



95th Street Group Newsletter

Volume VI, Issue I

February
2018

The President's Corner

Hello fellow RC flyers. I hope you are all having a reasonable winter and staying warm in these frigid temperatures.

We have been spoiled the last few years with some nice mild winter days and good flying conditions. This winter, so far, has been tough to get out and fly. Spring is just around the corner and I'll take this cold weather to do a little building and repair.

As you probably know, all of the officers from last year were voted in to serve again in 2018. I would like to thank all of my fellow officers for their continued work for the betterment of the club. I know we all appreciate it. We have a great group of members and a wonderful field to fly at.

Our Vice President, Richard Abels and myself, are planning to contact our landlord, Darrell Zimmerman to see if we can set-up a lunch meeting to get acquainted. I have not talked to Mr. Zimmerman and would like a chance to visit with him.

In the coming year we are going to have the grass cutting and fertilization contracted out as in the past. This year, however, the club voted to also pay the mowing company to do the trimming for a small additional fee. We will try this for one year to see if they do a sufficient job. This means there will no longer be TEAMS to trim and remove trash. Trash removal will have to be handled by all of us. You will need to take your trash home when you leave the field. No problem...just pretend you're camping!



Nothing was planned for New Year's Day this year, but at the last minute, several of us idiots, Oops, I mean, **MACHO** RC flyers, decided to head to the field for that first flight of the new year. My phone showed 7°F with a "feels like" temperature of -3. Yep, **that's minus 3 degrees F.**

The good news was the sun was out and the wind was down. Several members showed up to join in the frozen fun including Shelby Locklear, Richard Abels, Richard Travers, Lauren Wenger and Charlie Swain. Everyone got a flight or two in and I

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Special interest item:

95th Street Annual Work Day

Saturday
April 21, 2018

Bob Miller Field
De Soto, KS
9:00 AM

Rain date is the following
Saturday 4/28

The Multi-Rotor Invasion

By: Ed Noulin

From Best Buy to Toys-R-Us, walk into nearly any store today, pick up a magazine or open a catalog and you're likely to find an ad for some type of little, multi-rotor flying gizmo.

Like it or not, these multi-rotor devices (a.k.a. "Drones") are probably going to be around for some time to come.

Buoyed by their popularity with the younger generation, by photographers, search and rescue teams, police, etc., manufactures are cranking them out at an ever-increasing rate.

Let's face it, the mystique of R/C flying is gone!

Already, there is a flood of highly sophisticated

yet relatively inexpensive drones available to folks of all ages.

That's not to say that the level of skill involved in flying R/C is gone...not by any stretch of the imagination. Sure, there just might be a growing perception that "if I can fly a drone, I can fly anything." However, that

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The Presidents Corner (cont.)



Standing (lft to-rt.): Lauren Wenger, Richard Abels
Charlie Swain and Richard Travers. Kneeling (lft to rt)
Shelby Locklear and Jerry Brown...all with teeth
chattering!



A pair of Hobby King
Tundra STOL planes.
Shelby's on the left; Jerry's
above.



Charlie Swain did a maiden flight on his B24 Liberator.
It was an amazing model!

Clockwise on the right: Jerry Brown grabs a flight on his
Eflite Ultimate 2 biplane post Christmas, but before the
evil weather sets in. Lauren Wenger finds that, if nothing
else, e-foamies are easy to transport while Charlie Swain
helps Shelby Locklear tackle a frozen camera!

think everyone left with all of their fingers left with all of their fingers and toes intact. That was my coldest New Year flying to date! I hope I never have to break that record. You can see a video of the event on my YouTube channel at the following link:

https://youtu.be/sCB4q5pNj_c

I hope Santa was good to everyone. There are so many great models out there these days! I ended up with an Eflite Ultimate 2 Biplane and it flies nice! I managed to sneak in a flight before the frigid weather set in.

Right before Christmas I talked Shelby Locklear into ordering a Hobby King Tundra STOL plane. They have had great reviews. They are well engineered, fly great and are fairly inexpensive.

