



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

ANOKA COUNTY RADIO CONTROL CLUB, INC.

NOVEMBER 2018

THE MEETING WILL BE THURSDAY, NOVEMBER 15, <u>RIVERVIEW PARK</u>

PRESIDENT'S CHATTER

Greetings fellow club members. The holiday season is just about upon us. It is time to secure the appropriate catalogues, mark our needs (wants), and place the catalogues in an appropriate place where Santa can not miss seeing them.

We are undertaking replacement of two tables and one or two start up stands along with possibly another sealcoat job on runway in 2019.

I think it is also time to consider adding basic signage that indicates minimum requirements to fly at ACRC Field, i.e.: you must have AMA and ACRC membership to fly here. ACRC members must post current membership card on the board. Guest flyers must be accompanied by an ACRC member and have AMA membership. Otherwise this is a no fly zone for you. I welcome feedback. As a member it is your club. We are all responsible for what happens at the field. We need to protect ourselves and our privilege to fly. Remember the landowner lets us occupy our field; we do not own it. Do not let non-members or anyone else mess this up for you. Please take ownership of this, but be courteous when doing so. Please do not be offended if another member asks you to see or post your membership card. None of us know every member by sight.

Virgil Okeson



MEMBERSHIP NEWS

CHANGE OF MEETING LOCATION

Because Riverwind Community Center is being renovated the ACRC meetings will be held at a building at Riverview Park until further notice. To get to the park take Hanson Blvd south past Coon Rapids Blvd to 105th Avenue NW. There is a superette and a Pizza Flame on the corner. Turn right on 105th and the park is 6 blocks on your left. The address is 2420 - 105th Avenue NW. The coordinates for your GPS are:

45 09 38 N 93 19 43 W

ACRC rules require the use of either the ACRC card or an AMA card for guests. This is the only way that AMA insurance can be verified. According to the AMA, club rules become part of the AMA Safety Code for the club, and the Safety Code has to be followed for the AMA insurance to be in effect. Let's get those cards on the frequency board!!!

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 selfaddressed stamped envelope. Members who read

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the newsletter on line can print the application and rules from the ACRC website. Remember, **ALL** current members have to fill out a 2019 application and have their year 2019 AMA verified before they can be issued a 2019 membership card. Dues for 2019 are \$75.00 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 2019. It is easier to set the budget if the majority of the dues are in by mid-January.

REMEMBER - I need verification of your **2019** AMA. Sending a copy of your 2018 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

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

THE NEXT MEETING WILL BE AT **RIVERVIEW PARK** ON NOVEMBER 15 AT 7:00 PM. Remember, if you don't come to the meeting you can't win wonderful prizes.

Stan Zdon

VEEP REPORT

HI guys. Sorry I missed last meeting. Minor health problems. All is good now.

I had the opportunity to help promote our hobby at the science museum this past weekend through another area club I belong to. There was a brunch for donors at the museum centered on aviation and attended by Delta airlines. I built and demonstrated a model to show how an airplane moves in different directions through the air and what the control surfaces do. I found both young and older people showing a lot of interest and we all had a great time. Now one of our younger club members is going to use my working model in a presentation to his class.

The thought for the day is ... Every time I get the chance I like to get young people interested!

SERVO CHATTER

A Look Back

NOVEMBER 2000

18 Years Ago

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Not much happening in this month's newsletter as the flying season winds down.

Dan Stahn tempted fate on a windy day with his SIG Seniorita and fate won. Triage following the "incident" led to the discovery of an intermittent receiver power switch. Dan had noticed on previous flights that the switch "didn't feel right". When in doubt, throw it out!

Fun-Fly results, membership renewals, board position nominations, and a Swap Meet announcement (by yours truly) filled out the remaining pages.

NOVEMBER 1990

28 Years Ago

The 400-pound gorilla in the room is the AMA's implementation of the odd number channels beginning in 1991. The club had originally voted not to use these channels, however equipment upgrades have proven to be safe and cost effective.

Eight members have been nominated for the four open board positions.

The monthly raffle must have won the lottery, as a motor, 3 kits, and building supplies were up for grabs.

During the October 1990 meeting, much discussion had happened regarding board member duties. These discussions resulted in proposed changes to 4 By-Laws and adding 2 more definitions of duties to be voted on in November.

Jeff Slater's Who's Who column put the spotlight on Gene Jansen and his son, Randy.

