

# The Flying Times

## The Official Newsletter of the Valley RC Flying Club

May 2007

President, Dave Burgess    dmburges@planetcomm.net  
Editor, Daryl Tonini        dtonini@earthlink.net

Visit our web site at: [www.vrcfc.org](http://www.vrcfc.org)

### May Meeting Location Notice

At the field, come early and bring your plane(s)

### Presidents Korner

Well spring is supposed to be here but good flying weather it is not. Been on the cold and windy side.

**TRANSMITTERS** The battle is starting--- I see today that JR has come out with a 2.4 GHZ spread spectrum radio. They are using it in 9 and 12 channel models. The one nice part is they are using the same modulation scheme, DSM2, as brought out by Spektrum. The receiver has 2 front ends which can be placed up to 6 inches apart and arranged to receive Horizontal and/or Vertical polarization, depending on model orientation. I believe Spektrum uses 2 frequencies. JR must be paying royalty fees to use the Spektrum system.

Futaba is using a system of frequency jumping to achieve Spread Spectrum modulation. I won't go out on a limb yet as I don't have any idea which is the better system. Although the system used by Futaba appears to be a more true type of spread spectrum. They both use space diversity reception. That is if the signal is at a null at one antenna

it most likely will not be at the other antenna. There are a number of modulation systems that use the name spread spectrum. I have got to do some reading to find out the properties of each. The ultimate result of spread spectrum is to achieve a much better signal to noise ratio. The first systems I ran into, used to send out the same digital pulse on a bunch of frequencies at the same time and then in the receiver, using narrow bandwidth techniques combine them to cancel the noise but not the wanted data.(noise being random but the data is not). They also avoid interference by having a number of good data signals to pick from in the decode process. Myself, I think I will sit on the fence for now and wait until it all shakes out and prices drop. I hope they standardize the systems, but that appears to be unlikely. Although I can see a Transmitter that could switch between a number of methods of Spread Spectrum like some present transmitters that can do both PPM, PCM and Digital.

**IN FLIGHT MONITORING** I have finally got all the pieces and adapters all together to do a flight and monitor voltage,current, totals, temperature, RPM and soon maybe airspeed and altitude. I see by the latest Model Aviation in article near the last pages that the MicroLogger was being used to see how motor currents and RPM were

acting in actual flight using different propellers. A figure that can be calculated from this data is aircraft drag. By using a propeller of a certain pitch and knowing the RPM you can figure of the forward speed. The problem with that is, that it is a 100 % figure with no drag. With in flight air speed data you can figure out the coefficient of Drag . I think that is what they call it..

**CLUB TIDBITS** The BOD has met over the Internet to pick a replacement for our Vice President Doug Alder, who has resigned because of medical (knee) and other problems. We went over a number of names and picked a person who should add some youth to the BOD and have a deep interest in RC flying. We called Jonathon Hathaway and he has accepted the position. I and the BOD think he will do a good job. I must thank Doug for the job he has done over the last year and a half.

The mowing agreement with Aaron Swindle has been activated, so no need for you to mow this year. The Field Lease has been renewed for another 2 years and our Field Insurance with AMA has been renewed for another year. All in is good shape. Next will be Spring Clean Up and then the JUMBO. See you all at the Field. I believe that the next meeting will be at the FIELD. So come early and bring a plane.

Best Regards Pres Dave B.

## **The 23<sup>rd</sup> Ray Gordon Memorial Jumbo**

In just six (6) weeks our IMAA Jumbo event will be here!! Hard to believe that time is moving so fast. I am real excited about all the things that are coming together! Several vendors have contacted me and stuff is on the way!! Both of the local hobbies stores are also being very

generous this year with a 27% airplane and equipment. That is going to be a nice raffle!! I have heard from over 12 individuals from out-of-state that have contacted me for more information and I know of two of my long time flying buddies from Tennessee that are making to long drive up here to be with us.

I hope you will also plan on attending and remember to check in for areas that need some assistance. I hope to have a brief station sheet posted at the impound area that will show were the help is needed. As we have discussed in the meeting, there are several pieces of equipment that we need.

Aaron has done a wonderful job getting the field prep already. He has installed new pilots stations, new Fire Extinguishers and is working on updating the First Aid kit. We will need to schedule one afternoon in May to do some brush and high grass weed eating.

Some of the things that we still need are: Shade Tents, Food, additional raffle items (doesn't have to be r/c related), portable toilet, and drinking water and ICE. If someone can let me know if they can take care of any of those, I would appreciate it. I would am working on all new signs for the field and will have those ready also. Several have already volunteered to bring Grille, PA system, 2-way radios.

