25
Dale placed fifth	1:00.16

These flyers had to be careful with the wind in the above event; they could've ended up in Minneapolis, well maybe Blaine, if they weren't careful.

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The third event was the 15-second climb, dead stick and touch, timed wheels to wheels, five-second penalty if touching in the grass and not the asphalt. There was a misunderstanding between Bob and heckling judges. Bob thought it was time for the longest flight dead stick; it was shortest time wheels to wheels. So it was a do over for Bob. By the way Bob was flying a foamy airplane.

First place was taken by Rick 0:32.43 Second place is taken by Stan 0:33.03 Third-place was taken by Bob 0:35.75 Fourth place was taken by Dale 0:36.06 And in fifth place was Jeff 0:39.63

Overall Rick place first, Bob was second, Stan was third, Jeff was fourth, and Dale was fifth. Stan left with two broken airplanes; good to see you out there Stan.

That's it for now.

Virgil Okeson

FROM THE VEEP

During a recent conversation with a fellow modeler from another club, the subject of new member recruitment came up. He jokingly said that he would like to take a survey of his club members to find out the median age. I replied, no, you don't want to know that.

I belong to two dog clubs, a car club, ACRC, and requisite AMA, they all are saying the same thing: we have to get younger people involved if we are to survive. Great idea, say all, but just how are you going to get today's instant gratification, tweeting, Facebook helicopter parented, participation trophy-ized, nose-in-the-phone youth of America? That's the \$64,000.00 question. Yes, we have been successful in training young people, but how many are still around flying? I admit it is a grand idea to involve youngsters in model aviation, but I believe we shouldn't put all of our "eggs" in one basket.

Perhaps we should think about involving somewhat older students, like mid-life crisis age folks. Face it, stuff costs money these days and teenagers with girls and cars on their mind may not have the disposable income that a slightly older person has. Well, maybe not enough extra cash to buy a new Ferrari, but an airplane, radio system, and support equipment won't put as big a dent in the budget verses a teenager's finances. The point is, let's be open minded and creative about new member recruitment. Membership retention is just as important.

For this month's raffle, I've got a Spitfire MK2 ARF from Phoenix Models. It is approximately one-eighth scale at 55-inch span, and requires a 45 to 55-glow power or equivalent electric. Also has retracts and working flaps. This and a couple more items will be up for grabs.

Tim Karash

MEMBERSHIP NEWS

The meeting this month will be **AT THE FIELD**. The starting time is 7:00 PM and if you get there early you can get in some flying before the meeting. Remember that you should be using your current membership card to mark your channel and guests should be using their AMA card to verify their AMA membership.

In 2014 the By-Law concerning nominations for the Board was changed. Nominations are now held in May and June with the election in July. The four members whose terms end this year are Virgil Okeson, Jeff Flander, Tim Karash and Stan Zdon. Hopefully we can convince them to re-up for another two years.

ACRC members should remember and follow the safety rules. We all have mental lapses from time to time so gently remind others when you see them having a SENIOR MOMENT. Starting engines with the plane faced other than toward the runway and full RPM run-ups in the pits seem to be the most frequent violations of club rules. If you just visualize where the prop blades will go if the blades break off it will help you remember why the club has these rules. The plane should be started in the pit area and moved to the run-up area for the high RPM run-up.

The flight stations are close enough so pilots can communicate their intentions concerning take-off, landings, etc. Be sure to let other pilots know what you are going to do. Shout out "coming out", "taking-off", "landing", "on the field" etc. Remember, if the wind is from the north, you should be flying from the 5 stations by the south half of the runway and vice-versa.

Be sure that you are standing on or behind the flight station blocks. If you stand ahead of the blocks you could be blocking the view for someone who is landing and if you are standing way ahead of the blocks you are definitely in a Danger Zone. All flying is to be done beyond the runway. This even applies to Micro-Electric planes (See Rules 9 & 10). Once you land, clear the runway and taxiways as quickly as possible. If you have to do maintenance on your plane or change the battery, it should be taken back to the pits.