Tim Karash



ACRC MINUTES

Board members present

Virgil Okeson, Stan Zdon, Bob Proulx, Tim Karash, Marc Tellevik, Bruce Martin

8 Members present plus board

Returning member Keith Moldenhauer

Membership Report: 8 members have rejoined.

Treasurer's Report:

Income: \$234.00 Expenses: \$1680.68

Training Update:

Bob Barton to take over as training coordinator for Tom LaRose.

Motion to accept proposal by Stan Zdon, 2nd by Tom LaRose, motion carried.

Safety Report:

None.

Events Update:

No events are scheduled for remainder of the year, however Fun-Flies may happen if weather is permitting.

Old Business:

New grass is coming through nicely.

Lawn mower needed some minor repairs and is now in storage.

Two non-club members helped maintain our road in 2019. Tim Hoffman put sand down on our road and graded, Bruce Johnson used his tractor to level road several times prior to sand addition. Club members and the board felt a "thank you" would be appreciated.

A motion was made by Stan Zdon to give each a \$50 dinner gift card, 2nd by Tim Karash. Motion carried.

New Business:

Our club non-profit status with the state of Minnesota has been renewed.

After discussions last month and at this meeting regarding the poor condition of our picnic tables, a motion to purchase 2 picnic table frames from Ace Hardware and add treated wood was made by Stan Zdon, 2nd by Marc Tellevik. Motion carried. SERVO CHATTER

Club startup stands are deteriorating as well. A motion was made by Marc Tellevik to rebuild 1 per year, 2nd by Neil Olson. Motion carried.

Raffle:

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Stinger 60 kit was won by Neil Olson

Tim Karash

PROPELLER BALANCING

Information from **Bolly Products**.

It is important that propellers be well balanced. The propeller should also sit square to the engine prop driver. Check for an equal height under each tip with the prop sitting on a flat surface. Many props (especially molded nylon types) will have an uneven bottom (and/or top) surface due to uneven material shrinkage. Check this before checking for equal heights below each tip. It can happen that the shaft hole isn't square to the rear face of the hub, for this it is a good idea to step or taper ream the prop, leaving only a small amount of the hole at the required diameter. Please note, unlike machine made products, which should be perfectly balanced (but often aren't), hand made props will require some balancing and finishing. Just to be safe, all props should be checked.

We use 4 types of prop balancers:

1.) **Basic Double Cone type**. This is the common easy to use type. Take care to hold this balancer square between the fingers. It is easy to create a false reading.

2.) **The Pin and Cone type**. This type is good for checking balance in 2 directions, a) along the length, b) across the hub. The position of the cone adjusts the sensitivity. High = insensitive, Low = sensitive or 'overbalance'. Make a series of split sleeves to fit larger shaft diameters. This type of balance is very good for multi blade propellers.

3.) **Tru-Spin type**. The tru-spin style of balancer has 2 sets of rotating wheels onto which the prop is placed via a shaft that is fitted through the hub of the propeller. These are the most expensive, but accurate and hardest to use. Caution, we have found the alloy wheel types to be far better than

the plastic types. These balancers are also very good for balancing spinners. Note - many spinners are out of balance.

4.) **Magnetic type**. To a large degree these work on a similar principle to the basic double cone type, but without the friction of the fingers. The good versions are as accurate as the tru-spin type. They are at a disadvantage when balancing large, heavy propellers.

At Bolly we use all 4 types at different stages for different jobs when we factory balance a propeller.

Always balance by evenly removing material (sanding) from the top (curved) side of the blade. To remove material from the bottom may change the pitch and to remove material from the blade length or chord will create a dynamic imbalance. When removing the material, the choice of abrasive paper will depend upon the type of prop material. When modifying nylon base props, use a very fine abrasive paper as leaving any scratches on the surface is very dangerous; a deep scratch is potentially fatal. Wood props are easy to work with any appropriate abrasive paper. GRE / CRE props are very tough and will often require a very course paper for initial work, finishing with finer grades. It is common for the prop to be heavy one side (across the blade). It is necessary to evenly remove material from the LE side of one blade and the TE side from the other, i.e. it is best to use a pin and cone or tru-spin type balancer.

USING PROP BALANCERS

It is surprising how many modelers have never used a prop balancer, and even more surprising as to how few know how to read what the balancer is telling them. With any balancer, and any propeller, the prop should stay stationary at any point throughout its 360 degrees of rotation. Sounds simple, but it isn't. If you have ever had a prop that refuses to stay put, or one that is different when rotated through 180 degrees, it is almost certain that the prop has a heavy side, across the blade (chord) as opposed to along the blade (diameter).