We had one beautiful day Jan. 8th so we went to the field for a maiden flight. It definitely is one sweet flyer. It has huge wheels with spring loaded landing gear. The addition of large flaps for short takeoffs and landings makes the plane extra fun in the "touch and go" category. On low rates it will fly like a trainer and on high rates it will do some impressive aerobatics. All for less than \$200! Thinking back to the days when you had to

build everything if you wanted to fly, I think these planes are pretty amazing! I went home and ordered one myself. I'm a sucker for a good deal.

A couple of other flyers showed up at the field that day. Charlie Swain did a maiden flight on his B24 Liberator. It was an amazing model! Charlie left the decals off in case the maiden flight did not go well. Eureka! It flew beautifully and it's time for those decals.

Once again, I'd like you to be on the lookout for new members who share our love of the hobby.

If you know of anyone who would like to be a member of the 95th Street Group, please bring them to the field as a guest and show them what a great field we have.

Don't forget to fill them in on the rules and remind them that we're not allowed to fly over the Gun Club.

I'm looking forward to a nice, calm Spring this year. At least I'm praying for one calmer than last year. I hope to see you all at the field!





The Multi-Rotor Invasion (cont.)

perception just might be the hook that's needed to introduce more people into the real world of R/C flying. Because of this, I say the more the merrier!

Faced with the unenviable, I decided it was time to learn some of the lingo and explore what's popular in the world of multi-rotors these days. In the process, I stumbled onto the following article:

Crash Course – The Ins and Outs of Drone Racing

By Lauren Murrow;
Wired Mag June 2017

The Drone Racing League is less than two years old, but it's already a media juggernaut: After raising a \$12 million VC round, it landed a sponsorship deal with insurance giant Allianz and linked worldwide broadcast partnerships with ESPN and Sky. "Drone racing is a real-life videogame," DRL founder Nicholas Horbaczewski says. On June 13, at the World Championship in London, 16 pilots---wearing first-person-view headsets to see what their drone sees---will execute balletic moves while barreling through a Victorian palace at up to 90 mph. The prize? \$100,000. We asked Horbaczewski to break down a DRL showdown.

Setting:

"We try to find venues that, when you walk through them, you immediately wish you could fly around like superman," Horbaczewski says. Past races have been staged at the Miami Dolphins' stadium, an abandoned shopping mall, an auto plant and a deserted laboratory.

Drone:

To level the playing field, DRL designs its own advanced racing drones. The third iteration, the Racer3, is the size of a dinner plate and weighs just 2 pounds. "They're like Formula 1 cars," Horbaczewski says, "built to be as fast and maneuverable as possible."

Course:

An average race covers 1.25 miles in about 60 seconds. Each route is drawn by hand, measured with laser range-

finders and then rendered in 3-D to create detailed maps.

Gates:

The drones must clear a series of 8-foot-wide circle, square and diamond-shaped openings. Last year DRL unveiled its most difficult version to date: the Gravity Gate, a horizontal opening that drones must plunge through.

Crashes:

"If you're not crashing, you're not racing hard enough," goes the DRL mantra, so the league supplies 500 drones for each race. Half of them crash. Collisions are replayed in slo-mo so fans can gawk at every shard of shrapnel.

Cameras:

Cable cameras snake through tunnels, human operators huddle behind nets, and robocams hover throughout the course. DRL hires camera operators with experience shooting high-speed sports like auto racing and golf.

Finish:

The race ends with a wipeout: Drones fly full-speed through a gate backed by a net. Though a pit crew maintains the fleet during the races, nearly every drone requires post-series repairs back at the league's New York workshop.

Now, I realize that not everyone has an interest in actually racing drones. However, they sure are fun to watch. This is especially true when thinking about the skills involved in making these little missiles run through the hoops!

For additional information on what's currently considered some of the best drones for racing (including those for beginners), check out this link:

<https://bestdroneforthejob.com/drone-s-for-fun/racing-drone-buyers-guide-2/>

I'm not expecting to see a "Gravity Gate" show up at the Kaw Valley Aerodrome anytime soon, but who knows. It might just pop up some day and it's best to be prepared!





