



**AMA Club # 2013  
Year 2019**

*Gary Rauckman, Editor*

**August-Sept Newsletter**

[www.jayhawkmodelmasters.com](http://www.jayhawkmodelmasters.com)

**Jayhawk Model Masters**

**Sept. 7 Club Meeting**

**2019 Officers**

**Smith Center @ Brandon Woods  
Lawrence, KS**

8:00 AM – Breakfast  
9:00 AM – Business Meeting

President	Dave Alexander	393-7857
Vice Pres.	Patrick Deuser	766-2604
Treas.	Gary Webber	312-4840
Fld Safety	Darrel Cordle	766-8001
Board 3yr	Mike Weinsaft	843-3052
Board 2yr	John LaGesse	760-2543
Board 1yr	Wayne Donovan	609-6748
Editor, yrs	Gary Rauckman	423-2700

**Schedule of Events:**

**Sept. 7 Club Meeting**

**News-wrap**

- Sept 7, Sunchasers Giant Scale
- Sept. 7, SMRCC Float Fly
- Sept. 7, KCRC Warbird
- Sept 14, Salina Giant Scale
- Sept. 21, Topeka Giant Scale
- Sept. 28, JMM, Lawrence Big Bird
- Oct. 5, Sedalia Fly'n Swap
- Oct. 12, Manhattan Fly-In

I don't know about you guys, but I haven't flown anything since the June 13 Jayhawk Electric. But, of course, how many opportunities have there been. The Blue Sky Club members have been flying quite a bit at their field plus they started doing some float flying at Lake Shawnee. I better check and see if my membership is current over there. At least their field doesn't flood every week.

In case you haven't noticed, this month is the busiest in regard to flying events in our part of the state. Let's get together and support other clubs with our attendance.

I have no idea what you guys are up to or what you might be planning for the coming building season, but, that's the way it always is. I'm currently trying to program a flight controller in an HSD Super Viper that I have had for a while. It just doesn't do what the instructions say it will. Could it possibly be me?

## Simple Rules for Li-po Safety

Author Unknown

I've puffed, exploded, deadened, shorted, crashed, smeared, and punctured many a li-po pack, but I've seen actual flames very few times. I'm extremely black-and-white about all aspects of li-pos. There are the accepted practices when charging, discharging and storage - and then there are any other ways to perform the same - period. The accepted practices will yield a full and happy pack life (over 600 cycles from some brands), and any deviation will result in reduced life at best, and a 2,000 degree unstoppable torch in your living room or vehicle at worst.

I generally don't like broad generalizations, especially when educating hobbyists, but this is one area that I use them. When we compare NiMH/NiCad packs and li-po packs, I lump them under the same umbrella: When abused enough, both can explosively vent. Now with the thousands upon thousands of hobby enthusiasts I've interacted with since the beginnings of electric flight, those that have experienced that explosive venting with "round cells" are extremely few, while those that have experienced it to one degree or another with li-pos are a far greater number. So are Li-pos more dangerous? I don't consider them to be, no. But they do have more than one "rule" to keep them happy.

With round cells, they will only explosively vent if they are charged at a fairly high rate well beyond their capacity. This may happen either through charger error or negligence. But simply put, adherence to this one and only one rule will guarantee it will never happen to you. Adherence to all three of my li-po rules will similarly guarantee that explosive venting/flames/puffing or anything at all dangerous or pack life degrading will not happen. So what are the "3 rules of li-pos"?

**Rule #1: Never, under any circumstances, allow the voltage to fall below 3 volts per cell**

Under any circumstances means exactly that - any circumstances at all. Including: while under a heavy discharge load, resting (no load at all), or a very tiny discharge load. Never below 3.0v per cell under any circumstances.

A good ESC with the proper and accurate cutoff voltage configurable to 3.0v/cell under any/all discharge conditions is imperative to have. Several li-po brands (the smart ones) have started to not warranty packs if they were used with an ESC with either no LVC (low voltage cutoff) or an LVC setting anywhere below 3.0v/cell.

**Rule #2: Never allow the pack to get over 140 degrees F.**

Just as above, each and every foray above this temperature has a cumulative effect of degrading both output performance and cycle life. The longer it stays hotter, and the more times you get it hotter, the worse it will get, with the results the same as above.

**Rule #3: Always store the pack @ ½ charge when it won't be used for an extended amount of time.**

I don't know the "whys" or "hows" involved, but a pack stored (more than a month or two) at full charge, over time will lose capacity and discharge capability and eventually it will "puff" and be useless. So if you think it may be a month or two before you fly a pack again, discharge half the capacity of a full pack or charge up a spent pack and then discharge down to half capacity for storage.

So there you have it - 3 simple rules for a long and happy cycle life with your li-pos. If you follow them, I feel li-pos are no more dangerous than any other electron storage device, but what happens when the rules are broken, or more importantly: When exactly is the user at risk of an explosion and fire from a Li-po pack?

