

R/C FLYERS
EAST PEORIA, IL.

<http://www.summitvalleyrc.com>

The Summit Valley News

April 2004

Next Meeting



Our next meeting will be at the Navy Marine Club 1310 E Sieberling Ave in Peoria Heights at 7:00 pm on Tuesday, April 13, 2004.

Ave in Peoria Heights at 7:00 pm on Tuesday, April 13, 2004.

Mow Schedule



Mowing Team (Team decides who mows on which day)	Mowing Days	
	Jim Allen / Jay Monce	April 5
John Allen / Art Ausli	April 12	April 15
Hal Baker / Tom Berry	April 19	April 22
Chris Betz / TJ Bolen	April 26	April 29
Derek Campen / Tom Clark	May 3	May 6

Safety Tip Of The Month

In the infamous words of our Safety Officer Vern Mall: It's windy! Fly Careful!

Intro Pilot Rules

In the March Newsletter Glen Howard and Tom Imhoff were named as the only two Intro Pilots for the Club. There are actually three Intro Pilots for the Club. The third is our President Bob Heuermann.

Upcoming Events

This new section is designed to put upcoming Club events on your radar screen. Please check and mark your calendars and seriously consider participating in these near term events. As usual we can use all the help we can get with concessions, event coordination and any other work needed to make these events run smoothly and provide the maximum amount of fun for the participants.

April 25th, 1:30pm - Club Lunch / Fly-In. Designed to kickoff the flying season! Brats, dogs and chips. Sunday event. Theme: Food and Fun!

May 16th, Big Bird Fly-In. Sunday event. Noon registration, Pilots Meeting at 12:30. See attached Flyer.

OK Big Airplane fans come one, come all. That's right, the Summit Big Bird fly-in is scheduled for May 16th. So far we have interest in all of the surrounding areas and it should be a great early flying

President	Bob Heuermann
Vice President	TJ Klise
Sec./Treasurer	Jim Martin
Editor	Steve Grob
Safety Officer	Vern Mall
Sergeant at Arms	Tim Berg
Grounds Maint.	Pete Mahrt
Equipment Maint	Brian Taylor Derek Campen
Safety Committee	Bryan Miller Butch Wyman

season event. Make sure to bring your 70" Monoplane or 60" Biplane and join the camaraderie of the big airplane gang. Rumor has it we'll have some interesting equipment present, including 40+% 3D capable aircraft, a few of the top 3D flyers in the area and there'll be great flying all day long. Don't have anything to fly? Come on down to help with the event, we need a few good people to help pull this event off, concession work, cooking, transmitter impound and flight line safety among others. Everyone is welcome and encouraged to participate in any way you can! We hope to see you all on May 16th.

Members Respond!

A quick THANK YOU to the membership for the great turnout at last months important meeting. We had 30 of our 42 members present!

Prairie Air Show

Jim Martin has secured a booth for the Summit Valley R/C Flyers display at the 2004 Prairie Air Show. The event will be held on July 24 and 25 and there will be a large canopy where we can get out of the sun. Club participants will receive a free pass to the event. Volunteer to participate in the Club display and see the Blue Angels for free! <http://www.prairieair.com/>

Show & Tell

Bryan Miller brought a pretty cool 12V power supply to the March meeting. He made it out of an old PC power supply and he uses it to run his battery charger while at home. You can see the how to make one here:

<http://www.rcbatteryclinic.com>

On the website look in the left hand navigation column for 'PC Power Supply for Chargers' Thanks Bryan!

Golden Divot



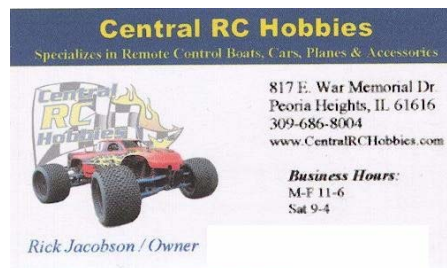
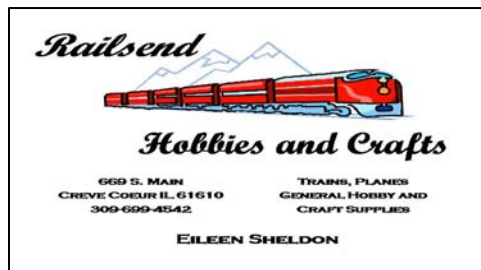
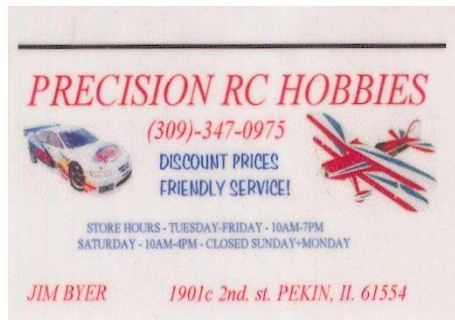
This month's nominees are:
Tom Hunt

Pete Mahrt

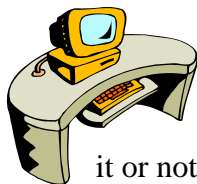
Marv/Glen

Butch Wyman. My

apologies for the lack of details for this month's winning story. I was having a conversation with another member while the heated competition took place. I did manage however to hear the important bottom line – And the winner is – Butch Wyman!



