

## Club Officers

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Send newsletter information and items for sale or wanted to the newsletter editor. He's almost always home after 9:00 PM or call his work number, 913-624-2570, it has a recorder, or send via Internet.

**Club Web Site:** <http://rcsf.freesevers.com/>

### Minutes of February 7, 2002 Meeting

The meeting was called to order at 7:02 PM by President, John Carnal. There were 24 members and 3 visitors present. Our visitors included Tom Devine, Susan Calvin, President of the 49th Jumbo and Cam Blazer, President of the Kansas City chapter of the Antique Aircraft Association.

The minutes of the last meeting were approved as published in the newsletter. The treasurer's report was approved.

### Committees:

**Safety:** John Urton had noticed a lot of opposite pattern flying lately. Bad idea. (I have personally encountered an airplane flying the opposite pattern and not only is it an obvious risk of mid-air collision, but it really throws off one's concentration - Editor). At the next meeting there will be a review of the AMA rules/safety code. This is one criteria for Gold Leader Club status.

**Training:** Dennis Tschirhart - not much training happening yet. He will be giving some information on changes in the AMA Introductory Pilot training program at the next meeting.

**Jackson County Parks & Rec:** The next Parks & Rec meeting is February 20. We will be submitting our requests for work at the field at that meeting. Dennis T. has a copy of the Parks publication that lists events at the parks. This would be a possibility for publicity for our events. There was some discussion of a sun shade attachment for the shelter. Dennis will discuss it with the Parks Department. If you have purchased your Jackson County permit you should have received a letter from the county explaining that there is a numeric-coded lock on the gate at the field. If the ranger hasn't unlocked the gate, the combination is used to unlock. However, this doesn't mean you can fly before the posted time. Plus, you need to properly open and secure the gates in the open position. It's all clearly explained in the letter.

**Combat & Formation:** Not much (nothing?) happening because of the weather.

**Web Site:** Many, many thanks to Gerard Jalbuena for his work on the web site. Also, Scott Goergen, who joined the club at the meeting, helped out a lot. RCSF is now *not* the only club in KC, on the Missouri side, that doesn't have a web site. Gerard and Scott did a first class job. Of special note, this was Gerard's first time for doing a site. People do look at it. At the KCRC Swap-n-Shop someone saw that John Carnal had a RCSF shirt on, slapped him on the back and said "nice web site." The location (URL) is in the header of the newsletter. Check it out if you haven't been there already. The topic of for sale items was mentioned. If you have items for sale (or wanted, etc.) let Gerard know. Gerard would also like pictures to post on the web site.

**Fun Fly:** Our fun fly is set for June 8th. Larry Smith is the chairman. He can use help. Give him a call and find out what you can do. If a lot of people each do a little, the job gets done and no one has to put in a lot of work. Larry's phone number is 816-358-2098.

**Delta Darts:** We will be doing a Delta Darts event for the church youth Wednesday, February 27 at 7pm. It will be in the gym. Hans Kilz is the chairman. If you can help, call him at 816-761-1579. This is an excellent way to expose youth to model aviation and is a great youth event for the church. Pastor Goodwin will put a note in the church bulletin, but won't publicize in the newspaper. We'll keep this one limited to church youth for now. If you're not familiar with this program, come out and check it out. Again, not really a lot of work and a great way to be involved with the kids.

### **Old Business:**

**Gold Leader Club:** John Carnal spoke with AMA and got clarification on a few of the requirements. By donating a *Model Aviation* subscription to the church and reviewing the AMA safety code, we will have met the requirements for this year. John will get the paperwork together and submit to the AMA by the next meeting.

### **New Business:**

**Jackets:** Mike Krogh had sample jackets and approximate prices, plus various patches. The consensus was to go with windbreakers because of the price. Mike will try to have various sizes available for trying on at the next meeting.

**T-Shirts:** If you ordered a T-shirt and didn't pick it up at the meeting, Dennis Tschirhart would very much appreciate your getting with him, picking up your shirt and paying him.

