

Prop Kicks



The Official Publication of the Cloud King R/C Club

Presidents Corner

December 2005

It's time to close out another year and start to look forward to the next one. Now's the time to bring the models in and do a thorough inspection to find all the parts that shook loose during the summer, and to do those upgrades and repairs that you've been thinking about. This winter I'm doing a new cowl and wheel pants for my big plane, which involves a lot more work than you might think.

I'm also in the process of building a paint booth in my basement like the one featured in the November *Model Aviation*. This should go a long way toward keeping those chemical smells, like paint and fiberglass resin, out of the house, which my family will greatly appreciate!

Unfortunately, the Southeastern Keystone Sale & Auction, originally scheduled for Janu-

ary 28, had to be postponed due to problems with the site. We are actively looking for an alternate location and would appreciate any suggestions from the Cloud Kings membership.

At the upcoming December 13 meeting, the nominating committee will be presenting the nominees for the 2006 officer positions. We'll finalize the slate so we can vote for officers in the February meeting.

Membership renewals are in progress. Remember to pay your 2006 AMA dues, and present your AMA card when you renew with the Cloud Kings. The renewal deadline is the February 13, 2006 meeting.

Thanks to all for a great year, and I hope to see you at the field for the Freeze Fly on January 1st.

Airplane Storage

If you're like me, you have a hard time finding space for your

airplanes during the summer months, along with everything else that is typically in your garage. Since I like giant-scale models (25% scale and up), my problem is all the worse. I found a neat way to store even my biggest airplanes that keeps them off the floor and without taking up much space.

Just install some large (16") shelf brackets, available at most hardware stores, and pad them with foam pipe insulation. Large planes can then be laid across the brackets on their sides. Be sure the brackets are locked in place in the rails so there are no accidents. Many large airplanes can be stored this way in a typical garage as long as you have some space on the walls.

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"New Members"

Please welcome the following new members:
Bill Vandenberg
Merrill Myers



“Sounding Off About Noise”

We have been very fortunate this flying season in not having received any complaints from our neighbors. I believe this is because of our vigilance in limiting the noise of our models.

What would you think is the number 1 reason flying fields get shut down? It is, and always has been noise. Noise gets attention, and although six other neighbors pay it no mind, it takes just one other determined neighbor to make life hell for the club and its' property owner.

How you handle this complaining neighbor is critical. Someone once said “Diplomacy is the art of making the other guy think he’s getting his own way, while you still get yours” We have used diplomacy here and it has worked. Our noise limits are reasonable, and attainable. Usually all that is needed to meet it are; a silicone muffler tailpipe, and a noise effective prop such as APC, Grey “Scimitar” by Master Air Screw, or Top Flight “Power Point” wood.

For your information, the most noise offensive prop is the black Master Airscrew with square tips. Assuming that some of our members don’t know the noise test procedure, here’s how;

- 1) Move a starting table over to the further most white marker rod and set-up plane.
- 2) Retrieve DB meter from cabinet in pavilion and set-up to max level on dial. Step 2 Max is done to avoid damage to meter. (pegging)
- 3) Start engine with exhaust aimed at second marker rod.

run a few moments, then advance to full throttle.
4) Hold meter over the white rod nearest the pit area. At this time click settings downward until needle is somewhere in the middle of the dial.
Reading should be at or below 95 db for two cycle engines and 100 for four cycle. If you cannot get a good reading then muffler and/or prop changes are needed.

Alvin Johnson (ret. Editor)

“Flying can be a Drone”

What is it? It’s a bird! It’s a plane!
It’s a UFO! It’s none of the above. It’s a Goldberg Target Drone. And what a spectacular thing it was hurdling through the air over West Field. It brought us all to our feet as it ran the circuit, circling West Field again and again. It was indeed a dif-



ferent kind of flying machine to be sure.

Brian Porter was already at the field when I arrived on a clear, but windy Sunday afternoon. His helicopter had already had a good work out, and he appeared as a man ready to show us poor neophytes

something much different than we’re used to seeing. There in the back of his vehicle, I noticed with interest as I walked by, was a strange looking flying machine. It was a Goldberg Target Drone. I think I remember someone having one of these a long time ago, but as I recall the owner couldn’t get it off the ground. So as you might expect I was most anxious to see if this one fared any better.

I didn’t have long to wait for Brian promptly recovered it from his truck and began the assembly process on one of our flight preparation benches. It didn’t take him long, seeing that it broke down into only two pieces for ease of transportation and assembly. I noted immediately that he had constructed it with ingenuity and careful thought. The aileron and elevator hinging, the special reinforcement of the fuselage, and the technically superb radio and servo installation were all outstanding and all looked quite professional. These drones were intended to be belly landed, however Brian had installed a nice tricycle landing gear - a definite plus.



Ok, here’s the question. Will it, or won’t it - fly that is? And if it does, how well will it fly? again, I didn’t have long to wait. Once having the bird gassed-up and range checked it was ready to go. Boy, it had bright yellow wings so it shouldn’t be hard to see. The K&B 61 came to life with a roar, a short warm up, and it was in the air in a heart-

beat. Wow, what a stellar performer it



was, of course Brian’s piloting skill didn’t hurt either. Well, it was a delight to see how well it flew - it was just a cool flyer! (Or do I mean hot flyer?) Either way it was slick in the air...



