

Wing Tips



September 2019

The Newsletter of the Mid-Hudson Modelmasters

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2019 Club Officers

President: Kent Wien

Secretary: Larry Kunz

Sgt. at Arms: Flavio Ambrosini

Vice President: Scott Fellin

Treasurer: Tom Eng

Club Calendar

Coming Up:

- **NEAT Fair 2019 – Northeast Electric Aircraft Technology**, <http://www.neatfair.org/> Sept. 12 -15, Peaceful Valley Campsite, Downsville, NY
- **CLUB MEETING & PICNIC, Sat. September 14:** At our VanWagner Road Field, 11am mtg.
- **August Wing Tips articles & photo submissions due, Thurs., Oct. 3:** Send your submissions to wingtips@modelmasters.us Due date is first Thursday of each month.

Other Events:

- **MONTHLY MEETINGS:** Normally 2nd Saturday of the month at our flying field. Also announced via Google Groups.
- **OUTDOOR FLYING SESSIONS AT WEST ROAD FIELD** – Every Saturday Morning, weather permitting.

MEETING MINUTES – August 17, 2019

- Open flying 8:00 until about 10:30 . +
- Meeting @ 10:30 with president Kent Wien presiding.
 - + Highland Middle School returned our \$500 escrow for the summer.
 - + Kent will contact Highland Middle School to arrange our winter meeting dates.
 - + Brad has done some maintenance on the mower. After several abortive “fixes”,
 - it turned out that it needed a new blade clutch, and then it had a flat tire. Thanks Brad !
 - + Long time member and past president Bob Santoro is back on his feet after a long battle with
 - a tick induced disease, and then a stroke. Welcome back to the flying world Bob !
 - + Next meeting will be Saturday Sept 14, OUTSIDE at the Van Wagner Road field.

- Show & Tell:
 - +Lloyd showed (and flew) one of Jim Wood’s “playboy” planes. A beautiful bird made from balsa and silk !

Jim was a MM member who passed away. He



Kent Wien attempting the limbo

+ 2019 Membership stands at 35.



Multi-Cub Fly, left to right Scott Fellin, Brad Quick, Lloyd Quick, Larry Kunz, Dom Fusca



Picnic Flight Line

made a number of these birds, and would be delighted that at least two still belong to club members !

- Treasurer’s report: by Tom Eng
 - + \$2126.95\$117.21 of which is the mowing fund, and \$500 of which is the escrow returned by

Highland Middle School..... which we will give back this winter.

- Party Day today ! at our Van Wagner Road field:

- + Many members showed up at about 8 AM to help set up.
- + Bob Santoro put it all together, Tom cooked, Scott ran the contests.
- + Many spouses helped, many brought salads, desserts, etc..

Lloyd brought lots of home grown tomatoes to give away, and Brad brought home made salsa
+ Larry brought a trailer full of flying gear donated to the club by Bob Marcoux. This was mostly
Cleaned out by our members, who donated \$ to the club for what they took. (about \$165 total)
+ Contests designed and run by Scott Fellin.

- 1) Limbo (under the ribbon without touching down, as many as you can in 90 seconds)
- 2) Touch & Go (how many can you manage in 90 seconds ?)
- 3) Road Race (Slalom course through pylons – with transmitter reversed !)
- 4) Spot Landing (Glide with power off from altitude, and land on the mark)
- 5) Timed flight (pick a number from the bag, and fly that many seconds without a timer)
- 6) Combat flight (All fly at once. Cut each other's streamers .. No collisions please !)

(Kent and Brad did finish this contest with a bang !)

It's summer vacation time! The staff was taking a well desired break and no meeting occurred in July.

Cumulative Contest Results:

- Kent Wein 85 pts
- Paul Olivett 55 pts
- Brad Quick 40 pts

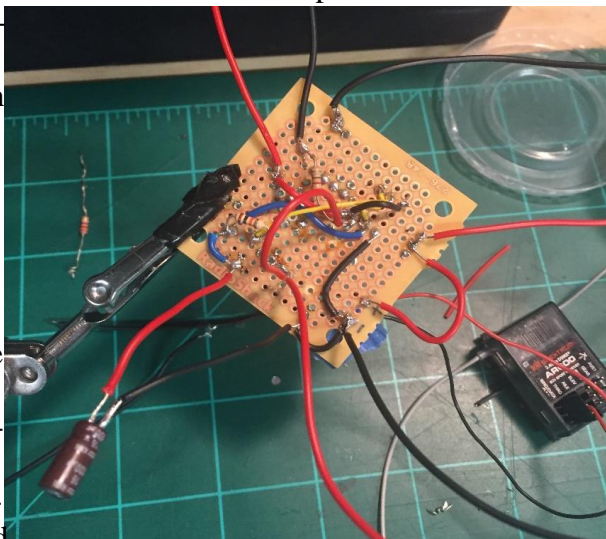
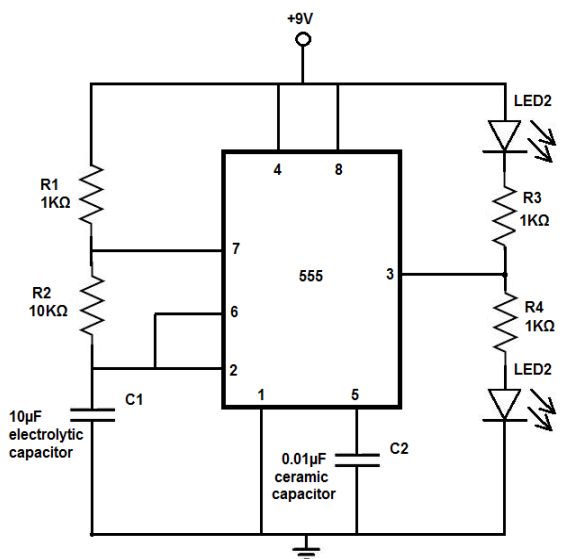
FunCub Upgrades by George Amenta

Most of you know about the funcub that I have. It is pretty much your standard funcub except I put a totally overkill power setup on it, so it has unlimited vertical and the ability to hover. Well recently I decided to do a few upgrades to it. The main one being a lighting system. But instead of buying a lighting kit, I decided to build it myself including the controller (for the flashing of the beacon and strobe lights)

Back in high school I took a digital electronics class which was mostly about truth tables, logic statements, and designing circuits on a simulation program to preform a certain task. But in that class, we also did some breadboarding and very minor soldering which

came very easy to me due to my soldering experience with quad copters and model planes. Anyway, we did a fair number of projects with the 555 timer. (Pictured right) Possibly the most popular integrated circuit ever produced. Most of our projects with this IC involved getting different groups of lights to turn on and off at certain speeds since the 555 timer can be used as an oscillator, delay, or "flip flop". So, when I decided to add lights to my plane, I thought back to the alternating flashing LED light projects I did in high school. I searched through the

notes I saved from that class and failed to find the schematic, so I googled it and found what I had used before. (Pictured left) I pretty much followed this with only a few modifications. First, the 9v input shown here was replaced with a servo lead that plugs directly into an open channel on the aircraft's receiver. Second, soldered



onto that servo lead were the wires for the landing light (located on the left wing), and both nav lights (green on right wing, and red on left wing) since those stay on and don't flash, they just automatically receive power whenever the lighting control unit is turned on. Third, I soldered a switch on that servo lead so I could turn the unit on or off on the ground before takeoff. Fourth, I did not use a 10 microfarad capacitor for C1 shown on the left. That capacitor controls the time on and off or flashing of the lights. I was looking for about 1 second on and 1 second off for the strobes and same for the beacon but wasn't sure what value to use. I tried a 1000 microfarad which was way to big with the lights staying on for over 30 seconds. Then I tried a 22 microfarad which had the lights flashing too fast. I ended up desoldering a 100 microfarad capacitor off of an old PC motherboard I had laying around and that gave me the result I desired. Last, in my configuration there were 2 LED's on one side of the junction coming off pin 3 (those 2 being the wing strobes since they would both turn on at the same time), and the other side of the junction had a single LED which is the red beacon on the tail. The beacon would turn on when the strobes were off and vice versa. I configured the lights on the aircraft very similar to the way they are on older Cessna's minus the white light on the tail. The bright white landing light placed around the midpoint of the left wing. The green nav light on the right wing with the white strobe just behind it, and the red nav light on the left wing with the strobe just behind it and the red beacon light on the top of the vertical stabilizer. I obtained some parts such as the resistors and LED's through Amazon and the rest of the stuff such as wires, capacitor and the timer itself I had at home. I mounted it all on a perf board which gave me the freedom to lay out and put junctions in the circuit wherever I wanted to. It may look messy, but I tried to make it as small as I could. Below is the prototype but the final unit looks almost identical to this. And yes, the legs of the capacitor were insulated on the final one. I put this board under the wing and in with the receiver. Overall the build came out well and the lights do look pretty good in the evening. The red beacon and nav lights are dim compared to the white strobes and landing light which are the brightest. But overall, I am happy with the outcome. Attached in the link below is a video of the final product on the plane.



