HI-SKY R/C FLYER

March 2011 **Volume 40 Issue 3**
President: Chris Rutter Treasurer: Ed Anderson
Vice President: Henry Smith Secretary: Ralph Gillette
AMA Charter Club #851 www.hiskyrc.com

Back in the Saddle
By Ric Baccus

I have been flying RC planes now for just a little over a year. I started flying with Dennis Paschall on the club trainer and after about ten flights I proceeded to my very own Hobbico 60 high wing trainer to polish my skills.

About five months ago I bought my first "big" gas power plane, a used Aeroworks Extra 300 with a 45cc engine which had a history, and had been crashed and rebuilt a few times. The last time I heard was pretty bad, but Dennis was able to rebuild her, and quite frankly, it was believed the plane flew better after the repairs than when new.

As my learning curve continued I discovered that big planes fly better, and are pushed around a lot less by the wind. I did learn however that aerobatic planes like this one are fast, very responsive, and they do not have any grace built into them for the low experience pilot. I could fly her, but I had to be real careful. Still, to me, the plane was cool, and I had bonded with her.

One morning in the fall of last year, I had my big plane up and was flying around. I had been flying her

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Meeting Notice: The March meeting will be in the First Baptist Church Activity building on March 1, 2011 at 7:00 PM.

HI SKY R/C Club Minutes: February 1, 2011

Meeting was held at the First Baptist Church.

Meeting called to order at 7:10 PM by President Chris Rutter. 11 members were present with 1 guest.

Minutes: Minutes were approved as published in the newsletter.

Field Report: Jim Tartt reported that the field looks pretty good. Workday is set for March 26th to work on the safety netting and the caliche. Probably need to mow before the work day and then again the end of July.

Safety Report: Comment made and agreed to by several members that we need to watch our hands when moving transmitters and other equipment around on the stands after an aircraft is started. There is not much clearance around the prop.

Treasurers Report: We have money in the checking, savings and CD accounts. Next major expenditure will be for the caliche.

2011 DUES ARE DUE

Activities: Established some dates for activities in 2011.

Fun Fly	April 16th
IMAC	May 28/29
Fajita Fly-in	June 18/19
Pylon Race	July 2 (Fly what you bring) - (Cook what you bring)
Calling all Hogs	August 20/21
Fun Fly/Pylon Race	Sept/Oct
Electric Fly	Horseshoe is set for one day only, October 23rd.

Old Business: Signs – AJ has tried to make contact

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for a while now, and I guess I was beginning to feel confident in her ability to stay in the air, even if I did something less than perfect.

That day I had been experimenting with flying inverted and as I often do, I was probably flying a little lower than I should have been. There was some traffic in the area, so I was also flying out a little further than I should have been to stay clear of others. That is when I got into trouble. I was way out southeast of my position, still flying inverted, when I got disoriented and I panicked and started making aggressive movements trying to determine if the plane was going away from me or coming toward me and that is when it happen.

Before I could say what I was thinking, the Extra 300 took a steep turn and headed straight for the ground at what I figure was about 80% throttle. In an instant I knew I should cut the throttle, but it was too late and the plane was gone.

I can't begin to tell you all the emotions I was feeling at that moment, but I am sure some of you know very well. I had just lost my favorite plane. Yes, I had been told "not to get attached to any RC planes, as they all have a life expectancy and some retired before others", but at that moment all that didn't matter as I felt a real sense of lose. My over confidence had caused me to damage my favorite RC plane.

As I headed to the crash site with others, I had several concerns. This was not going to be one of those mesquite tree kind of crashes. This was going to be serious. I had $500 invested in this plane and for me that was a lot of money. I was wondering just how bad the damage was and how long I would be without my plane before I could get it repaired. Then I saw the plane. My heart sank. It was a total loss. How can that be you say? Well I had managed to be so far out that when I went down, I didn't hit a tree, or even the ground, but in fact I drove my Extra 300 right into the race track surface that exist southeast of the flying field. There was nothing left but a pile of balsa, and various engine parts lying all around a 10 foot area. Nothing survived except 2 servos that are probably questionable at best.

Now a whole new wave of thoughts flowed through my mind. I had not just crashed my favorite plane, I had destroyed it. I felt bad for the plane, I felt bad because Dennis had spent so much time on this plane, getting it to fly perfect. I felt embarrassed that I had been so foolish to risk flying inverted when my skills were not yet polished. The financial loss came later as I reflected on the wreck that evening, and I was almost sick.

It was over a month before I pulled out one of my smaller planes and went to the flying field. I flew around for awhile, but I wasn't comfortable, and I could tell that the wreck was still fresh on my mind. On my last flight I was experiencing some engine troubles, so in frustration, I just packed everything up and headed for the house.

