Springfield Radio Control Flying Club

AIRMAIL

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NEXT MEETING

Thursday
January 5
The Library Center
4653 S. Campbell

From The President

by Doug Bennett

Merry Christmas and a Happy New Year. I hope you are reading this in time to make plans to attend our first club event of 2006 the "Chili Fun Fly". As we have for years we will gather at the field on January 1st to bring the New Year in with style and share a bowl of your favorite chili or other covered dish. You don't have to bring food to participate, but the more the merrier. The fun will start around Noon. It's a great time to renew old friendships and make new ones for 2006. I wonder who will be the first one in the air in 2006?

Now down to business. The week before Christmas Mike Howard and I met with the new Director of the Springfield Greene County Parks Department at our field. We wanted Ms Jody Adams to see what a nice flying field looked like and to get her thoughts on a Springfield area flying site. I feel comfortable in saying that she is behind such a location and that we would get her support 100% in developing parks maintained facility in the future. Jody asked me to put together an advisory group made up of members from all the local flying clubs. The purpose of this group would be to put together a want list or recommendations for the Parks Department and present it to their planning board. The plan being to make this part of the Parks Departments long range plan for future development.

Enjoying The Annual Christmas Party

Here is where we need your help. At the January meeting, I intend to open the floor up for suggestions and recommendations from the members on what you would like to see happen in Springfield. Since this could turn it to a long meeting, I would like for you to put your suggestions on paper in case we don't have time to hear everyone's recommendations. I will organize your recommendations and take them to the meeting of the area clubs. I have asked Russ Rhodes to attend this meeting with me and I would like one more person represent our club. If you are interested, please call or e-mail me or see me at the meeting to let me know.

Well, I don't want to get too long-winded here, and besides I think the possibility of a Springfield Area Flying Park is enough to get your wheels turning. I hope everyone had a great 2005 and is as excited as I am in the prospects that await us in 2006. See you at the field New Years Day, stay warm, and please fly safe and friendly.

Doug

Springfield RC Club Minutes for December 2005. Ralph Todd, Secretary

Minutes of December Christmas party:

Springfield RC Club, minutes of Christmas party, December 8, 2005. Ralph Todd, Secretary.

The party was held at the Golden Corral restaurant on 2020 East Primrose at 7 PM on December 8, 2005. There was a good turnout on a very cold and blistery evening with about an inch of snow on the ground. This may have contributed to the exuberance and the spirit of Christmas.

There was the thrill of seeing new members, introducing, and re-introducing of members and their spouses, as we picked out seats in our private meeting room. This continued as we began making decisions on what to put on our plates, at what has to be one of the most complete food bars around. We saw several members going back, and back and forth, scratching their heads while wondering just which selections to put on their plates. There was no way to include some of every item. Dan Copeland had certainly done a good job of making arrangements.

David and Lanora Campbell were busy receiving 2006 dues, and handing out new membership cards between bites of their meals. They had all new cards printed, signed and ready to issue.

President Barry greeted members and guest, and thanked all who had worked to make for a successful year. He presented David Sleeth with a lifetime membership certificate. All responded with loud applause, as it was very apparent how much he had contributed to the club for many years.

While waiting on the secretary to tally votes for the years Top Gun award, Barry proceeded to entertain us with a fun game. He asked questions which might relate to a peculiar flying style of a member, and let us guess who it was - long flights, short flights, most planes, most crashes etc. Everyone had a good time with this.

By the end of this game, the vote was in. Our own out going president, Barry Harper, had the most votes. He was presented with the Top Gun award for the year 2005 by outgoing secretary Ralph Todd, who commended him for a fine year of service to the club.

Doug Bennett helped to present service award plaques to the out going officers and board members of 2005. Following was a brief swearing in ceremony, for the newly elected officers and board members for the coming year.