The technique we recommend is this:

1.) Check the blade horizontally to find the heavy

blade and mark the blade H.

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2.) Put the prop vertically, heavy blade down, and if the blade sits off center, mark a H on that side of the heavy blade. Tip - to help determine the heavy side of a prop - use a piece of clay stuck to a hub or blade.

3.) Now bias the material removal from that half of the heavy blade. In extreme cases material may be removed from the side of the hub, or even the opposing blade - but on the same side of the hub.

Three and 4 blade props use the same principle, except it is often a combination of blades that need to be checked.

SUMMARY - Any of the prop balancers can be used, just remember to check the prop in horizontal and then vertical. If in doubt, check the direction of the imbalance with a small weight on the side opposite what you believe is the heavy side. This will also allow you to gauge the amount of material to remove.

PROPELLER CARE

After spending time balancing the propeller, take care to keep it in balance on the field. Frequently clean off residue, i.e. - grass, insects, earth, etc. from the blade. A propeller should not be used if any damage or stressing is evident. Avoid storing propellers in a stressed position or hot environment, i.e. - model nose down, resting on the prop. The propeller may warp under these Nylon needs to maintain moisture conditions. content for optimum properties. Most manufacturers moisture condition the props before sale.

PROPELLER SAFETY

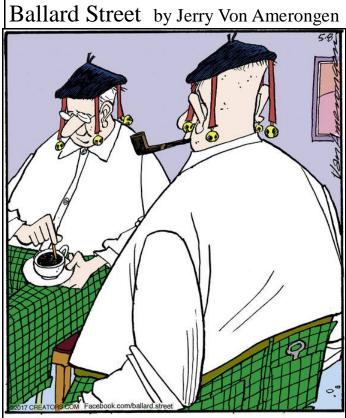
Propellers are potentially dangerous. Please treat them with care, respect and common sense. Modelers have died from injuries caused by propellers. Remember a static propeller is safe; it is how they are used that causes the problems. Your safety (and those around you) is your responsibility. At Bolly we have a test bench where we frequently test our products. When testing a 20cc engine we had a prop kick loose (the prop nut wasn't tightened sufficiently), the prop flew forward 3 meters and hit the roof that was 4

meters above. It then bounced back to the test stand. It was a very good example of the potential dangers; luckily no one was nearby when it happened.

- 1. Correctly secure the propeller.
- 2. Do not stand to the side of, or lean over a rotating propeller. Always adjust an engine from behind.
- 3. Have a helper hold the model (or secure the model in some way), and keep spectators well clear.
- 4. Discard any propeller that is scratched, nicked, stressed or damaged in any way.
- 5. Almost all props sold will have an instruction leaflet, please read them and take heed of them.



SERVO CHATTER



Perhaps the club's recruiting problems have something to do with the club hat.

ACRC BOARD MEMBERS		SERVO CHATTER EDITOR	CALENDAR OF
<u>PRESIDENT</u> Virgil Okeson	<u>TREASURER</u> Marc Tellevik	Stan Zdon newsletter@anoka-rc.com	<u>UPCOMING EVENTS</u>
president@anoka-rc.com	treasurer@anoka-rc.com	newsietter wanoka-rc.com	<u>Thursday – November 15</u> •ACRC Meeting-Riverview
<u>VICE</u> <u>PRESIDENT</u> Jeff Slater <u>vicepresident@anoka-rc.com</u>	INSTRUCTION COORDINATOR Bob Barton	<u>CONTRIBUTORS</u> <u>THIS MONTH</u> Tim Karash Virgil Okeson Jeff Slater Stan Zdon	<u>Thursday – December 20</u> •ACRC Meeting-Riverview <u>Tuesday – January 1</u> •ACRC Freeze Fly <u>Thursday – January 17</u>
MEMBERSHIP SECRETARY Stan Zdon membership@anoka-rc.com	FIELD SAFETY OFFICER Brett Ohnstad	ACRC SPONSORS Blackjacks Asphalt King Kong Hobbies Hobby Zone Big Sky Hobby	•ACRC Meeting-Riverview <u>Thursday – February 21</u> •ACRC Meeting-Riverview
<u>RECORDING</u> <u>SECRETARY</u> Tim Karash	EVENT COORDINATOR Bruce Martin	Flight Line Gifts Woodworking Plus	
<u>secretary@anoka-rc.com</u> ACRC Website - <u>http://w</u>	events@anoka-rc.com ww.anoka-rc.com		

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