I am also working on our club clothing articles that need to be ordered by May 14<sup>th</sup> in order to have them ready by the Jumbo. If you still need info, let me know. I have also been given permission to buy extra just in case you failed to order one or want to buy another one at the

event. I am also working with the company is having some 23<sup>rd</sup> Ray Gordon Tee's made up at my expense to sell. Whatever money I make over my cost, I will donate to the club.

So....lots of cool things happening and I only need 3 more people to step up and volunteer to head a sub-category. Everything else has been filled in on the flow chart. A BIG THANKS to all of you who have already signed up! Please volunteer, or better yet.... volunteer (encourage) one of your good flying buddies to sign up!! Two questions I have for the club. #1 Do you know anyone who has a full size plane (better yet a military plane) that could do a fly over at noon? #2 Does anyone have a camera that can take a panoramic picture? I want to get all the pilots at noon to bring their planes on the field and get a full shot.

Thanks again for the calls or for the emails I have received in your support. I think we are going to have a wonderful time and lets all hope for good weather and great flying!

See you there!

Tim B.

## The Wright Stuff

Well....It's time to get those planes out of storage and start checking them over for the up coming flying season. I am really excited about all the new ARF planes and the 2.4 GHz spectrum radios that are coming out. Both JR and Futaba have announced at the TOLEDO show they will have their own version by late spring and summer. This is going to make pilots re-think their excuses

now, when they dumb thumb one into the ground. If you were honest you would say it was my fault, but those of you who can't seem to get that out of your mouth, you want be able to say.....the old standby..."I got hit!!!!" Or "someone is on my channel!!" Might be time to do a reality check!!

I agree that on rare occasions, something mechanically does go wrong with our planes or that we do get interference, but 98% of it is pilot error. Which leads me to me column this month. The best way I have found to reduce this percentage is to have a pilot training program that is structured and covers all the basics (ie: ground school, flying many different attitudes, testing, and advancement recognition). One of the things that I have learned and witnessed over the years is the growth of a club is due to attention to three major areas.

#3 reason is **Facilities**.

OF course....You have to have a place to fly! BUT that Location sometimes can be a factor that can intimidate new pilots. That stress level will play a factor in their learning. How well you maintain your field and the amenities that are available can make a difference to new pilots. AMA offers a LEADER CLUB program because they too realize the importance of field and community awareness issues. I think we should participate in that program!

#2 reason is **Events**.

You will get more new blood and more excitement in general with pilots, when clubs participates in events. The more you have, the more you see growth in vast areas of the hobby. Events also generate needed funds to keep the club financial secure and able to participate in capitol improvements to the field and to provide community outreach awareness. One of the things that show a good neighbor approach is to have things like a TOY-4-TOTS fly-in and also a scholarship program. You would be

amazed at positive influence things like that have on your local community.

#1 reason that clubs grow and have good participation is.....**Training.**

I have seen clubs double in size in a 3 year period because they took a serious look at their training program (or lack thereof) and made adjustments. It is a fact that most of us teach to others what we know and how we were taught (whether it is good or bad habits). We can't teach something we don't know or was never shown to us or that we simply don't understand why it works. Herein lies the problem. If we were taught some simple principles, given the transmitter and shown some movements of the stick and left to learn the rest on our own, then that is how we teach others..... and the cycle continues.

Some may argue...so, what is wrong with that? Well ....First, Two wrongs don't make a wright, BUT two Wrights....built an airplane. You see from history that the Wright Brothers relied on other peoples conclusion and it continued to plaque their advancements until they finally decided to go back and start all over with their own calculations. The same applies here with training new pilots. We need to retain our new pilots and keep them active and one way to do that is to give them the "WRIGHT" stuff.

Second...It takes as much time to do it right the first time as it does to do it wrong twice! There is a better way to retain our new members. Think for a second about how a typical person learns to fly. They see someone fly a RC plane or read an article or TV show about it. They may even asked a few questions. They get the bug and want to go online and buy all the latest stuff. You know....a military airplane to zoom through the sky like a P-40 or P51. They get all excited and rush to the field with their stuff in hopes that someone will be there to help them be an expert pilot by the late afternoon! Now, they get there and they look around for whom they

should ask for help from. Timid and not wanting to push anyone, they wait....and wait...then finally someone who is not a club instructor approaches them and offers to help. The first thing they hear is "that is not the right kind of plane to learn with, you need a trainer"

So they find out where the local hobby shop is and go in a get all the stuff they need to "learn" to fly. They get is all assembled (ARF) and go back to the field the next weekend.