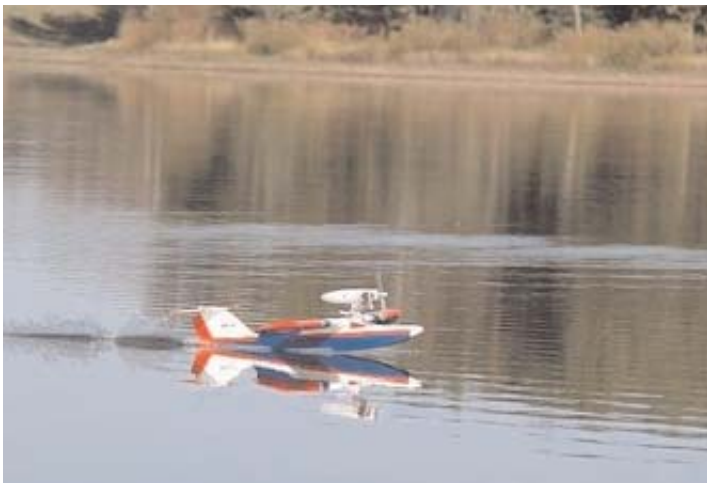
Then came time for exchanging gifts. The men brought wrapped presents for men, and the women presents for women. These were to be limited to approximately $10 each. Barry handed out numbers to all present who participated. The men and women were called on, by the numbers, to come and pick up a present - or to first take something from some one else who had already opened theirs. It was a lot of fun. If a present was opened that contained something really nice, they would sort of try and hide it. Chances were, they would lose it in this Chinese gift exchange.

Best wishes, seasons greetings, smiles, and handshakes, were freely exchanged, as we departed to brave the cold evening and the trip home. It appeared to be the feeling that everyone had a very nice time, and this party added a final touch to a very successful year. The party lasted until about 8:30 PM.

Here's a little tidbit from the "Did ya know" bank of info.

The pavilion was built on Oct. 5, 1991, and the original name on our field was "Chris W. McConnell Memorial flying field." We flew off a dirt runway, and the first plan was to not have anything but a dirt floor in the pavilion. There was only one house to the North of the flying field.

Mike



Tips and Hints
by Larry Dudkowski

This column is a collection of things I learned while looking up other things. Sometimes I run across hints, tips, or articles that aren't big enough for a whole column but are interesting enough to pass along, so here they are.

• Voltage is a critical factor in determining propeller speed in an electric model. I tried to fly my A-10 using a two-cell Li-Poly pack (7.4 volts 1200 mA). It promptly floundered into the ground. I switched to a six-cell Ni-Cd pack (8.4 volts 600mA) and found that I had a good performing aircraft. The same was true for my Tiger 400. Just switching from a two-cell (7.4 volts) to a three-cell (11.1 volt) Li-Poly made all the difference in the world. Simply put, it is battery voltage that determines the propeller speed and therefore causes aircraft speed. It is battery capacity (mA) that determines the flight time.

• The next time you are out grocery shopping check out the stationary section of the store. Look in the section where the rulers and protractors are. Pick up a set of small triangles. They usually come in a set with a 45° and 60° angle. They work great for squaring up the fins and rudders against the stabilizers and elevators (or any other spot where you need to have a 90° angle). You may find that they will work a little better if you cut off about a ½-inch of the 90° corner of each triangle. I also like to use them to position the control horns in relation to the servo arm.

For constant cord wings, set the base of the triangle along the control surface. Slide it along until it aligns with the servo arm and mark the spot on the control. The same is true for the rudder and elevator.

• Here's one for you builders out there—if there are any left. When I have wing-mounted servos, I make some paper tubes to use as guides for the servo wires. Just roll up some stiff paper (typing or printer paper will do) into a tube slightly larger than the servo connector. You want to make sure the connector will pass through the tube easily.

Tape or glue the tube so that it doesn't unwind. Then simply glue the tube to the wing ribs so that you have a conduit between the servo-mounting hole and the points in the wing. Being paper it's easy to cut the excess tube.
Now even with the wing covered you should easily be able to thread the servo leads through the wing to the exit points.

• You want to put a little thought into when you mount your on/off switch. This is especially true for hand-launched models such as Combat airplanes. You want to place the switch in a location that won't be accidentally hit during the launch.

For Combat models, probably the best spot would be on the top of the fuselage just aft the wing. There have been a few instances where the switch was accidentally turned off during the launch. This caused the model to go out of control and crash at full throttle.

If you use a push/pull switch, try this little bit of advice. Set it up so that pull is on and push is off. That way, if anything hits the tab during transport it will not turn the model on and discharge the batteries.

When flying I use a small piece of fuel tubing to hold the switch in the on position. Simply cut a small piece of fuel tubing about the length of the push/pull rod in the on position. Then cut the tubing lengthwise, and you can slip it over the rod.

When ready to power up your airplane, pull the rod out and slip the piece of tubing over the rod between the fuselage and the tip. This will prevent the rod from accidentally being pushed in during handling. This little lesson cost me my Ultra-Stick last summer when the model powered itself off in flight. Believe me there is nothing scarier than flying a model you can't control.

