



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

FEBRUARY 2009

THE MEETING WILL BE THURSDAY, FEBRUARY 19, AT RIVERWIND!!!

PRESIDENT'S CHATTER

The days are getting longer and the temperature is finally moving in the right direction. This basically means our winter project building is coming to an end soon. Hopefully everyone is on track to finish their projects; I know that I am two planes behind.

Some great news for our club; the MARCEE electric swap meet and silent auction was a big success for everyone involved. Dan Thiede and I hosted multiple tables of aircraft and miscellaneous items from the donated estate of Jack Overbaugh. Everything was auctioned off and it was quite the scene. At our next club meeting I will go into details of the event. Again, I would like to thank the entire MARCEE club for all the help and for giving us the chance to auction off such a great collection of aircraft.

I would like to start thinking about the spring cleanup of our field, possibly sometime mid April. Any volunteers will be appreciated and there will be information of this on our ACRC Forum.

On February 5th I stopped out at the field to check out how the runway repairs from last October have faired, and from what I can see the repairs have held up very well. Also on a preventative note, if we could place the small benches that are next to the starting stands up on the starting stands when we are finished flying it would be a great help, at least until warmer and dryer weather. Those small benches have been frozen in the puddles from last November.

See you at the field..

Erik Castrodale



Sukhoi Su-47 Bekrut

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.

Jim Taylor	(612) 868-0419
Lead Instructor	
Matt Campson	(763) 315-0342
Mike Dorff	(763) 360-7611
Mark Felland	(612) 362-2124
Mike Flander	(763) 439-6959
Al Spearbecker	(651) 261-1048
Jim Wright	(763) 786-7047
Doug Lewis	(763) 670-7678
(Helicopter and Plane)	

Meeting Minutes

Meeting called to order at 7:00 P.M.

30 members present.

Board Reports:

* Vice President: Dan Thiede reviewed the prizes for the evening's raffle.

* Membership: Stan Zdon reports that membership renewal is well underway.

* Treasurer: Jake Groetsch reports that the club treasury is in good shape.

New business:

* Al Spearbecker presented the club with three notebooks containing the rules for Fun Scale, Pattern and Scale Aerobatics. The pages were all laminated which will enable them to withstand hard use at the contests.

Raffle:

1st	John Jensen	Cutting Mat
2nd	Al Spearbecker	Deweyville Special
3rd	Joe Coleman	Epoxy
4th	Dale Anderson	Superstand
5th	Eric Castrodale	RealFlight Expnsn Pack
6th	Eric Castrodale	Fuel Filter
7th	Al Spearbecker	CA
8th	Dale Anderson	Contender aircraft
9th	Dale Anderson	Thin CA
10th	John Jensen	X-Acto Blades
11th	Mike Dorff	Zip Kicker
12th	Mike Dorff	CA Hinges

SAFETY IN THE WORKSHOP

Keep it Clean

Many injuries result from poor housekeeping in the shop. Trips, slips, and falls account for the bulk of these mishaps.

Scrap material and wrappings, loose parts, scattered tools and equipment, or oil spills can cause injury. Debris should be swept up and disposed of. Parts should be kept on workbenches. Tools should be placed where they cannot fall and cause damage or injury. Oil spills

should be covered with absorbent material and cleaned up.

Lighting, Heating, and Ventilation

Enough windows and overhead lights are required for a good level of overall illumination. Additional lighting should be available over benches and stationary tools.

When supplemental heating is required for winter workshop operations, the heating unit should be located to provide an adequate, even distribution of heat; but should not cause a fire hazard.

Adequate systems are needed to vent smoke, fumes and exhaust gases. Open windows and doors may provide enough ventilation in the summer. Special systems may be needed to remove exhaust fumes and other gases during the cold-weather months.

FLIGHT TRAINING

We are almost there, it won't be long and spring will be here. So we keep telling ourselves, anyway. Hopefully everyone has a Flight simulator to practice on and a set of skies for a plane just in case. Our training planning is going well we are scheduling trainers to cover Wednesdays and weekends at the field, and to be on call as needed. A Very Special Thank You goes out for all of the trainers that volunteer their time and effort. They are playing an active roll in training so new members can enjoy all the benefits that our club has to offer. We have a list of our instructors in the newsletter and online. Training guides and rules will be available at our monthly meetings.

We are also in the process of inventorying our equipment, which we should have done by the end of March. We should be good to go for spring and any special occasion that might come up in the new year. Remember to let me know of any new trainees so we can stay organized and follow proper training guidelines.

Happy Flying!!

Jim Taylor

In the Blink of an Eye

by Don Nix, AMAInsider Safety Column Editor

More often than not, that's about all the time it takes for most accidents to happen. I can think of one personal incident where the quick blink of my eyes saved me from more serious problems.