Battery Connections

By: Ed Noulin

Every now and then a good deal on LiPo batteries pops up...one that entices me to buy them in bulk. The down side of a “good deal”; however, usually means having to install my own connectors. Although I don’t necessarily shy away from this task, it certainly isn’t one of my favorite chores.

To help ease the pain I’ve come to adopt somewhat of a standard procedure. As a result, what once took me several hours to “outfit” a set of four batteries, now takes me less than an hour. The hour spent also includes the time devoted to laying out the necessary tools and cleaning up afterwards.

The key, at least in my case, has been first laying out the right tools and materials. Perhaps what I should have said was, “...first making sure all the correct materials are available” before even thinking about the tools. Too many times in the past I’ve reached the soldering stage only to find out that I’m completely out of the right size heat shrink! So, I start by checking...

- Number of connectors required for the job
- Proper sizes of heat shrink tubing available
- Solder and Soldering Paste (Flux)

Once all the materials have been gathered, then it’s time to break out the tools! My arsenal includes the following:

- Drill Press vice or Soldering Aid for holding the connector securely while soldering.
- A 50W-75W Soldering Iron
- Scissors for cutting the heat shrink tubing

- An Xacto Knife for removing the temporary protective heat shrink on the battery leads
- Heat Gun
- Needle Nose Pliers
- A Companion Connector to serve as a heat sink

I start by cutting the lengths of heat shrink needed to cover each of the solder joints. Then I cut short lengths of a larger size that will jointly cover all terminal connections with a second layer and, finally, the lengths of heat shrink that will go over the entire assembly. The challenge here is finding the right sizes of heat shrink!

Let’s face it, rarely does the exact size of heat shrink tubing exist. Nowadays, I don’t bother trying to find that little, elusive piece of perfect-fitting shrink. Instead; I choose what looks reasonable (e.g., a tight fit, but not too tight) then, using the needle nose pliers, temporarily stretch the tubing to fit over the connection. I prefer this method over using heat shrink that’s way too big to begin with and won’t draw down properly.

I always prefer to remove the temporary protective caps from the battery leads one lead at a time. I find that the temporary protective caps (ones made from heat shrink) are easier to remove if they’re heated slightly and peeled off from the bottom with an Xacto knife...remember one at a time! I don’t remove the second cap until the first wire is soldered in place and is completely covered with protective heat shrink. Oh yes, that’s assuming I’ve remembered to temporarily slide all the necessary pieces of heat shrink onto the wires before soldering!

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R/C battery connectors come in a variety of different configurations. Most involve some degree of care in soldering.



Once all the materials have been gathered, then it’s time to break out the tools!



Battery Connections (cont.)

Speaking of before soldering...these battery connectors are destined to handle some pretty high currents; therefore, the solder joints must be solid. I know that a good solder joint requires adequate heat...just not so much as to melt the body of the connector! I also know that a good solder joint means keeping the connection still as the solder hardens. Because I hate melting connectors or burning my fingers, I've resorted to using a companion plug of some type to serve as a heat sink and a small vise to hold things in place.

I always start by applying a small amount of soldering paste to all the connections. Then, using flux core solder, tin each joint including the end of the battery lead that's first in line.

Once the first connection is complete and protected by heat shrink, I repeat the process of tinning the end of

the second battery lead and completing that connection as well. During the process of soldering, I not only visually inspect the joint, but also pull, bend and tug the wire as if trying to tear the connection apart!

Yup, there have been times that, while tugging on a wire, I was able to separate it from its connection. My mistake was not getting the lug on the connector hot enough even though the companion wire was oozing solder like crazy! It happens! I was happy it happened in the vise and not while up tearing up the sky.

Now...with a sigh of relief, I should have enough batteries to get me through the upcoming flying season!

Additional reading:
<https://www.rcairspace.com/2013/07/how-to-easily-solder-deans-connectors-lipo-battery/>

AMA Aircraft Safety Code

A model aircraft is a non-human-carrying device capable of sustained flight within visual line of sight of the pilot or spotter(s). It may not exceed limitations of this code and is intended exclusively for sport, recreation, education and/or competition. All model flights must be conducted in accordance with this safety code and related AMA guidelines, any additional rules specific to the flying site, as well as all applicable laws and regulations.

