

KCRC NEWSLETTER JANUARY 2009

Meeting and Banquet; Tuesday,
13-Jan-2008, 6:30 pm, Mama
Blues, 9645 Kingston Pike



PROPWASH



BY PHIL SPELT

HAPPY NEW YEAR to my fellow KCRC Members!!! I hope 2009 will be great one for all my fellow KCRC'ers. Having attended the first informal Board of Directors' Meeting under our new President, Dennis Drone, I feel very confident that our Club will be in excellent hands this year! I renew my pledge to Dennis to do whatever I can to help make the Club and his Presidency the best it can be.

I will resist the temptation to reminisce about the years I spent in office, except to say that I hope, in the final analysis, that I did more good than harm for the Club. I expect to continue the 2 float-flies a year, one in spring and one in fall, with the fall one being at the Oak Ridge marina. Several of us think it would be good to expand that event into a 2- or even 3-day party. We'll see, as 2009 gets started, what we can work out with the Oak Ridge Rowing Association.

There has been some talk about reviving the Air Show if there is interest among Club members, I would be happy to work with a committee to see what we can design.

Another thing I did once is to get KCRC a Gold Club status. When I did that, in 2006, I wrongly assumed that it was a permanent award, but obviously such is not the case. Again, if the new Officers wish, I would be happy to renew that award, and keep it going every year. It involves assembling some documentation about our activities and getting them to the AMA.

As Past President, I am still a member of the Board, so I still have plenty of opportunity to create a ruckus <lol>. As things come up during this year, I will be glad to do whatever I can to help the Club. I think we have a great bunch of members, and I look forward to seeing you at meetings and at the field.

Meanwhile, this is The Wingman, taxiing to the hangar...

MINUTES: DECEMBER MEETING

The meeting was called to order at ~7:00pm. The November minutes as published in the December newsletter, were approved. The treasurers report was read and approved.

old business

Ballots were passed out for the 2009 club officer election and the votes were tallied with the following results;

2009 Club Officers:

President-	Dennis Drone
Vice President-	Gary Lindner
Secretary-	Don Eiler
Treasurer-	Joel Hebert
Board of Directors-	Jeff Prosisie, Karl Gerth, (plus past president, Phil Spelt.)

Volunteer posts;	Webmaster- Phil Spelt
Newsletter Ed.-	Jim Scarbrough
Historian-	June Cope

The location of our annual banquet was voted on. It will be held on January 13th, 2009 at Mama Blues at 9645 Kingston Pike. The price is \$9.49 each. That includes your drink. It does not include tip and tax. These details and directions can be found on the club web site; www.kcrcn.com.

new business

KCRC will participate in the Knox County Outdoor Festival.

A motion was made to purchase a weather proof table top and passed.

Crash of the Month; none this month.

Model of the Month; Bill Dodge won model of the month with his new scratch built Curare shown below.



(minutes and photo by secretary, Ed Hartley.)

NOVEMBER MEETING PROGRAM BY SCOTT ANDERSON

(The following is a report from the November meeting by Jim Scarbrough. It was inadvertently left out of the December newsletter by the editor....sorry Scott and Jim! Jim's diligence in reporting such programs is not going unrewarded! (...or should that be punished?) Jim will be doing the newsletters for 2009 while Jerel tries to get his act together. That'll teach him to leave something out...or was that just part of his devious plan?)

An excellent program was presented at the November meeting by Scott Anderson. Scott demonstrated an airborne video camera and associated hardware.



Scott with the camera/downlink equipped, electric powered, Junior Telemaster.

The video signal, as well as various other data, are transmitted in real time to a receiver interfaced to a PC. Using supplied software, the video from the plane is displayed as you fly, along with altitude, speed, and other data. (next photo).



This is a Google earth overlay that the Eagle Tree telemetry system does during your flight. (Scott Anderson image)

The picture quality was very good and the view was almost like being in the model. The airplane used was a Hobby-Lobby Junior Telemaster powered by an Axi motor and 3S4000mah LiPo batteries. The video unit had its own power supply. The display was a tape of a flight that Scott made earlier in the week and was very entertaining, especially when the landing was made. Scott had used up most of the power during the flight making the video and found that there was not enough power left to go around again. The landing was overshoot and it was kind of disconcerting to see the tree growing larger in the view until we hit it! There was no damage so I guess that qualifies as a good landing. It was an excellent program.

Jim Scarbrough

REFLECTIONS JIM SCARBROUGH

While sitting in at the November club meeting watching Scott Anderson's very good program about a wireless video camera installation on a model, which also downloads all sorts of real time flight data that can be displayed on a PC screen, made me think of the old Virginia Slim cigarette ad that said "You've come a long way, baby". The big model he had the unit on was powered by a brushless motor and LiPo batteries and guided by a many-channel spread-spectrum radio and digital servos.