The weather turned bad, and it has been another month or so since flying. I have walked around in my shop looking at my planes, but something just didn't feel right. I was really puzzled by these feelings, because I have always been the type that if I couldn't learn or get something figured out that I wanted to do, I would just keep plowing at it till I did.

Finally a few weeks ago I went out to the field early on a Saturday morning. I was the only one there, and I decided to walk back out to the crash site one last time. All the thoughts came back as a walked out to the far southeast corner of the race track. It was pretty easy to find, as you could still see a few pieces of balsa lying on the ground.

I just walked around the crash site for probably 30 minutes . . . just thinking to myself. I reflected on the plane, the crash, and finally all that I had learned from that experience. I began to feel better. I begin to think about what all I did wrong that lead up to that fatal moment. I was flying above my experience level, too fast, too low, and too far from the field. It all became clear to me out there in the field. It was at that point that I knew I had to get back into the saddle, and fly again. I had to take what I had learned and get back on track with my training. I had other planes that I could build and fly. I even had a gas powered replacement plane that I had picked up to replace the Extra 300, but hadn't even installed my receiver in it yet.

A lot of the folks in the club had invested time in me. I liked to fly and I like being a part of the flying club. I had met new friends at the field and it was time to get some planes ready and get back into the fellowship and back to flying. As I walked back to my truck, I felt as if a load had been lifted off of my shoulders. Having had this crash, I was more experienced, and I had fresh knowledge. These were tools that could help me, and others that are new to our hobby.

2010 was a tough year, but 2011 is going to be better. It's February and the weather will soon be warming up. I thanked God for allowing me to have this hobby, and for once again teaching me that real growth occurs in the valleys, not on the mountain tops. See you at the field, **Ric**

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CALENDAR OF EVENTS

See the minutes for the Hi-Sky activities for 2011.

Aviation Wisdom

From the newsletter of the Silent Electric Flyers of San Diego

1. Truly superior pilots are those who use their superior judgment to avoid those situations where they might have to use their superior skills.
2. Rule One: No matter what else happens, fly the airplane.
3. Forget all that stuff about thrust and drag, lift and gravity; an airplane flies because of money.
4. The propeller is just a big fan in the front of the airplane to keep the pilot cool. Want proof? Make it stop; then watch the pilot break out into a sweat.
5. If you're ever faced with a forced landing at night, turn on the landing lights to see the landing area. If you don't like what you see, turn 'em back off.
6. A check ride should be like a skirt, short enough to be interesting but still long enough to cover everything.
7. Speed is life; altitude is life insurance.
8. Never let an airplane take you somewhere your brain didn't get to five minutes earlier.
9. Don't drop the aircraft in order to fly the microphone.
10. If you push the stick forward, the houses get bigger. If you pull the stick back, they get smaller.
11. Hovering is for pilots who love to fly but have no place to go.
12. The only time you have too much fuel is when you're on fire.
13. Flying is the second greatest thrill known to man; landing is the first!
14. You know you've landed with the wheels up when it takes full power to taxi.
15. Those who hoot with the owls by night should not fly with the eagles by day.
16. Young man, was that a landing or were we shot down?
17. Learn from the mistakes of others. You won't live long enough to make all of them yourself.
18. Fighter pilots believe in clean living. They never drink whiskey from a dirty glass.
19. Things which do you no good in aviation: Altitude above you. Runway behind you. Fuel in the trunk. A navigator. Half a second ago. The airspeed you don't have.
20. If God meant man to fly, He'd have given him more money.
21. Flying is not dangerous; crashing is dangerous.
22. Flying is the perfect vocation for a man who wants to feel like a boy, but not for one who still is.

with Jim Hall to get permission to install signs showing where the field is located. He will continue to try to find Jim.

Have not gotten any comments back on cost of "T" shirts.

Matt Allen said he has checked on using the Chap center for flying and they want $2000 per day. Agreed that we probably will not go there.

New Business: None

Show and Tell:
Dennis had his Extra 330 EPP Foam from 3D Hobby Shop. They have added carbon fiber along one side of the body only for reinforcement. Dennis says it does fly well and would be a good 3D trainer.

Matt had another internet/blue core foam plane. This one was a simple wing. Took about an hour and a half to cut and build. Uses a park flyer 250 motor. Matt says it flies very well.

James showed his Yak EEP from Wichita Kansas hobby. Main difference between this EEP plane and the one Dennis has is that this one is hand airbrushed for the design while the one Dennis showed was printed. Major cost difference.