As an AMA member I agree:

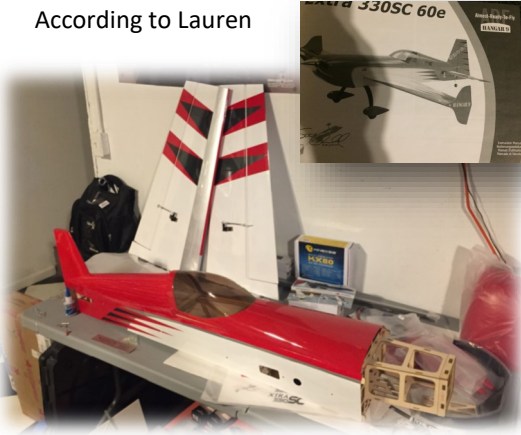
- I will not fly a model aircraft in a careless or reckless manner.
- I will not interfere with and will yield the right of way to all human-carrying aircraft using AMA's See and Avoid Guidance and a spotter when appropriate.
- I will not operate any model aircraft while I am under the influence of alcohol or any drug that could adversely affect my ability to safely control the model.
- I will avoid flying directly over unprotected people, moving vehicles, and occupied structures.
- I will fly Free Flight (FF) and Control Line (CL) models in compliance with AMA's safety programming.
- I will maintain visual contact of an RC model aircraft without enhancement other than corrective lenses prescribed to me. When using an advanced flight system, such as an autopilot, or flying First-Person View (FPV), I will comply with AMA's Advanced Flight System programming.
- I will only fly models weighing more than 55 pounds, including fuel, if certified through AMA's Large Model Airplane Program.
- I will only fly a turbine-powered model aircraft in compliance with AMA's Gas Turbine Program.
- I will not fly a powered model outdoors closer than 25 feet to any individual, except for myself or my helper(s) located at the flightline, unless I am taking off and landing, or as otherwise provided in AMA's Competition Regulation.
- I will use an established safety line to separate all model aircraft operations from spectators and bystanders.





The Buzz Around the Field

According to Lauren



Wenger, sometimes stuff just seems to get in the way of working on a fun R/C project. His planned Extra 330SC project was no exception. The ARF arrived nearly a year and a half ago, but has only recently been able to grab his attention. Hang in there Lauren and perhaps we'll see it at the field this summer?

By the way, it's quite possible that editor-Ed stills holds the club record for the longest time between receipt of an ARF and first flights...3 years!!

Pattern Primer and Judging Instruction
SATURDAY MAY 5, 2018 (Unofficially Saturday and Sunday)
FREE but a \$5/weekend park permit fee needs to be paid at the park station located at the field entrance.
AMA membership is required to participate in this event.
LOCATION: Hillsdale Lake, Kansas. See direction in the club link below.
TIME: Can come anytime during the day. See more details below.

Charles Reed III Memorial Pattern Contest

July 7 and 8, 2018
(63th Annual Kansas City Pattern Contest)
Sponsored by KCRC, Lake Jacomo Field
 
First Flight 11:00 AM (sun in box, 10AM if cloudy)
Registration Begins 9:00 AM



Spring is just around the corner and, if you haven't already done so, you'll soon be pulling those LiPo's from storage. Before "waking them up," this might be a good time to check for any exterior damage, frayed connections, dead cells, etc. It just might save you an airplane!

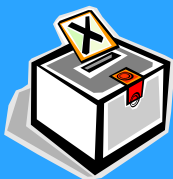


Remember when? If you guessed the time was September 2011 and this is the group participating in one of the few 95th Street Fun Fly events, you'd be correct.



Address news articles to:
Ed & Elaine Noulin at:
edsrncg@kc.rr.com

The 2018 Club Officers Are:



Pres.
J. Brown



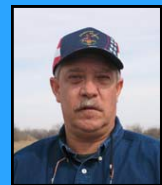
Vice-Pres.
R. Abels



Sec.
M. McNeill



Treas.
B. Alexander



Field Marshal
R. Donley