Hmmm....the same guy is not here today...now who do I ask? They sit on the bench and hope that by chance someone will figure out they want help. Finally another flyer who is not a club instructor, steps up and offers to help him. He is just a guy who can barely fly but is willing to help. The heart starts pumping and the owner of the plane is about to bust with excitement as they watch the plane start up. Then the guys flies it and the owner is about to scream as he watches because he is about to experience flying a RC plane. Then, the guy informs the owner that it is not flying right and need to bring it in. He lands it and begins to go over the plane (Forgot to do this before they flew and assumed the owner did everything right). Gives the owner a list of things that he needs to do to the plane before it is "airworthy" and send him on his way.

So...the guy goes home and makes the changes the best that he can. Comes back the next weekend, unloads his stuff and gets it ready and waits.....and no one is there. Turns out, there is a fly-in at one of the other local clubs and most of the club members have gone to it. A few guys eventually show up but don't really know how to fly well or not real sure who this new guy is. So he loads his stuff up and goes home. He stops by the local hobby shop to buy a prop and ask some questions. He gets the names of some good flyers to help him learn. He is now set to start his training.

He learns the basic Oval pattern and flies several more times and calls it a day. He continues to learn to move the sticks and can now take off. One more lesson and he can land. He gets a pat on the back and is told that now he has a solo flight. He feels like a million bucks and can't wait to do it again. Two days go by and he can't stand it anymore, he has to go fly. No one is at the field but that is OK because he has Soloed and can do it.

Takes off and guess what,... the wind picks up and he is having a tough time with it. Trims are all off and the engine is acting up. He panics and eventually drives it into the ground. Next week.... Buys another trainer and has a few more lessons and then starts to show up at the field to do it all by himself again. This time the plane does better but he gets over confidence and tries to do a roll or tight circles and once again he freezes up for a second and the plane crashes. Discouraged and frustrated he goes home and says that he is done with RC planes.

WOW....how many times have I seen that scenario play out? Several and it could have been avoided if several rules were enforced at the local club. #1 No intro pilot ever flies without a trainer plane and instructor. PERIOD! #2 Training is to be administered by certified instructors only. #3 No pilot earns their wings before their time! #4 Solo flight does not equal a Pilot license. #5 Designated times for pilot training will be followed. #6 All Training will be conducted with a trainer box. #7 Proficiency guidelines will be followed and conducted.

None of these rules are hard and fast. We all learn things differently and at different rates, but consistency in our training will increase pilot advancement 10 fold. I can tell you from personal experience that clubs that follow such rules have better safety record, better participation, and better new pilot retention.

As the new flight training coordinator, I will do everything I can to make this program a success! I will tell you up front that I am not the best flyer nor am I the best teacher in the club. BUT I am someone who has a passion for RC planes and a real desire to try and make our club the best it can be. I look forward to this challenge and hope to make it a wonderful experience for everyone involved. My motto: If you can find a better way to do something, isn't that worth doing?

I think this will be a great year at the field and I look forward to flying with many of you this season. We have a new Vice-President and a new mowing contract with Aaron that should take care of most issues that the club will need to address. If you have a suggestion about the training program or you want to participate in it, contact me. I need to hear from all of you. I want to hear your opinions and comments. My door is always open and I enjoy productive conversation about our club and RC flying in general.

Seasoned pilots can benefit from this program too. I hope to introduce an Advanced training program after the Jumbo event this summer. As with most learning experiences in life, you get more out of it, than what you put into it. If we want good quality pilots, then we need good quality training so that we all have the Wright Stuff.

Thanks for listening,

Tim B.

## BUILDERS CORNER

Had to share this with the club. We met with Charlie Munneke to photograph his 1/3 scale Sopwith Camel. It is for sale on both

<http://www.flyinggiants.com/> and  
<http://www.rcuniverse.com/>

the asking price is \$5,500. Other offers you will have to take up with Charlie. (540) 886-0763. Below is a description of the aircraft:

Sopwith Camel 1/3 scale. Wingspan 105.5 inches.  
Length nose to rudder 78 inches.  
Weight 30lbs. Built from 3 views.  
Construction: Spruce, Ply, Balsa.  
Hardware: Nelson Hobbies Proctor Turnbuckles. Hi-Tech Servos/645. 1800ma batt. Zenoah G-62/W Spring Starter. Slimline Pitts Muffler. Dubro 1/3 scale wheels. Undercamber wings, Bungie Gear, Elev/Rudder..pull-pull. Aircraft is covered with Solar-Tex. Painted with Randolph Dope Colors taken from full scale Squadron Signal Publications. Pilot By Diane. Field assembly approx 10 minutes. This aircraft is NOT a Kit Bashed Pup. Shipping is not an option. Delivery can be arranged. This aircraft was designed, blue printed, and built by Charlie Munneke, truly a master builder.