From The Editors Desk



Our Club is currently going through a time of major change. Like it or not, we are soon moving to a new flying field. Since humans are naturally resistant to change, most of us are probably dreading the thought of going through the transition. For some, it's a longer drive. For others it

will be a new 'home' to get used to. For all of us there are some very fond memories of the old field that will become part of the history of our Club. The Club House, the tower, the sign above the gate, the fenced in parking lot, the cozy little valley that we called home for so many years. We'll keep it alive by telling the stories over and over again and looking at the hundreds of photographs far into the future so that the cozy little valley will always be a huge part of the history of our Club.

There's lots of work to be done at the new place. Cut brush, fell trees, plant grass, electricity, water, septic, a clubhouse. Already we have tremendous membership participation and enthusiasm. Who ever heard of a pond adjacent to a flying field where a pilot can wet a line? These are the ingredients of a new history. There will be new stories to tell, new photographs to show and those who embrace the change will make themselves a part of Club history forever.

For all of this we have two very generous men and their families to thank. Tim and Tom – thanks for our past and our future.

Happy Landings
Steve

Heat Treating Music Wire

By Roy Vaillancourt

Submitted by Tom Clark

The music wire used by R/C modelers to make landing gear and cabin struts is medium carbon steel heat-treated to spring temper of about 45 on the Rockwell C scale of hardness (RC45). On this scale, RC20 is soft, RC45 is tough, and RC60 is hard. Though wire can be bent and cut using the proper tools and techniques, but sometimes it's just too difficult to work with.

One way to soften steel music wire is to heat it, which makes it easy to bend and form. But after heating and forming, the subsequent cooling – often at an uncontrolled rate – can make the finished wire too hard or too soft since its hardness is determined by the rate at which it cools. For some parts, the final hardness isn't critical. But a landing gear formed from wire softened too much won't spring back to its original position; and a gear made from wire cooled to a harder than normal state will snap on its first use. To restore the wire to its original specific spring temper, it must be heat-treated a second time and cooled at a controlled rate.

Three steps:

To form wire easily, first anneal it; next, form or bend it to the desired shape; and then heat-treat the part back to spring condition – that is temper it.

First the wire should be annealed at the location to be bent. To anneal it, heat the wire until it becomes a

bright cherry red --- about 1400 degrees Fahrenheit. Let it cool completely to the touch. Don't quench it or blow on it. Just let it cool naturally away from any drafts. The wire should now be in the RC25 soft range, and it will bend easily. After forming, once again heat the wire with a torch until it becomes bright cherry red, but this time quench it – that is, cool it rapidly by immersing it in room temperature water. Plunge the steel into the water with a twisting, swirling motion to keep water vapor from insulating the wire against the cooling action of the water.

At this point the wire should be very hard, probably above RC60. To test the hardness, try to make a mark on the worked area with a file. The file should slide off without cutting the steel at all. If it cuts the wire, try the heat and quench cycle again. If the file still cuts the wire, it isn't high carbon steel. Get another piece of wire and start over – you won't be able to add the necessary carbon to low-carbon steel. When the file test signals success, the wire is ready for the final step, but not for use, because it's very hard and quite brittle, and will probably snap off.

The final step is to temper the wire back to the desired hardness. Tempering is a form of annealing but is controlled so that the steel achieves a specific hardness. Start by sanding the wire with steel wool or emery cloth. Then heat it gradually with the torch. Watch for the following colors as a guide: straw color (350 degrees), followed by dark blue (600 degrees), and the medium blue

(750 degrees). At this point remove the wire from the heat and allow it to cool slowly. Don't quench it or blow on it; just let it cool naturally in still air. Once the steel returns to room temperature, it should be at the target RC45 hardness, which has a good spring temper. Try the file test again. You should be able to make a mark now, but only with some effort. If it passes the test, the wire is properly tempered.

Besides parts for model planes, tempered music wire can also be used to make special purpose tools. Instead of tempering to 750 degrees (medium blue), stop at the straw color stage. The wire will be at about RC60, which is still very hard, but not brittle. Wire at this temper can be used to drill wood and plastics, and most aluminum and copper.

Notes:

Anneal: To heat and then cool (as steel or glass) usually for softening and making less brittle.

Quench: To cool (as heated metal) suddenly by immersion in a fluid such as oil or water.

