

# Prop Kicks



The Official Publication of the Cloud Kings R/C Club

Charter Club # 579

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**Secretary:** Tom Lauletta  
**Safety Officer:** Brian Porter

**Vice President:** Pete Jones  
**Treasurer:** John Anderson  
**Field Marshall:** Bob Fling

April 2007

## President's Corner

Well men, thank you for the privilege of serving as your club president! You men seldom, if ever disappoint me, you always rise to the occasion when called on. It's a good thing to be a member of this club! Together we're going to make this an exciting and dynamic year. I can't wait for the weather to improve so we can get out there and put a few birds in the air! We had a record attendance at our last meeting; lets keep the enthusiasm alive by taking your place at the flying field this season. Our club needs *all* of our members to be actively involved. After all we are an R/C flying club – lets do it!

I want to encourage everyone to attend our next meeting. In the future we want to make our club meeting short on business, and long modeling! Our next meeting is to be held at the West Grove Fire Company building, on April 10<sup>th</sup>. This meeting will feature, for early comers who are there between 7:00 & 7:30, an indoor miniature "helicopter flying" exhibition by Dale Adams and Richard Parrott. (If you want some real excitement on this one, you'll need take

a seat up front!) The rest of the meeting should go as I have listed below:

1. Meeting called to order.
2. Secretary's report.
3. Treasurer's report & projected 2007 budget presented.
4. Old business
5. New business
6. First time attendees & Provisional members
7. 50/50

Now for the good stuff:

1. Flying wing building techniques, by Pete Jones
2. John Andrews will say a little about flying these beast!
3. Show-n'-Tell, of his Lazy 8, by Don Coleman
4. Show-n'-Tell, by Bob Fling
5. Bring-n'-Brag, by a Mystery Member?
6. Oops – we're out of time!

Let's fly, [Bill Losey](#)

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## “Last Meeting”

**New Members:**  
**The following were voted to full membership privileges:**  
Richard Smith  
Bob Scott  
**Welcome aboard!**

**Next Meeting:** April, 10, 7:30 PM at West Grove Fire Hall

**Cloud Kings Air show and Fun fly:** Scheduled for June 23 2007 at Harris Field

## “Tricks & Tips”

By Bruce Ginn

Most of us build using the old open frame and shrink film method which has worked well for 40 yrs or more. Since some of us started with balsa and tissue paper the shrink film and CA made building much easier and faster.

The one of the next steps in high performance airplanes is foam core sheeted wings which intimidates many of us. We believe that the skills needed to build this type of airplane are beyond us. This just isn't true. You don't need a shop full of expensive special tools or a degree in aeronautical engineering to tackle this type of project. Just some time, patience and willingness to follow instructions.

During my first attempt at assembling the sheeting for my wings I found the edges of the 1/16" balsa to be used did not match up well enough to get good glue joints. I took my straight edge and hobby knife to trim the edges but still didn't get the edge I wanted since this is after all a structural joint. The cut does give a place to start for the joint needed.



A friend told me about a fixture he has used to match the edges of the balsa for perfect glue joints. This fixture is used to sand a straight edge at a 90 deg. angle for a matched joint. I used a 4 ft. X 6" X 3/4" piece of MDF, a 4ft. length of 1" aluminum angle, and 1 1/2" wide 120 grit sand paper available in rolls in the plumbing section of the hardware store. The sand paper is attached to the aluminum angle with spray adhesive first. I like to use the factory cut edges of the MDF because they are straighter than I can cut with my small table saw.



The aluminum angle is placed against the factory cut edge of the MDF, clamped and 6 evenly spaced (about 7 1/2") holes drilled using a 5/32" bit, deep enough so the #10 screws will not bottom out. The aluminum is removed and drilled to 3/16" for clearance and the holes in the MDF tapped to the correct thread. Locate the angle and install the screws and the fixture is ready for action.



To use this fixture place the balsa on the MDF against the sandpaper at one end and with very light pressure slide the balsa against the sand paper 3 or 4 times. I only sand in one direction, removing the balsa from the paper to return to the start point.