**KC Area Fun Fly:** John Carnal has visited other area clubs and was well received. He discussed the idea of a city wide fun fly, probably around the end of August, probably at the KCRC field at Lake Jacomo. That field has just about everything needed for such a breadth of flying, including a large parking lot. Profits would go to a charity. The area clubs all seem interested in participating.

### **Other:**

There was extensive discussion of allowing electric flying west of the parking lot. May pros and cons were brought up with no real consensus. Part of the discussion was the aspect of frequency control and a lack of awareness by some of that need. Cam Blazer suggested a note on the sign at the entrance to the extent that frequency control is necessary. A motion was made to close the discussion and vote on allowing electric flying on both the east and west sides of the parking lot. The motion was defeated.

As of the meeting, MNC Hobbies was pretty much a thing of the past. Jim Franklin will continue to carry Hi Tec equipment from his home, but there wasn't a buyer able to get financing, so he's selling his inventory and shutting the business down.

We had word that Bryan Hill has had a liver transplant in St. Louis and is doing very well. The surgery was the Tuesday before the meeting and the plans were for him to be home about February 16.

Sara Krogh was in to report on the rubber-powered competition she is doing through her school. She has had over 2 minute flights, next best in the competition was 1 1/2 minutes. She beat kids from 17 other schools. Bernie Drummond, Dick Hinkle and John Carnal helped (and "Dad" Krogh also?).

**Next Meeting** Jack Cannady will speak. He is an expert on the big 2-cycle engines.

### **Show & Tell:**

Claude Beatte had a Twin Air he was building for Mike Krogh. He had to redesign the nacelles so they would be removable. There was no accommodation for access to the fuel tanks or engine servos with the original design. It will have 2 Thunder Tiger .25s.

Dick Hinkle had an indoor electric foamie.

John Carnal had the DC3 he's building at the meeting again, the assembly is almost done. Still needs the top sheeting on the wings and lots of little stuff (90% done, 90% to go?).

**Raffle Prize:** John Sincox won the PKO electric J-3.

**Atchison Antique Aircraft Fly-In.** Cam Blazer, president of the Kansas City area Antique Aircraft Association chapter discussed the fly-in and how RCSF members could participate. Some key points were:

The fly-in starts Friday, May 24 with aircraft arriving and pilots registering. Housing is available at the local college. RCSF members welcome to say with the full-scale folks and participate in hangar stories & etc.

Saturday, May 25 registration continues with judging of full-scale aircraft.

Cam said RCSF member would be very welcome to help with the registration, he schedules people for 1-hour shifts.

BBQ and awards ceremony Saturday night, RCSF members welcome...but, awards only for the big planes.

Static display by RCSF would be set up next to full-scale aircraft parking. No RC flying, just static display.

If you can make it, event is being coordinated by Walt Calkins. Call him or see him at a meeting.

Cam was kind enough to invite me to their February meeting. Attendance was light due to being a day or so after the ice storm. I found them to be one of the most open and inviting groups of people I have visited with. A number of them had done RC models. I think this is a group that we would fit in with very well. Walt

The meeting was adjourned at 9:00

### Calendar of Events - Models

**Mar 7** RCSF Club Meeting - First Baptist Church of Grandview  
**Apr 4** RCSF Club Meeting - First Baptist Church of Grandview  
**May 2** RCSF Club Meeting - Stamm Field  
**May 25-26** Jefferson City Fun-Fly (?)  
**Jun 8** RCSF Fun-Fly  
**July 20** KCRC Summer Fly-in  
**Sept 14** KCRC War Bird Fly-in  
**Sept 28** RCSF Club BBQ & Fun-Fly

### Calendar of Events - Full Scale

**May 24-26** Antique Aircraft Fly-In, Atchison KS - RCSF participation  
**July 23-29** "Oshkosh" - Annual EAA bash, Oshkosh, Wisconsin - [www.airventure.org](http://www.airventure.org) <<http://www.airventure.org>>  
**Aug 17-18** Air Show - KC Downtown Airport

A short note of thanks to all the members who participated in the signing of my get well card. It brought a big smile to my face in the midst of recovering pain from the surgery! Looking forward to being well soon and back flying with all my friends. By the time the weather breaks I should be ready to at least fly my electric Europa.