More Photos From The Christmas Party

Fast Charging: Will it Harm My Packs? by C. Scholefield

First, let's define fast charge. The industry standard is any charge rate that will charge the cells in one hour or less. This fast charge capability thing is very interesting. Almost all Ni-Cds manufactured today for RC systems can accept fast charge (up to C rate, that's the rate at which you can charge the cells in approximately one hour).

Cells that are specifically sold as fast chargeable go through another step in the process. This step involves charging a sample from the production lot, and then measuring the end of charge voltage. Cells with the highest end of charge voltage are then analyzed for internal pressure. If the internal pressure is acceptable—that is not above a preset limit—the whole production lot is blessed as being fast chargeable. Of course this adds a finite amount of cost to the cell as they must be “formed” prior to being shipped in order to be fast chargeable.

Cells not destined for fast charge applications are shipped “unformed” by some manufacturers. The first charge after the assembly is what “forms” the cell. When you charge your RC system packs for the first time you are "forming" them. That is why the instructions tell you to charge the packs for 16 to 24 hours before you first use the system.

So in most instances you are safe fast charging the RC packs (transmitter or receiver) on the market if you first make sure they get a good first cycle formation charge—24 hours at a slow rate.

Where the problems arise is that some of the fast charge systems available are a little sloppy when it comes to terminating the fast charge, or they are pushing the cells too hard (higher than the C rate charge) and then damage occurs.

As a rule of thumb if your packs are not getting hot (slightly warm is okay) you are not damaging them in the fast-charge process. When pushing too much current into cells not designed to accept it there is the risk of driving the cells above 1.6 volts (the hydrogen-over-voltage point) and electrolyzing the water in the electrolyte and generating hydrogen. This is a cumulative event and repeated fast charge at these rates will result in sufficient accumulation of hydrogen to cause the cells to vent. When they do vent, there is a chance that the chemical balance will be disturbed and the cell capacity will fade.

Understand that the pack may not be fully charged when the fast charge terminates. It is a good practice, if you are going to fast charge frequently, to top off the packs using the slow charger. This will bring all cells to the same state of charge and "balance" the pack. Otherwise the cell that is not fully charged will be the limiting cell on the next discharge. This continues until there is a major unbalance in the pack and one cell can be driven into reverse (if you don't crash first).

COLD WEATHER FLYING

[This is not an exhaustive document on cold weather flying and I'm sure others have written about it better than this, but these are my own personal observations.] Many of you shy away from cold weather flying. But why? With the right equipment, proper preparation, proper clothing, favorable conditions, cold weather flying can be really quite enjoyable. Conditions: OK to fly in the cold first requires the right conditions, no wind or a gentle north wind (a gentle west wind is OK, but not ideal), and a clear sky. With these conditions, one can sit on the sun side of the shed to stay out of the wind and enjoy the warmth of the sun. Clothing: Certainly cold weather requires more layers for both upper and lower body. The key areas to keep warm are hands, feet, neck and head. I've found a hooded sweatshirt over a good heavy winter baseball cap works well. Good thermal or heavy wool socks inside insulated boots keep the feet warm. Jersey or thinly lined jersey gloves help keep the cold off the hands without severely limiting dexterity. It takes a little getting used to flying with gloves on, but it only takes a few flights. [Then, in the Spring, it's odd flying without them.] I do own a transmitter bag in which I can place both hands and a transmitter, but I've not used it in the past three winters. Proper preparation: It should go without saying that fully charged batteries in glo starters and electric starters are a must. Cold engines are harder to start and are a strain on glo starters and electric starters. Engines require a slightly richer carburetor setting. Right equipment: On a really cold day, fingers and toes will eventually get cold. A portable electric heater is a must. We must also fly the right model -- one we know really well. This is critical. The cold conditions only contribute to reducing our reaction time. Because our body may be uncomfortable to some degree, we must fly a model with which we are very comfortable. If we are accustomed to standing near the flight line, a large piece of cardboard propped against the flight station safety fence can keep the wind off the feet, legs and fingers.

Notice nothing was said about temperature. If all the things above are taken into consideration, temperature doesn't really matter much. We've flown on days that started out in the morning at 12 degrees and ended in the afternoon at 17 degrees.

The only caveat to the above is for those who have watery eyes or runny noses in the cold. This can make flying in the cold difficult, dangerous, and/or impossible.

Barry Harper