I got to taxi it a bit and the ground handling is spot on with no wobble or any slop. It feels like you are connected to the airplane.

There are some very talented people in this club! :)



Aaron\*\*\*\*

## BUY-SELL

I am looking for a .61 size motor for the Cherokee I bought at the swap meet.

Phil Speicher  
540-335-5328

## SAFETY STUFF

In the May 2007 issue of *Quiet Flyer* magazine, Rob Smith's Sport Electrics column presents a procedure for LiPo disposal. It is representative of several which can be found on the internet but one which Rob feels is the safest and most effective.

First, he points out that LiPo batteries are environmentally friendly and can be disposed of in the regular trash, unlike NiCad batteries, which need to be recycled. The trick being to complete a series of steps that make the LiPo battery totally safe before disposal.

He lists the items needed for the procedure: Discharge device (light bulb, discharge capable charger such as an AstroFlight 109 Digital), a bucket, wire cutters, water, and salt.

First, the LiPo battery pack must be discharged to at most a maximum of 3.0 volts per cell. Discharging the cells to less than 3.0 volts is ideal. The whole idea is to take as much of the charge out of the pack as possible. Rob cautions that you should be as careful with this step as you would when charging the pack.

Next, after the pack has been adequately discharged, Rob instructs that you clip the wires as close to the front of the pack as possible avoiding any shorts from leads or tools touching the battery terminals. Conduct this operation in an area where there is nothing that can catch fire—use common sense.

Using the plastic bucket, add one or two gallons of cold water. The amount depends on how many or how large the

battery packs are that you are disposing of. After adding the water to the bucket, add ½ cup of salt per gallon of water. You want a salty solution.

Finally, take the LiPo battery to be disposed of and immerse it in the bucket of salt water. Let the battery pack soak in the salty brine between one and two weeks. The salt water slowly takes the remaining charge out of the battery pack. Ideally, when the battery pack is removed from the salt-water bath, there will be zero electrical charge in the battery pack. Now the LiPo battery pack can safely be tossed in the regular trash.

## FIELD MARSHAL NOTES

Hi all..... Well the nice weather has finally arrived...with it comes many hours in which to get some flying in. We've got the field and surrounding area shaped up. Dan Meyers brought his tractor and bush hog over this Sat and knocked down all the stubble and over growth from the entrance down to the creek and beyond. It simply looks great. J.R. Varela and I got most of the loose branches cut away from the trees recently. I've been weed eating and sprucing up around the bridge and shelter...I like to keep it trimmed down pretty short. The runway is looking the best I've seen it in a while, mother nature has been generous with the rain and cooler temps makes for nicer grass growth early on.

If we need to, we'll have a clean up day shortly before the Jumbo. You guys can decide what needs to be done for extra sprucing up to make it look extra nice for our guest pilots. Dan Meyers suggested a better sign out by the road for this year...I agree. Tim Blankenship has done quite a few events so we can always get more suggestions and ideas from him. You'll notice I installed numbered flying station marker blocks out at the field. 1-5, although we like to

fly only 4 aircraft at a time. Never hurts to have an extra I say. The grass barriers have grown back in nicely, I will keep them mowed to a specific height this year...they got too high last year. The barriers help stop a plane if its headed toward the fence....usually the wheels get hung up and the plane flips over, fairly gently I might add. If the aircraft gets past the grass, the fence will do the rest for us hopefully. If the grass and fence fail to do the trick....please yell out quickly so folks can take cover...don't want anyone hurt. Speaking of safety.! If you have need to go in the (mower shed) for anything I cant stress how important it is you WATCH YOUR STEP in there.! My buddy the ground hog digs sharp angled holes in the floor every chance he gets....please be careful. I may try a live trap to get rid of him this season, the club says I cannot use dynamite or C-4 explosives to quell his destructive behavior.! LOL :) Randy Sampson and Wes Ryman have got a batch of new toys to maiden and fly..so don't be a stranger.

Thanks to everyone for your help and support.

Aaron Swindle  
Field Marshall

## EVENT CALENDAR

8<sup>th</sup> Annual Electric Aircraft Fly-in

Saturday, July 28, 2007  
LCAA Flying Field  
Banshee Reeks Park, Leesburg,  
Virginia  
Registration and flying starts at 9 AM  
and goes 'til 5 PM. AMA Sanction 07-  
0061. Bring your Park Flyers, Slow  
Flyers or Sport Flyers. Check LCAA  
web site <http://www/lcaa.org> for  
additional details.