THE NEXT MEETING WILL BE **AT THE FIELD** ON MAY 18 AT 7:00 PM. The summer meetings will be at the field until August. The fun-fly will be on Saturday May 20 at 10:00AM.

Stan Zdon

A Look Back

May 1989

The official ACRC newsletter gets a facelift. The currently used format and header were put in place for the very first time this month. Also the publication date has been moved forward one week to allow everyone to actually read the newsletter before the meeting. Novel concept. A "Scale/Pattern" contest announcement was published for June 24 & 25, but no details as to what kind of criteria were intended by that title. Also included was a very well thought out new aircraft check list. Perhaps a reprint should be nailed above every workbench. (Editor's Note – A pattern contest was held on Saturday and a scale contest was held on Sunday)



May 1999

President Mark Felland brought home another well used plane from a swap meet while newsletter editor Tim Brockman's wife said get rid of that old VW, a trailer, a motorcycle, and a biplane. Stuff expands to fill all available space. I think that's a physics theory. Meanwhile, back at the April meeting minutes, membership and the treasury continue to grow. A new pilot certification program was announced, entitled "Wings". This requires demonstration of specific maneuvers and a certificate of proficiency will be awarded to the new pilot. Pattern and Fun Scale contests are on the horizon. The big news was Dan Stahn, Doug Rude, Todd Haug, Jim Wright, Brian Dorff, Ray Jelinek, Jerry Nelson, Eric Malkerson, and Bud Durant all brought new aircraft for Show and Tell. BTW: not to be outdone, Bud brought two.

Tim Karash

ACRC MINUTES

Board members present:

Virgil Okeson, Stan Zdon, Bob Proulx, Brett Ohnstad, Tom LaRose, Tim Karash

14 members present, plus board, and new member John Loberg.

Membership: - Now at 94 members.

Safety: No problems as of yet despite a considerable number of spring flights.

Events:

Monthly club Fun Fly on Saturday 4/22

Bob has created and distributed pattern contest posters.

The East Bethel Booster Days event with take place on July 15th, however he has received no response from previous contact person.

City of Shoreview has Contacted ACRC regarding their upcoming Slice of Shoreview Days July 21 - 23. The event will be held Island Lake Park. It's near Victoria and 694. Bob Proulx to pursue details and report at next meeting.

Training:

An instructors meeting was held and all is set for the season, starting next Wednesday, 4/19.

Treasurer:

Expenses \$1979.99 Income \$86.00

Old Business:

Club sponsor ads to be placed in newsletter for 'Don't Fence Me In' and 'Blackjack Sealcoating'. These ads will run for one year and have reduced sealcoat cost by \$200, and fence cost by \$900.

Fence posts are in as of today, possible fence fabric on Saturday 4/22. A secondary catch fence will be added at center taxiway. It will be 20 ft long, 12 ft back from main fence and will cost an additional \$200.

Club picnic tables need repair. Virgil will donate necessary wood.

New Business:

Field cleanup day proposed for 4/26 rain date 5/3

Family memberships need definition. It was agreed upon to define a Junior member as anyone under age 19 at beginning of calendar year. The age definition applies to Family members as well.

Matt Campson has submitted a "Crash of the Month" photo and will be published in next newsletter.

A truck that belongs to Central Wood Products has been parking in the field access road (which belongs to Central Wood Products), the trailer has a large amount of advertising for Central Wood Products.

Motion made by Bob Proulx to move the ACRC sign to the space between the two field roads. Motion seconded by Stan Zdon. Tom LaRose to talk to Hoffman Bros (not Bobby Hoffman) regarding sign placement.

Show and Tell

Jeff Slater brought a couple of inexpensive FPV drones. From WL Toys, a \$40 indoor Hexcopter does not hover, but has a camera. The other, for \$6 more, is a considerably larger Q282 Skyhawk.