Club Raffle:

Servo Checker	Monte
6A ESC	James
Electric Prop	Chris
Electric Prop	Ed
Electric Prop	Ralph
Connectors	Matthew

Next meeting: At the Baptist Church, 7:00PM March 1st.

Meeting adjourned at 8:00PM.

Picked up Passing By

Ric wrote a very good article about the loss of a favorite plane. I remember when I crashed my first trainer. The story is similar in that I let it get too far away and I was confused about which way it was headed. I remember that day well.

I hope you read the article in Model Avaition about the ongoing discussion about regulations concerning the FAA and our hobby. You may go to the AMA website and read more and later information. I suggest you read these for yourself. I can not see why the FAA would involved with our hobby unless it concerned flying at a facility where private and/or commercial aircraft were flying into and out of.

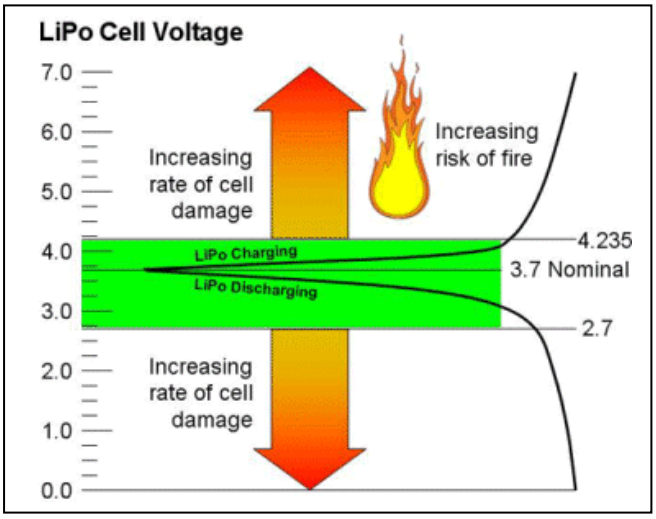
Importance of Balancing Lithium Polymer Batteries

By Dave Buxton
From the Falling Water Radio Control Flying Club,
Soddy-Daisy, Tennessee

The primary reason for this article is to explain the importance of using a balancer for Lithium-polymer (Li-Poly) battery charging every single time you charge your Li-Poly batteries. Balancing will greatly reduce the risk of your batteries going bad prematurely.

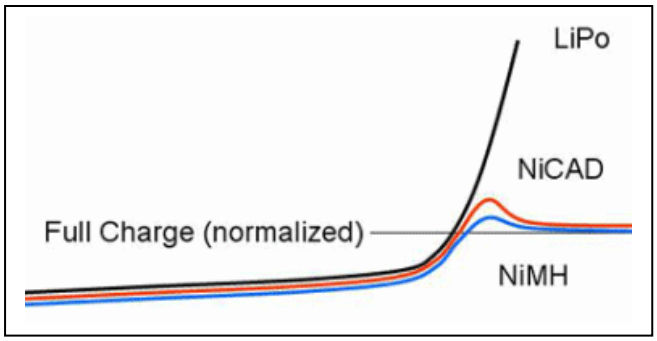
Let's start with an illustration for those who may be electronically challenged:

> Imagine two 5-gallon buckets. One has been used for mixing paint and has several layers of it coating the inside.
> The bucket with reduced capacity (painter's bucket) will fill faster and will empty faster if the flow rate for each is the same.
> Normal aging and cell damage are like adding layers of paint. The cell with less capacity will charge or discharge faster than the other cells in the pack.
> Brand new battery packs can have cells that are poorly matched.
> Cell balancing is like drilling a hole in the bottom of the painter's bucket so it will fill no faster than the clean new bucket. We can put our finger over the hole as necessary to keep the two buckets in balance as we fill them.
> Using a Li-Poly balancer does not scrape the paint out of the painter's bucket.



Li-Poly chemistry accumulates a charge over a fairly narrow voltage range with rapidly diminishing capacity exhibited above and below this range. This explains why the voltage rises or falls more rapidly above or below this chemistry range. Operating outside this range of voltages will at best accelerate the aging process and can result in serious cell damage and even smoke and flame. A battery that could have lasted three years might fade away in less than a week if one cell has a significantly reduced cell capacity relative to its mates.

Nicad and NiMH cells self limit at full-charge voltage. At that point they start getting hot, which is why it is very important that Nicad and NiMH chargers detect full charge and switch to a trickle charge rate. Li-Poly cell voltage is not self limiting, which is why you should never use a Nicad style trickle charger. Diagram 2 normalizes the three charging curves so that their respective full-charge voltages appear to be the same.