Thanks Brian for the exhibition!
Not to mention that everyone present who wanted to had an opportunity to fly it...
The last question; Brian, “What are you going to do next to top this one?”

“Aileron Differential”

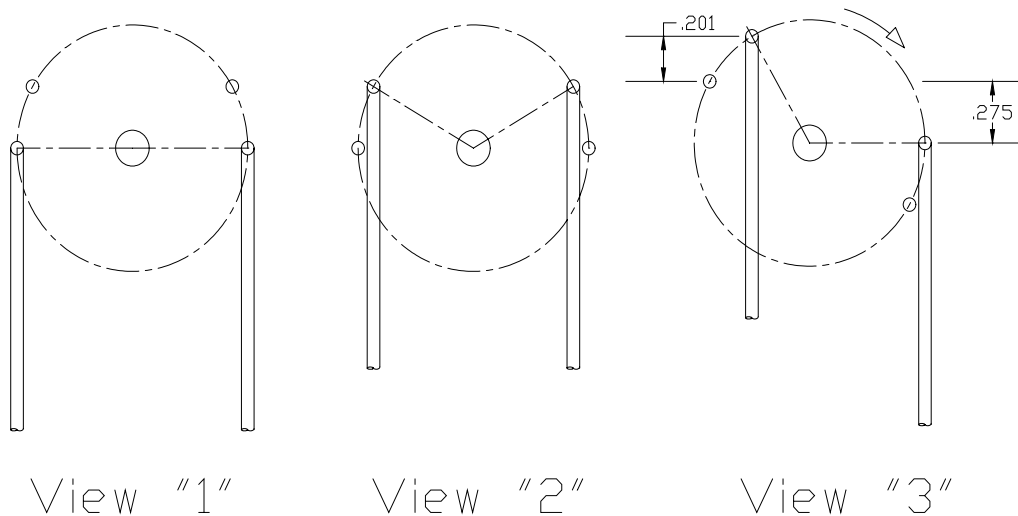
During the summer, while rebuilding an airplane (one I crashed), someone told me about building in some differential into the aileron controls while I was at it. Well, since I am one always wanting to make the wheel better, I thought I could give this a go. Hmm, not knowing anything about this concept, I began to read-up on it with the idea that airplanes fly better with this “differential” built in. Why would they fly better? What



I learned is that there is more pressure on the bottom of the wing than the top (conventional flat bottom wing) so when you apply aileron to make a turn, air is pushing harder on the lower aileron than on the top thus pushing the airplane against the turn. To eliminate this effect is where differential comes in. If you set-up the linkage to allow the “down” aileron to be less than the other “up” aileron, then the pressure would become closer to neutral between the ailerons and thus give you easier turns. OK, now that we’re square on that maybe some of us (aerobatic flyers) should forget it and put it in the back of our heads. Why you ask? What is true for flat bottom airfoil, is not so true for the symmetrical airfoil. Since pressure is near equal on both top and bottom with a symmetrical wing and the fact that some flyers can’t seem to keep their wheels pointed down (inverted flight) it would likely worsen your planes aerobatic ability. This concept is probably left alone for the guys who

spend most of their time right side up. How do you set it up? Easy, shown in the illustration below; “view 1” is the conventional or symmetrical wing method to set-up the rods on the servo. Using a round attachment (I use a six pronged attachment) set the rods forward to the next set of holes, “view 2”, and, when turned, you can see from the sketch in “view 3” one side has moved about 30 percent more than the other. What about you bunch with duel servos? Works the same with only one linkage per servo. As you can see in the photo I have the symmetrical wing. Although it remains set-up for differential I’ll likely change it back this winter.

by Pete Jones



“Weird & Wacky”

Mysterious, strange and odd, the bizarre -Yes, “I think that’s exactly what I had in mind”. If this describes that inter-



darker side of your RC physic then maybe this is your cup of tea. Read on...

It has been suggested that we get ready for the next flying season by building some unusual flying things. Like for instance a Flying Dog House, a Flying



Stop Sign, a Flying Lawn Mower, a Flying Witch, a Flying Mail Box, and ... Well, by now you’ve got the idea. There are a whole host of aircraft yet unnamed that you could choose from that are al-

ready available from various sources over the internet. Of course you could, from the yet untapped recesses of your mind, elect to conjure up something here-to-fore never attempted and make it fly. Sound challenging?

Now, for the logic behind such an idea. We have long lamented the lack



of young new flyers in our club and this might provide a means of teaming up with some young person on a project like this to kindle the fire of model aviation. Also, we sponsor a number of flying events each summer where these specialty aircraft could be flown to amazement and delight for visitors and spectators alike. Additionally, having a team of our members working on such a project would help build cohesion and comradesly in our club, and provide activity that will draw us closer together throughout the long winter months.

So, gentlemen what’s your pleasure? Don’t all speak up at once. If



you feel the calling to be a part of such a group let your voice be heard. To enlist just tap me on the shoulder, by e-mail DaRedBaron@zoominternet.net, or by telephone (215) 850-2633, and if these means won’t do you can speak to me personally at the flying field, or our next club meeting. Come on - it could be fun you know!

By: Bill Losey

