



The Grass Strip News

Nov. 2018

Intro

I have decided to start up the club news letter again. I will be writing about various things and happenings to keep the club up to date with the various things going on with the club. I've been flying R/C since I was 11 years old. By the time I went off to college, I had stopped flying. Twenty years later, 2010, a good friend of mine introduced me to LiPo Batteries and all that had changed in the R/C airplane world. I couldn't resist, I had to get back into the hobby. Things had gotten so cheap from the 1980s. When my father and I started, we had an old used Futaba 4 channel black plastic AM transmitter. I remember friends with the old Kraft transmitters. The first new radio we ever bought was the Futaba FG series, the gold face ones. I think we gave almost \$400 for it. When I returned to the hobby in 2011, a friend gave me an old JR x347 and promptly installed a 2.4 module. I could buy servos from Hobby King for \$1.50. Amazing!!!! There was an ASSAN module set with 2 receivers you could buy from Hobby King for \$70. Servos, Radios, everything had gotten cheaper. Foam airplanes were everywhere. And what was Spektrum?! Never heard of the brand before. Times have changed, and so has the hobby. It seems to find a teenager who is interested in the hobby is a rarity. No one has the attention span to build up a balsa kit or learn to fly. Everyone wants instant gratification. They want sit on the couch and watch some guy play sports, or text to their buddies on Facebook, or play a video game. I remember as a kid, I had nothing but time. After school and homework (if I even did it), I was in the basement building a kit, trying to get the monokote to come out smooth. I remember having so much time to build and get a plane ready. Dad would come home from work, after supper, we were in the hobby room the rest of the night. Today, no one has time, everyone seems so busy. People got cable, smart phones, internet. When I was kid, we had rabbit ears and 4 channels on the TV if lucky. Mom and Dad refused to get cable. Looking back, that was a smart move on their part. I'm a better person now for learning how to actually do something. You learn a quite a few skills building an airplane from a kit. Anyways, here we are!

Our hobby is slowly dying because of lack of interest. The Drone nuts have just about got us banned from the sky. (This is a rant for another day). Internet sales have taken over, local hobby shops are all but gone. Even Tower Hobbies went bankrupt this past year and had to be bought out. Times will continue to change. We should all enjoy the hobby as much as possible and take time to teach those who want to learn and enjoy the hobby along with us.

Despite all that has changed, I love flying R/C airplanes! The R/C airplane hobby now has gotten cheaper and better than ever. There is nothing like it, I would argue it is one of the most enjoyable hobbies a person can have. It is nice to cruise the sky with your favorite airplane and forget about all the crazy things going on in the world. For those 5-10 minutes I'm flying, my mind is clear, I'm not thinking about anything, just the pure joy and pleasure that comes from cruising the sky with my favorite airplane.

We are lucky to have such a nice place to fly at the moment. Thank you, Doc Atwell. Hopefully we can continue to use the field for a long time. I do think we need to be mindful about noise, that is what ultimately cost us the last field. Even though we are further out, there are still some houses around. Let's all be mindful of that.

I'm not sure yet what all I'll write about, but until a better writer comes along. I'll try to talk about things and share club news here. If you have an article you would like to write and publish in the newsletter, send it to me at the email below.

Sincerely,
Ron Adams
TaildraggersRCeditor@gmail.com

At the Field:

In case you missed it, the past 2 weekends had some great weather. This past Sunday, November 18th the field was full of pilots. Something I don't see often.



Who all was there? Harvey Burns, Don Rainy, Javier Ramirez, Gary Riddle, Reginald Gordon and grandson, Jason Beaver, Ron Adams, Terry Wallace, just to name a few, If I missed your name, I apologize. A good time was had by all.

Topic of the Month **Batteries and Chargers**

Now, I will share with all my opinions and what I have learned in the last few years. I do fly electrics as well as nitro. Electrics have come a long way and continue to develop. I have learned a few things that might help you or you may just already know.

Batteries.

You get what you pay for. I've flown Zippy, Turnigy, Nano-tech, Dinogy, Eflight, Floureon, and a few others I have bought off eBay. Most recently Graphene by Hobby King and Dinogy.

I will tell you that Dinogy, Nano-tech, and the new graphene batteries are what consistently hold up for me. I personally recommend them. Recently, a buddy of mine thought he had good batteries, his was fully charged and he flew, then he put one of my batteries in and really noticed the difference. Same battery

11.1V 3S 1300 mAh. What was different? Brand and C rating. My batteries were rated at 50C his were 25C. His were Zippy, mine were Dinogy. My batteries have low internal resistance, his were high. You need to keep tabs on the internal resistance of your batteries. It's not an exact measurement. I would say its relative. You need to document and check internal resistance when you first buy your battery. How? First, I recommend you get a charger that measures it.



These 2 chargers represent those on each end of the price scale. I have owned both.

The HITEC Pro Multi-charger X4 can charge 4 batteries at the same time and is one of the best chargers on the market. Easy to use. You can use at the field as DC, or plug in at home as AC. It will set you back \$200.

The Turnigy Accucell 6. It is a DC charger only, so you will need a power supply or when at the field just hook up to your car battery. It is a budget charger, but a good charger. \$25 from Hobby King. They work great. It will also check internal battery resistance same as the Hitec, but you can only charge one battery at a time.

If you can afford both, get a Hitec at home, the Accucell 6 in the car/truck.

So... what is acceptable for Internal Battery Resistance measurement? Again, this is only my opinion and how I do it. That's where I come back to the relative part.

Measure your Internal resistance when the battery is new and fully charged. Write it down. Typically, I see new batteries all over the place. Anywhere from 3 milli ohms to 15 milli ohms. I like to see a drop of 20 or less milli ohms after I have been using the battery for a while.

Example: My new 3 cell Lipo 11.1V battery measured:

Cell 1: 5 Cell 2: 8 Cell 3: 12

At the end of the flying season

Cell 1: 25 Cell 2: 28 Cell 3: 32

In this case, I would say this battery is marginal. It dropped 20 per cell. I was hard on it. I'll keep using it just a little more.

If I see a change of 20-40, its already seen its best days. You are going to get bad performance.

When I see a pack with over 50 milli ohms per cell drop from when new, I can tell you, its time to think about replacing that battery.

Remember we are talking milli ohms so the length of your balance plug and the connection itself can cause variance from battery to battery. Even the XH board you plug into can make a difference. That's why I'm saying you need to measure when new and track it, and measure it under the same condition, fully charged.

LiPo batteries are dangerous. Respect them.

Basic Battery Handling Rules:

NEVER leave them in hot cars. NEVER leave them in a hot garage or any kind of hot environment. They will explode, catch your car on fire or burn your house down.

NEVER leave charging Batteries unattended. Keep your charger unplugged when not in use. Make sure your batteries are unplugged from the charger when not using the charger.

Keep check on your internal resistance, and don't use puffy batteries in your airplane.

Safely dispose of your bad LiPo batteries. Completely discharge the battery. Make sure all cells are 0 volts. Remove the main connector and twist the main discharge leads together before discarding.

Request to Club Members:

The next planned Club meeting will be December 11th, at 7:00pm.

Location:
Commuter Craft
63 Industrial Drive
Cartersville, GA 30120

If you have ideas on how to increase club meeting attendance, send any of the officers an email or email me at TalldraggersRCeditor@gmail.com

The club would like to improve the overall flying experience for all club members and share our experiences. Ideas and Suggestions are welcome!