1/16' balsa sheeting may not be flat to start with but I found that to keep the balsa flat against the MDF a piece of square stock on top close to the sanded edge held down with my fingers will keep it flat and give a good square edge.



After matching all the sheeting, align and tape the joints on one side with blue painters tape. The tape will act as a hinge to open the joint but does not pull the fibers from the wood when removed like regular masking tape will.



Hang the sheet over the edge of the work table so the first joint opens and use a syringe to apply the glue, then move to the next joint until the sheet is laid out on the work table.



When all the joints are glued wipe off the excess, cover with wax paper and weight down the balsa sheet. The weight will keep the sheet flat and give you a better joint. Take care to weight the edges or they will curl and the joint will open. Let it dry for about 20 minutes before lightly sanding the side that is not taped. After about 1hr. carefully remove the tape, wipe any excess wet



The sheeting has not been applied to my foam cores at the time of this article so this is where this Tricks & Tips stops.

Tricks & Tips is a club member column. If you have a tool or trick that will help us build better airplanes, please submit your item to Pete Jones for publication. glue and sand lightly. Let the sheet dry overnight.

## “Safety Briefs”

Brian Porter  
helicrazy@comcast.net

Hello,

I'm sure most of you know who I am, and you know I mainly fly helicopters, but I do stoop sometimes and fly my fixed wing. I have recently volunteered to be the safety officer for the Cloud Kings. Now I'm not going to preach about the obvious safety rules we all know and respect, BUT, occasionally I will put in a gentle reminder about the safety items we all know about respect.

Now safety is a very important part of our everyday life so from time to time I might put in something other than Radio Control.

Related items

Okay enough, let's get to the article. Radio impound, this is a “Pet Peeve” of mine. A few years ago

we had individual who pulled up to a field where I was flying, he unloaded his gear, turned on there transmitter and start a range check.

Unfortunately to my dismay I was on the same channel and was flying a helicopter at the time. Needless to say I lost the aircraft. After the incident, I asked the guy why he didn't impound his radio or check the frequency board before he turned on his radio. His response was since he usually flew by himself on week days, he didn't need to do it.

In the process I lost a helicopter which he did not offer to pay for or even apologize for “shooting” it down. The irony to this, it was the club Safety officer who had been in the club for about 15 years and his “Pet Peeve” was radio impound!

Now you ask what this would have to do with safety. Well the

part I left out, the helicopter crashed on the club bleachers which were BEHIND the safety fence.

Had someone been sitting there, they would have been very seriously injured.

I ask you to please use the impound and also use the frequency board EVERYTIME your at the field, think about your actions can affect everyone in and around our sport/hobby. Safety is everyone's responsibility!

That's all for now.

PS: Its Pete 1 Brian 0. If you don't know what this is about, come to the field one day when Pete and I are there!

## “Electrifying News”

You remember that last time we talked in some detail about the **Kv** rating of motors. Motors of the same size and shape can, and often do, have different **Kv** numbers.

The reason for this is that the manufacturer has varied the number of turns on the armature. The volume on the inside of the motor is fixed, therefore the size of the wire must be reduced to get more turns. This will reduce the **Kv** rating. Of course the smaller wire can't carry as much current as heavier wire.

Ok, how can I use this information to my advantage? For fast model,

chose a higher **Kv** motor and use a smaller prop. For slower models and 3D stuff pick a lower **Kv** motor and use a larger prop.

So, you got a low **Kv** motor to swing that *BIG* prop, but the current limitation of the low **Kv** motor won't give you enough power to get the job done. Try choosing a larger motor with a low **Kv**, but with enough current capacity to deliver the prop power you need. The slight weight gain penalty will be more than offset by the bigger motor being able to swing a larger prop.

*By Sparky*

*We left off our discussion in the previous news letter promising just a bit more detail about those mysterious electric motors. This time we're going to try to wrap-up that topic so we can explore other new and exciting things as we go forward.*

I have two electric motors in my hand, both are exactly the same size, weight and appearance, made by the same manufacturer, however, they are quite different. Let's see if we can discover what make them differ.