You may be a newcomer to RC flying of indoor or park flyer airplanes on a very limited budget. This article need not scare you out of the hobby or into purchasing an expensive charging system. The smaller, simpler Li-Poly chargers do not charge batteries all the way to the top, allowing some margin for a cell being out of balance. At least do the following if you don't use a balancer:

Make sure the charger is charging to an adequately conservative voltage that is less than 4.2 times the cell count.
Check the cell count each time you use the charger. Wrong cell count is one of the leading reasons for smoke and fire, which has lead to car fires and houses burning down.
Once in awhile, at full charge, use a volt meter to confirm that none of the cells are being charged to more than 4.2 volts. If a trend is developing in that direction then its time purchase a balancer.

If the above is stretching it a bit, then you should at least add an external balancer (e.g. Blinky Balancer).

Consider the following limitations of an external balancer:

May not be aggressive enough, especially for larger batteries or any battery with cells more seriously out of balance (Blinky balancing cost me an expensive battery).
An integrated balancer can easily produce an alarm if you dial in the wrong cell count. An external balancer won't do that.
A charger with an integrated balancer will slow down or even stop the charging process whenever the balancer is not keeping up.

If your flying practice sounds anything like the following, then you should (must) use a charger with an integrated balancing system:

High battery stress style of flying (e.g. lots of full throttle, hot weather, flying until the battery fades, outdoor helicopters).
Cell counts greater than three.
Cell capacity greater than 2100 mah for which you should at least use a Blinky external balancer.

Some chargers have an external balancer that communicates with the charger. This can be as effective as having the balancer built into the charger.

***** MUSTANG MANIA *****

An unbelievable deal if you are a hardcore fan of the legendary P-51 Mustang. I'm selling everything Mustang from a Pilot's Operating Handbook and 1/48 scale plastic model to the ultimate RC scale Mustang by Aerotech. Check out the bundle below.

In addition to the POH and the Monogram plastic model, I'm including an old Fliteglas Mustang (.60 sized, for Rhom retracts, flyable with a bit of fixin'), two House of Balsa .40 sized Mustangs, (one the highly desirable fiberglas fuse, about 80% finished and one finished, with a minor repair needed to install the retracts), one House of Balsa Mustang kit, one Dyna-Flite Mustang (about 60% finished, .60 sized), and, the queens of the fleet, a Top Flite 1/5th scale Mustang complete with Hi-Tec Eclipse radio, Moki 2.1 engine, ready to fly, and an 100% dead nuts 1/5th scale Aerotech Mustang, about 80% finished, with ALL the bells and whistles, including highly detailed cockpit, pilot, sliding canopy, four-bladed display prop with extra spinner, highly detailed Mustang wheels and tires, retracts with scale gear legs, functioning inner gear doors, drop tank sway braces, ALL rivets and panel lines in the exact right locations…the ultimate Mustang. I intended to use the Top Flite Mustang as the "trainer" to break in the radio and engine and so will only sell them as a pair. **ALL OF THIS FOR $2750.**

Also for sale:

1) Spitfires galore…A Spitfire package including a Dave Platt Spit Mk. 12 kit (88 inches, ultimate Spitfire model, no longer available), a Top Flite .60 sized Spitfire IX kit no longer available, and the ultimate ARF, a Spitfire Mk. 24 by Kondor Model Products, 80 inch wing span, beautifully built and painted, $450 retail, Literally a steal at ***$600*** for all three.
2) Top Flite P-39 Airacobra kit, no longer in production, .60 sized with interior kit included. ***$75***
3) A true classic collectable kit, a Jetco/Sig PT-19 for .45 to .60 engines, very scale; a builder's kit. ***$100***
4) For you EDF fans, an F-4N Phantom, complete and ready to fly and an A-7 Corsair II, also complete and ready to fly. Both for ***$200***
5) A Sig "Kadet Senior," 80 inch wing span, with K&B .40, radio (needs Rx and Tx battery packs replaced), a great three channel trainer, almost ready to fly… ***$120 OBO***
6) A real unusual pairing, a Dyna-Jet pulse jet engine and a Dooling .29 speed engine, ***$80 OBO***
7) Two Guillows stick and tissue classic display models, built, a B-24 Liberator and a B-17 Flying Fortress, ***$5 each***
8) NIB OS.26 four stroke and NIB Cox .020….rare to find NIB***…$75 for one $40 for the other***

So, why am I selling? After 55 years in the hobby, the flame just doesn't burn as brightly. Alfa Models and flying at the park is about all I can do these days, so here is your chance to get some really good scale stuff at a great price.

I'll part out everything but the two big Mustangs: they need to go together. Best to reach me via email at SNJ24@ att.net. Bill Coombes