I thought back to my introduction to RC in the fifties (a half century ago!). My brother-in-law and I followed an article in Grid Leaks magazine on building a control unit to get remote proportional control of the elevator and rudder of a flying model. It was called "Gallopig Ghost" because the control surfaces were constantly flapping back and forth. Everything but the single channel Citizenship transmitter was home made, but it worked like a charm. A couple of years later I was able to buy a commercial unit made by Min-X that boasted a super het receiver and an engineering marvel called a Rand actuator that gave elevator, rudder, and throttle control, all with one channel!

The FCC had one frequency on 27 MHz that it called the "citizens band". We had to get an FCC license to use it but there was no test. It was a very busy channel. Many models were wrecked because of interference but we had a great time. Along about 1960, thanks to the tireless efforts of our AMA organization, the FCC increased the number of 27 MHz citizens channels and set aside five frequencies to be used only by model airplanes, although we always suspected truckers were using them. Losing control of your model in those days was a common occurrence. I remember one day at our field in Clinton we were having quarter midget races and we had a model on each of the five channels in the air at one time. Before we had completed ten laps, all five had gone down out of control.

My first "good" radio was a kit built unit sold by Model Airplane News magazine. It was called a MAN 234 because it would work in two, three, or four channel configuration. Each monthly issue would feature either the building of the receiver or the servo or the transmitter and you'd order the

kit of the featured unit. It was a true proportional control radio. There were several of us who ordered them and we'd get together to assemble the kits so we could help each other out. It was a two stick, mode two radio that worked great. In fact, I still have mine and it would still work if there wasn't so much castor oil in the servo gears.....Jim

CALENDAR OF EVENTS

TUESDAY, JANUARY 13TH, 2009, CLUB BANQUET AND MEETING, AT MAMA BLUES, 9645 KINGSTON PIKE (THE OLD RYAN'S LOCATION)

12 THINGS ALL PILOTS NEED TO KNOW (#3 AND #4)

FROM MODEL AIRPLANE NEWS

3 FLIGHT TRIMMING; To properly trim your model for straight and level flight, you should know that your model is balanced correctly longitudinally within its suggested CG range and laterally (wingtip to wingtip). You should also make that you have the engine down and side thrust properly set. From here on out, all in the air.

Take off and climb to a safe altitude of about 100 feet. Smaller models can be flown lower and giant- scale models can be flown a little higher. The idea is to have a safe altitude while still being able to easily see if your model is climbing or losing altitude. Set the throttle to about 1/2 to 2/3 throttle for your cruise speed and fly the model directly into the wind.

Neutralize the elevator and aileron stick and see what happens. If your model wants to climb, add several clicks of down. If the model wants to come down, add some up clicks. This usually takes a little while so make as many passes into the wind as it takes to get the elevator sorted out. Now do the same for the ailerons. Set up a flight path directly into the wind and neutralize the aileron control. Left trim corrects for a right turning tendency and right trim is needed for a model that wants to turn left. Now go around and set up one last trim pass into the wind to confirm the model will fly straight and level with the control stick in the neutral position. Remember that a properly trimmed model will climb slightly when you increase the throttle from the cruise speed throttle position, and it will lose altitude if you decrease the throttle below the preset cruise speed position.

The last thing to do is to land and take note of the positions of the control surfaces. Move the trim levers back to their neutral positions and mechanically adjust the control devises so the surfaces are back in their trimmed positions. It may take two or three more flights to fine-tune the trim positions of the control surfaces, but you should end up with a model that flies straight and level with the trim levers centered.

#4 FLIGHT ORIENTATION; A lot of airplanes are lost simply because the pilot loses his orientation while flying. That is to say, the pilot loses his ability to see what the model is doing and what he has to do to properly maintain control. With experience, pilots learn to fly with both visual cues as well as with instinct involving muscle memory. The best way to learn proper flight orientation is to practice. Fly, fly and fly some more. And while you are flying, keep ahead of your model by not just flying around the patch, but rather fly with a purpose. Make up a flight plan and stick to it. Don't just do whatever comes to mind after you take off. Do the same thing every time. Take off into the wind and when you reach traffic altitude make a 90- degree turn away from the pit area. Continue to climb, and then make another 90-degree turn in the same direction so you are flying downwind. Throttle back to cruise speed then follow the rest of your flight plan. Two more 90-degree turns in the same direction will have you flying upwind again. This helps you to maintain your situational awareness.

Should you become disorientated, having a flight plan in mind will allow you to think your way through a maneuver. If you know you are flying left to right in a slightly banking turn, should you fly too close to the sun and your model becomes a dark silhouette you'll know what to do, or not do, until you can see your model clearly again. If you fly your model so far away that you can't see it and what it's doing, add a little aileron and see what happens. If the model lowers the wing to the left when you give left aileron, you'll know it is going away from you so you can now make a turn to bring the model back toward you. If the wing on the left goes up when you give left stick then the model is already heading back toward you. A good thing to remember when the model is flying back toward you is that you can keep the wings level by moving the aileron stick toward the lower wingtip.

With practice, you'll soon be able to see the subtle cues your model makes, and then you'll make needed corrections more quickly until you do it almost automatically. You'll be flying the model instead of letting the model fly you.

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