***"Can I fly one of your jets?  
I crashed all of mine"***



***Some JMM History  
2011 Reprint***

When I was in college back in the mid 60's there was a group of guys who flew RC airplanes at Broken Arrow Park. They called themselves the Jayhawk Model Masters. I asked Nate Ericson about this, and other questions I had. Nate's memory is a little better than mine.

South Jr High was built in the late 60's and the Model Masters moved directly east to a piece of ground that was a part of Haskell. They flew there a number of years until they were encouraged to find a new location.

Nate remembers that one day someone working or associated with Haskell decided to drive a road grader or scraper down the runway, thus ripping it out. They got the hint. Nate doesn't remember exactly when, so we will just say the late 70's until corrected.

Anyway, a doctor member of the club started to dialogue with the Corps of Engineers at Clinton Lake. The lake was built from 1972-1976. Once receiving the Ok for a flying site, Nate was asked what he thought would be the best location, and he picked the site we have to day.

I personally joined the club in the late 80's, and there was only a small north-south landing strip. There was no driveway, interior parking or gate. Everything had to be carried in from the south parking lot. I think a narrow path was mowed to get to the field. About 1995, the drive and interior parking was added. I believe we floated \$100 vouchers to finance the project.

The shelter house was added in June 1998, and the bleachers arrived in 2000. The shelter house was also financed through volunteer vouchers that were paid back in 3 years

***Hey, when are we going to see this aircraft again?***



***Who is Mike Weinsaft?***

I am a single guy, and not having a wife has led to me collecting a few more models than I probably should have (many needing just a “little” fix ...)

I have worked in the field of Electronics since January of 1978, starting with King Radio, Century Geophysical Corp., Kohlman Systems Research and my most current job at Northrop Grumman Repair Facility in Topeka, Kansas. I also have a private pilot's licence and A&P licences, having attended Spartan in Tulsa. I have not worked as an A&P.

I started my R/C career in 1984 in a novel way. I was unemployed and a friend wanted to get back into R/C. We split the cost of a new Futaba radio system for his Ace Biplane. Looking back it took some confidence in myself and the economy to do that. (Turns out I was unemployed for only four weeks and returned my first unemployment check!) Soon, I bought out my half of the radio and built a Midwest Livewire Champ, which was an awesome and gentle flier. I loved its classic look and only much later found out it had originally been designed by Hal Debolt in 1954.

The reason that R/C is a good fit for me is that it equally lets me use the skills I have and also provides new lessons to teach me. I try to listen to life to learn those lessons. One of our hobby's most basic lessons is “it does not pay to take short-cuts”. And this is true (except when it isn't true) I also love the social aspects of our hobby. It is hard to describe the bonding which took place the times that we as a club built floats for the St. Pats parade.

I always felt great pride in what we created. (and we placed four out of the 5 times we entered) It was fun building and it was fun being in the parade (even the time it rained!)

I generally love almost anything that flies, but I especially have weak spots for Old Timers, gliders, biplanes, Golden Age planes, and canards. I am now working on a Monocoupe, one of my all time favorite planes.

As I've already said, I love the camaraderie which our club/hobby provides. In our current world, where there is so much divisiveness I greatly appreciate the friendships and the “brotherhood” feel which permeates our club. Somehow our club just attracts gentlemen.



Wingtip Turn @ Blue Sky, Howard DGA



Wingtip Turn by George Jones



### ***July 20 Club Meeting***

We had 22 members at the July 20 meeting none of which were visitors. July 20 was a very hot day unlike the rest of the summer. We did have 3 people bring a show and tell aircraft however; see column over.

### ***Show & Tell***

Suman brought a very rare Martin M-5, a 1930 5-cylinder radial engine. Believe it or not this 90 size radial was made in Nebraska and came with a metal prop. I had the power of today's 40 size motor



Suman was also showing a 1950's 15 size racing aircraft with a magnesium pan. This 60 year-old design was powered with a Super Tiger G 15/20 and featured a metal elevator and fuel tank.



John Lagesse brought his 70" Phoenix Corsair to show. This aircraft is made in Vietnam and comes with air-retracts. John installed a Rimfire 120 and a 80 amp ESC. Theplane weighs about 12 lbs. and John flies it with a 6S Lipo.



Patrick won both the free breakfast drawing and the Stearman raffle prize for last month. I rest my case.



Scott Stordahl won the Model of the Month with the Great Planes "Uproar" that he built and covered. It weighs 4 lbs and is powered with a OS 46 AX. He says it has too much power and that a 40 LA would be a better match. He said the 1500 mah life battery at 6.6 volts only uses about 40 mah per flight.



"I won't be coming into the office today. I'll be out in the field doing research."