Includes TX and video screen. It will record flight for later playback and it hovers. Add \$30 for goggle style video screen holder.

Raffle:

1stP-51 ARFDuane Orson2ndEdge 540 Foam FlattieJeff Slater3rdSteel Ammo BoxBruce Martin

BOARD MINUTES

Board members present:

Virgil Okeson, Bob Proulx, Stan Zdon, Brett Ohnstad, Tim Karash, Tom LaRose

Field to be closed April 21 through 23rd for seal coating. Stan to email all members.

Food for MARCEE event has not been finalized. Virgil to contact Amy regarding details

Pattern contest shirts: Brett Ohnstad to work out design possibilities and possible on-site creation

Tim Karash

ACRC EVENTS

As of this writing, things are already off to a great start out at the flying field. If you haven't had a chance to get out there yet, here's what you've missed. We had our first fun-fly in late April, the runway has been seal-coated and all the grass around the perimeter has been removed, the new safety fences have been installed, and we had an all-electric fun-fly on May 6 with a pretty decent turnout.

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The next few events are - another fun-fly on May 20 and then the annual ACRC Spring Fly- In on June 10. Please note that this fly-in will be an AMA sanctioned event and there will be a \$10.00 Landing Fee to participate. The landing fee will include lunch.

The plans for the Pattern Contest on The weekend of June 17 & 18 are still in process and details will be released as they become available.

Please remember that, even if you don't fly in the Pattern Contest, we could still use several volunteers to help with running the contest, and you might even decide that pattern flying is something you'd like to learn more about. In the mean time, see you at the field.

Bob Proulx

ACRC INSTRUCTION

Flying season is here and Wednesday night training started as scheduled. We had a good turn out of trainees an instructors, it was a good start with ground school and lots of flying time. Emails are still coming in for training. We will have six entering the Intro Pilot Program starting off in May.

Checking control surface movement.

Setting up your R/C plane correctly is crucial to its survival. Getting the control surface movements correct before you go flying is of paramount importance, and yet unbelievably some R/C pilots (and not always beginners) take off their plane with reversed controls (pre-flight checks are covered later), and they wonder why the plane crashes a few seconds after take off. Check the R/C transmitter modes page to make sure your plane is responding correctly to your stick inputs, but here is a general summary of control surface movement in relation to stick movement.

Elevator stick back = up elevator.

Elevator stick forward = down elevator.

Rudder stick left = left rudder (when viewed from above).

Rudder stick right = right rudder.

Aileron stick left = left aileron up, right one down. Aileron stick right = left down, right one up. Throttle stick back = motor completely off. Throttle stick forward = motor on.

The amount of deflection of the control surfaces, i.e. how far they move, should be outlined in the instruction manual. Deflection amounts can be adjusted electronically if you have a computer radio (in the 'Travel Adjustment' or 'End Point Adjustment' menu) or adjusted manually.

To adjust manually simply move the linkage to a different hole on either the servo horn or the control horn. Moving the linkage to an outer hole on the servo horn increases the deflection of the control surface, an inner hole decreases deflection. Conversely, moving to an outer hole on the control horn decreases deflection while an inner hole increases it. Make any necessary adjustments to match the amounts given in the instructions. If you've bought a good RTF and it's been set up well in the factory, you probably won't need to adjust anything - but it's always worth checking.

Wheels up, in the air! Wheels down, on the ground!

Another Great Day of Flying!

Tom LaRose

Crasher of the Month



The first Crasher of the Month award goes to Matt Campson. The picture is dated April 13, 2017 at about 4:00 PM.