I am doing well and I'm on the speedy road to recovery. Again, Thanks for the card and the prayers that were given for me. God has truly blessed my life with family, friends, and a new liver. There are so many people in the earth that have no family, few friends, and die from liver disease every day. I am a humbled and thankful man!

Again Thanks Everybody,  
Bryan Hill

From my favorite source for humor: Avflash, Vol. 3, Issue 32, Monday, August 11, 1997

**NEW AIRPORT SCREENING DEVICE MAKES YOUR "BIRTHDAY SUIT" VISIBLE:** Make sure you shower real well and get rid of that belly-button lint before traveling through six airports in the U.S. that are using a new screening device called BodySearch. The device uses low-power X-rays that penetrate only a few millimeters below the skin, seeing through clothing and eliminating the need for strip searches. The BodySearch scans are so sharp that the shape of a person's navel is visible, along with the shapes of other naughty bits. But your chances of getting scanned with the new device are pretty slim, since customs officials said they are using it only on those suspected of carrying contraband, not everyday airline passengers.

From: [http://members.aol.com/PhotoConcept/Cardboard\\_Secrets.htm](http://members.aol.com/PhotoConcept/Cardboard_Secrets.htm)

### Cardboard and Foam ... What are the secrets?

The secret to building with cardboard is not just the foam, but polyurethane and urethane glue. This relatively new (wood) glue will stick to anything and takes a considerable time to cure which gives you time to fixture the pieces properly. As it cures it foams and fills the flutes and gaps in the cardboard joints. An end to end butt joint is not only possible with this glue; it results in a joint that is stronger than the cardboard itself. Once cured the glue is extremely easy to sand and contour. With any balsa filler the voids in the foaming glue joints can be filled with out compromise in appearance.

Polyurethane as a primer absorbs into the paper fibers and solidifies into a hard durable surface. This gives great strength to the paper skin and allows sanding the surface without damaging the paper ply. It also makes the paper waterproof so you can now paint with a water base paint which we prefer. You can also get good results with oil base paints but application is the key. Paint from a spray can is heavily thinned so it requires more skill and several thin coats to get good coverage. Runs are difficult to remove without damaging the paper ply. It is actually better to wipe a run off with a paper towel while the paint is wet then sand and re-coat the bare spot after the paint is dried rather than let the run dry and try to sand it off after.

Contrary to popular belief, water base paint is easier to sand once it has dried than oil base paint. Applying too much pressure and/or using dull sandpaper causes the gumming of the sandpaper when sanding any paint. A power sander such as the "Mouse" makes quick work when sanding paint because of its lightweight and has an oscillatory motion. So the secret is out. The combination of rigid foam, polyurethane sealer, urethane glue and water base paint makes cardboard construction superior in many ways to balsa.

It goes without saying the strength of the urethane glue joints with wood and cardboard is second to none for R/C planes. Other glues will work but none are as gap filling and as strong as urethane when joining the ends of cardboard or wood. Cardboard is a very resilient material. It will bend and flex and absorb energy without any sign of degradation. One of the first things you will notice

with a cardboard plane is how quiet they sound when the engine is running. This dampening effect is a plus when considering the damaging affects of vibration to the rest of the airframe and radio gear.

Polyurethane is the preferred sealer primer for all the planes developed by R/C Concepts. Many other sealer/primers can be used like lacquers, a gamete of wood sealers, and wood petrifiers but their cost or the fumes they emit are undesirable. Polyurethane is impervious to water and all the common fuels used in the R/C hobby. It will also allow top coating of all kinds of paint including water base paint, which R/C Concepts uses extensively. Most of the old time modelers will make jokes at using cardboard for model airplanes stating that fuel will soak the paper and make it limp. Besides the fact that fuel will not make the paper in cardboard limp, only water will, one coat of polyurethane makes the cardboard totally fuel proof and water proof. You can also fuel proof as much of the interior of the plane as you would for balsa.