https://www.youtube.com/watch?v=L2gHtFV3_s0

Meet New Member Kent Wien

How did you become interested in the RC hobby/sport?

My brother is 6 years older than me. He was flying R/C gliders and I used his hand me down 2CH radio (Cox/Sana'a) for a glider I bought at a club meeting for \$5 in Alaska when I was 9 years old.

How long have you been in the hobby/sport?

Gliders 1978. Airplanes 1979. Helicopters 1982.

What aspect of the hobby/sport are you most interested in?

I've had a lot of fun with all the electric choices out there. Most recently with EDF (ducted fan jets) and just picked up a 3D heli that flies better than any gas heli I've had.

What was your 1st plane?

Glider: Cara Cara local design in Alaska.

Airplane: Precedent Hi-Boy

Heli: GMP Cricket.



Do you have a favorite Plane? If so which one and why?

Lately the Freewing F-16 70mm EDF has been a blast. I had a Byron Beech Staggerwing that I really miss.



What is the most challenging part of the hobby/sport for you?

There are some 3D heli maneuvers that I haven't even come close to mastering.

Do you have goals regarding what you want to accomplish in the hobby/sport? What are they?

I have a large scale AS350 that I need to finish. Love scale heli flying, and the challenge of being smooth and to fly as realistically as possible.

What other hobbies or areas of interest do you have?

I fly paragliders with Kristin and I have a tiny plane (Flight



Design CTsw) that we take on local adventures. For work, I fly the Airbus A319/320/321 as a Captain, often with Kristin as the first officer!

What advice do you have for new people getting into the hobby/sport?

Don't be afraid to ask someone for help with a maneuver or how to set something up. There aren't many egos and everyone is very willing to share their areas of expertise.

Oh and simulators really do help!

If you are a recent new member OR a long time member and have never been featured in the newsletter, consider sending your answers along with photo(s) to the questions above to the Wing Tips email address. You'll earn model master dollars too!

Interesting stuff

Dillon Losee:

- Watch "XXXL BAE HAWK 1/2.5 SCALE - TEST FLIGHT" - https://youtu.be/SNoETCRi_20
- Tinywing 1S setup second trial (18650 Li-ion) - https://youtu.be/299xD2_znMA
- When OVER POWERING your RC BIPLANE is a GOOD thing ! - <https://youtu.be/SiBXuiTUMgA>
- RC Spruce Goose 1/20 - https://youtu.be/VgJkFPWyH_E
- RC Helicopters OMG Moments Part 2 - <https://youtu.be/7TT88HLYRWI>
- Giant Scale RC de Havilland DH.88 COMET G-ACSS 'Grosvenor House' twin engine RACER - <https://youtu.be/Q2jIjXCqotw>
- Australia to tax RC planes and drones - is it fair? - <https://youtu.be/Cn6ddGdWSkQ>
- Blade 3d helicopter with Perfect Landing - <https://youtu.be/JwgLIHIX408>
- Fox glider / sailplane at the field - For those of you who weren't at the field here is Scott flying his Fox glider, I surely was not expecting him to try to knife edge or hover it but that's Scott I guess. - <https://youtu.be/31EaI9UWbb8>
- 4/5 cubs formation flying - <https://youtu.be/6ZkZgaMkC58>
- Playboy, Memorial flight of Jim Wood - <https://youtu.be/CDHGMUf0Xx0>
- Coanda Effect Drone Propulsion - https://youtu.be/Irp_vnmUWZ4
- Can Reaction Wheels control a Drone? - <https://youtu.be/4kfBEaTncjI>
- Amazing RC Ornithopter like a bird - <https://youtu.be/2Nd8BA3OHCC>
- DW Eagle II maiden - https://youtu.be/0Zcrq_3OGfc
- FPV Helicopter! - https://youtu.be/EQ_9jgZ36A4