STALLS AND SPINS

Model Airplane News - May 4, 2017

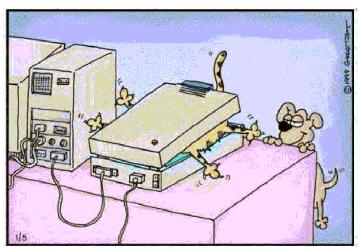
The stall, or more accurately the inadvertent stall, has probably caused more RC planes to crash than any other cause. The safety of your airplane depends on your knowledge of its slow-speed handling and stall characteristics. To minimize the number of crashes due to stalls, the pilot must understand the principles of what makes a plane fly and how to make practical use of the information.

First, we must understand how the wing supports the plane in flight. As the plane moves through the air, the amount of lift is determined by the particular airfoil and its angle of attack (AOA). The AOA is the angle formed by the wing's chord line and the oncoming air stream. The other primary factor in the amount of lift is the speed of the airfoil through the air. A stall will occur when the AOA exceeds the wing's critical angle of attack. At this angle, the lift suddenly decreases and the drag increases, resulting in the plane losing altitude very rapidly. The pilot has control over the AOA with the elevator. For example, if the pilot inputs up elevator the tail drops and the nose rises, which increases the wing's AOA. important point to note is that the plane can be moving in any direction, including straight down, and a stall will occur if the AOA is exceeded.

The only way to recover from a stall is by decreasing the angle of attack below the critical angle by pushing forward on the elevator. By learning your plane's slow-speed and stall behavior, you should be able to avoid getting into an unintentional stall situation in the first place. Take your plane up high; reduce the throttle while increasing the elevator deflection to maintain your altitude. As it slows, note how the plane reacts to your control inputs, and when it does stall, note if a wingtip drops or if it stalls straight ahead. Recover from the stall by lowering the nose to gain flying speed. Adding power will speed the recovery and minimize altitude loss. Practice this until you can recover with the wings level. All models stall differently, so you'll want to learn your model's characteristics.

Spins are an exciting aerobatic maneuver when done intentionally, but an unintentional spin close to the ground will spoil your day. A spin cannot occur unless the plane is stalled. If at the moment of stall there is a yawing moment, an autorotation will commence. The spin is caused by a complex series of events. If rudder is applied as the wing stalls then it will cause one wing to drop. For instance, if left rudder is applied with up elevator, the left wing will move downward and rearward resulting in a left roll. The left wing will therefore have a greater angle of attack and slower speed relative to the right wing. The right wing will essentially be less stalled than the left wing resulting in autorotation about the spin axis. In the fully developed spin, the aerodynamic and inertial forces are stabilized into a predictable pattern of rotation. The rotation, airspeed and vertical speed are stabilized and the descent path is vertical. Unless something is done, the spin will continue.

Turns in the landing pattern can lead to spins if a skidding turn is attempted. A skid is when too much rudder is used for a given bank angle. Often a pilot will use rudder when overshooting the turn in order to avoid a steep bank angle. This is the recipe for a spin. If you find yourself in a spin, most planes will recover easily by letting go of the controls and letting the speed build up. Some high-performance planes require opposite rudder and/or down-elevator to recover. Use caution during the recovery as the speed can build up quickly. Also, avoid a secondary spin during the recovery by not using excessive up elevator. has Every plane peculiar its own characteristics, so make sure you try spin recovery at high altitudes.



"Cat Scan"









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Abraham Technical
Aerospace Welding
Cambridge State Bank
T & G Hardwood

<u>CALENDAR OF</u> <u>UPCOMING EVENTS</u>

Thursday – May 18

•ACRC Meeting-Riverwind

Saturday – May 20

ACRC Fun Fly #2

Saturday – June 10

•ACRC Spring Fly-In

Thursday – June 15

•ACRC Meeting-Riverwind

Saturday – June 17-18

•ACRC Pattern Contest

Saturday – June 24

•ACRC Fun Fly #3

Saturday - July 8

ACRC Warbird Fly-In

Thursday – July 20

•ACRC Meeting-Riverwind

Saturday – July 22

•ACRC Fun Fly #4