Lets clear up a myth about water base verse oil base paints. Paint is an emulsion of solids and liquids that when fully dried the solids are all that remains. Some people believe that oil paints are lighter than water base because the volatile oils dry up quickly while the water base may take 4 to 6 weeks to fully dry. So in a very short time oil paints seam lighter than water base, but not so if the water base is fully dried. What makes the most difference is how they are applied. It is called the finishing. The finishing is what makes a model look great or just plain mediocre whether you cover your model with film or paint. When using water base paint and a simple brush, lightly sand between each coat and make your finishing brush strokes all in one direction for each layer. On each subsequent coat of paint the brush strokes should be at 90 degrees to the coat you are covering. You will be truly amazed at how even and smooth the final coat comes out with this method.

The original Corrugated Cardinal was made with expanding foam and as you might know ordinary box cardboard. The airspace between the fuselage and the center core piece was injected with expanding foam. This required a little practice to determine the right amount of foam to use. It was found that it is better to use less foam in the beginning then inject some more after the first amount was fully cured. The force of the expanding foam is considerable and will bulge out the cardboard if not securely retained. The forward curved section of the wing was also filled with foam while the straight aft section of the wing was left void. Originally the ailerons were made of tapered balsa stock and hinged with plastic CA hinges. R/C Concepts now uses fabric or masking tape hinges with the control surfaces also made out of cardboard. Of course you can use what you prefer.

Over the years R/C Concepts has found an easier method for replacing the expanding foam especially in the wing panels. Rigid foam insulation is cut with a band saw or hot wire to make the ribs and the main spar for the wing. There are not as many ribs as would be customary in balsa construction and the spacing varies between each one to the end of the wing tip. Cardboard profile fixtures are cut at each rib section to hold the corrugated panel to the ribs while the foaming action of the glue fills and secures the webbing to each rib. The result is a wing that is very strong in torsion resistance unlike a film covered wing and more like a balsa sheeted and glassed wing panel. It does not warp with varying amounts of sunlight and heat. In very few areas of the fuselage where foam is used, the rigid foam can be cut to the exact size without the problem of expansion. Because expanding foam does make the strongest composite structure with cardboard we still use it for profiled tail surfaces where a truly professional look and performance model is desired. It is recommended for the experienced builder who is out to dazzle the on lookers at the field and have the ultimate in aerobatic performance.

Ok, so why have others had less than desirable results with the use of cardboard when R/C Concepts has had great success? The answer is simply the design and know-how. R/C Concepts has learned as a result of multiple crashes where to remove the flutes and interior plies of paper to keep the plane light and still retain it's superior strength.

The technique to remove the paper ply and webbing is simple. First, to remove just the paper ply slide a blunt pointed 1/4 inch dowel between the outside of the webbing and the paper ply while pulling gently on the paper ply. Do one flute at a time in succession. Second, to remove both the outside ply of paper and the webbing use a putty knife to get it started and pull both together at the same time. This is easier if the finished side is polyurethane coated first. And it will also prevent the finished side from rippling during final painting. Sometimes these removed areas are within the panel of the cardboard so the inside paper ply must be slit and the webbing material is carefully scored with an Exacto knife around the perimeter of the area. Polyurethane also strengthens the finished side of the panel and that helps protect it when scoring the webbing material.

Other areas where extra strength is needed in the fuselage additional pieces of folded cardboard are added. The core piece is common to all R/C Concepts designs so far. It provides added strength to the fuselage and an area for the fuel tank and radio gear. Being away from the exterior of the fuselage it gives added protection to the delicate radio gear in a crash. And finally, wood is used in areas that require mounting screws to hold the engine, landing gear, tail wheel assembly and servos.

You could follow the same trial and error process to develop these planes yourself but why bother. Save yourself the time and money

building and rebuilding to find out what we already know. All the designs available from R/C Concepts have been thoroughly tested and proven.

Would you like to try one?