A couple of decades or so ago while living in Southern California, my wife and I decided to spend a long weekend at a cabin we rented occasionally in a small village up near Big Bear in the San Bernardino mountains. Being born lazy and losing ground ever since, I'm usually quite content to do as little as possible, especially if it requires exerting any physical effort. This time, though, I had an idea about how to both relax and do something productive at the same time. I'd just acquired a new R/C kit I was anxious to get started, and since it was of the type that goes together rather quickly with a minimum of tools or accoutrements, I took it along to build.

Fortunately, the cabin was equipped with a rather large, long table perfect for laying out plans and materials. While my wife lingered over coffee the first morning, I got everything ready to go; punched out all the die-cut parts (pre-laser), identified everything, made sure nothing was missing (even read the instructions!), and reached for the thin CA.

I had been especially careful to bring along a brand new, unopened bottle of the stuff so I wouldn't be stuck without enough to finish or have old material. (Remember that word "stuck.") The container was one where you snap off the top to open, and then reverse it to become the cap to seal it back. Looking at it carefully to be sure I snapped it cleanly, I did so and instantly got a face shower of CA. That's where the blink of my eyes saved me. Amazing how fast our body can spontaneously and involuntarily react when attacked. Not a drop got into my eyes, although one lid was partially glued shut. That stuff does set instantly under the right conditions!

Surprisingly, I immediately knew what had happened. The material was packaged at near sea

level, and I was up about 7,500 feet in the mountains. You can figure out the rest. The higher pressure inherent in the package at the lower altitude combined with the considerably reduced pressure at a much higher altitude outside effectively converted it to aerosol form for a split second. This would compare to sudden depressurization in an airliner at altitude, and works exactly the same way. Everything inside responds to an urgent need to go out until the pressure is equalized. (Brief digression: Don't you die laughing at those disaster movies that show an airliner decompressing with everything and everyone being sucked outside for several minutes? No way, no how.)

I got the model ready to cover by the end of the long weekend, but spent a good deal of time peeling CA from various locations on my face and neck. Incidentally, just plain soap and water will loosen the stuff in most cases so it can be more easily peeled. There are commercial debonders available, of course, but I don't think I'd use them on my face or near my eyes.

Later, in telling the above story to a friend in the CA business, he told me about an experience his company had when installing a new CA filling machine. They got everything—electrical, pipes, hoses, etc.—all hooked up and flipped the switch to give it a trial run. When they did, a hose connection failed and all in the area were pretty well showered with CA ... the thin type that sets instantly.

Point: Most accidents do happen in the blink of an eye, and sometimes it's difficult to anticipate them. Fortunately, most are preventable with a little caution, good sense and forethought, and we'll deal with some of those in future columns. In the meantime, if you've had an experience you'd like to pass on for the benefit of others, I'd be happy to hear from you:

Happy modeling and flying ... safely.

FLYERDON@aol.com



MEMBERSHIP NEWS

**IT'S GETTING CLOSER TO SUMMER.
LET'S GET THOSE NEW PLANES
BUILT !!!!!!!!!!!!!**

About 60% of last year's members have rejoined for 2009. This is a little less than last year at this time when it was about 65%. If any of your friends have not rejoined, please encourage them to do so ASAP. The 2009 budget is based on a projected membership of 100 fully paid members. If we drop much below that number we will have to cut services somewhere.

If you qualify for an All-Season patch for 2008 let me know at the February meeting or call me and let me know. I will be ordering patches in March and giving them out in April.

If you have any pictures that could be used in the newsletter send them to me. If they are digital, email them to szdon@yahoo.com. If they are prints mail them to me and I will scan them and return them to you. If you come across any articles on the Internet that could be use in the newsletter send me the link and I will download them and use them.

If you are interested in aerodynamics there are some interesting articles on the Embry-Riddle Aviation website:

<http://www.erau.edu/er/newsmedia/featurearticles.html>

The next meeting will be at Riverwind on February 19 at 7:00 PM.

Stan Zdon

Soldering: It's All About Heat and Clean

by Tom Ball

When I was teaching school back in the 1950s, I got a summer job with the company that installed the first dial telephone system in Elk Grove. Eventually I moved on to other jobs as the work progressed, but initially what I did was solder each wire from a 200-pair cable to terminal

blocks eight hours a day. By the end of the summer I had a pretty good idea how to attach two items together with molten metal while avoiding the dreaded "cold joint."

I just finished doing all the wiring for a new 1/5-size Cub that I am converting to electric power. While I had all the gear out, I also changed the terminals on three batteries that I bought at the last swap meet. This seemed like a good time to write an article I had suggested some time ago.

Before I get to the preparation of the actual materials to be soldered, let me talk for a minute about irons, solder, and tools. My standby is an older model Weller 8200 rated at 100 watts. I love this gun because it is ready to go as soon as the trigger is pulled and I can lay it back down on the bench without wondering an hour later if I turned it off. For really heavy work, like joining 1/8-inch piano wire for landing gear, I have a conventional 100-watt iron made by a company called Drake. My third iron is a small Ungar, which does not show wattage, but it has a very fine tip and is good for jobs like re-attaching a broken wire to a speed controller.

For solder I used a good quality resin core 60/40. The last numbers refer to the proportions of lead in the mixture to tin. The flux I happen to have on hand at the moment is Oatley No. 5 solder paste. On hand means it has probably been around five or six years. With paste, a little goes a long way.

Many of the tools I use, like needle-nose pliers and small files, are just normal bench tools. A more specialized tool I almost always use is called a "third hand." It consists of a base supporting frame with two opposing alligator clips, which can be twisted and moved to almost any position.

By gripping the two parts to be soldered and holding them firmly together through the entire process, it helps eliminate burnt fingers and failed joints because of movement before the solder has completely cooled. The last two tools that always

Continued on Next Page

come out when I set up a job are a simple wire stripper and a small bronze brush which I use to clean off the tips of the irons when they start looking a little dull.

For a perfect solder joint, both surfaces must be clean enough and hot enough that the solder will melt and flow evenly on both items. Any dirt, rust, corrosion, or other foreign matter on either surface will prevent the solder from sticking to the dirty area and will cause a weak or imperfect joint. This is less of a problem when dealing with new components and fresh wire than when doing repairs or reusing old components. Sandpaper, files, a Dremel tool, and the wire brush I mentioned earlier can all be used to get a bright and shiny surface. When doing repairs, I cut back enough fresh wire if the wire is long enough to allow it.

One way to guarantee that you are dealing with two clean surfaces is to apply a light coating of paste and solder to each surface before you make the actual joint. This is sometimes called tinning and will show up any places that are not willing to take solder.

Once both surfaces are tinned, they must be held together in some immovable way through the entire process, from the application of heat to the



NAME THE PLANE

final cooling when the solder itself turns from bright to dull. If you are going to do this without some type of jig, be sure to use pliers. There is no way you can hold something with your fingers close enough to the joint to be effective without burning yourself. For larger jobs, I use everything from small vises to C clamps.

The actual soldering is generally over within seconds. The trick is to position the iron so that both surfaces are heated to the point where solder melts and flows.

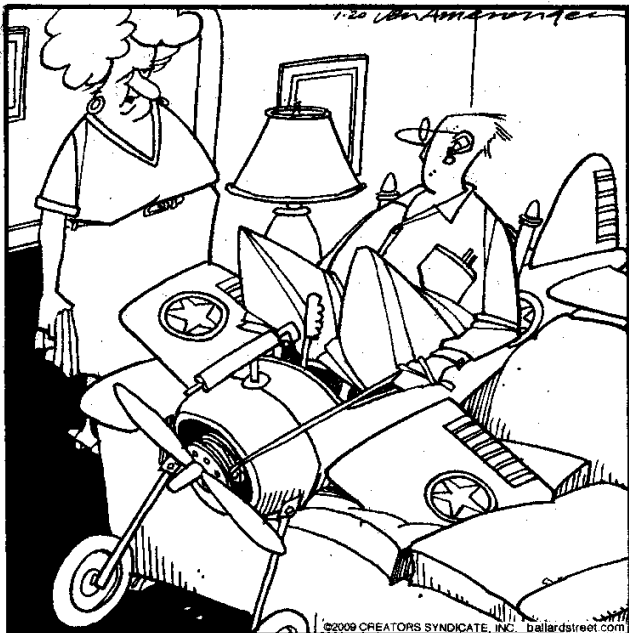
For small jobs such as soldering wires onto plugs or terminals, you can generally get enough solder on the tip of the iron before applying it to the area. If more solder is needed, for example when building a heavy-duty landing gear, push the end of the solder right into the heated area but don't overdo it. Excessive solder buildup does not make for a stronger joint. Also, keeping an iron in an area until wire insulation and other components are melted does not make for a better job.

One last point to watch out for is the so-called cold joint. A true bond will be made only when both surfaces become hot enough to solder. Be sure that the tip of the iron comes in contact with both surfaces long enough for this to occur. Cold joints will often look fine and may even hold for while, but they have a nasty habit of failing on final approach.

From the Sacramento Valley Soaring Society,
Novato, California



BALLARD STREET JERRY VAN AMERONGEN



“Jake, the couch is no place for a plane”

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*Deadline for the next newsletter is:
 March 1, 2009*

CALENDAR OF UPCOMING EVENTS

Thursday – February 19, 2009

- ACRC Club Meeting

Thursday – March 19, 2009

- ACRC Club Meeting

Thursday – April 16, 2009

- ACRC Club Meeting

Saturday – April 18, 2009

- ACRC Fun Fly



ACRC Website - www.acrc.ws or www.anoka-rc.com