



Wing Tips



July 2020

The Newsletter of the Mid-Hudson Modelmasters

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2020 Club Officers

President: Kent Wien

Secretary: Larry Kunz

Sgt. at Arms: Flavio Ambrosini

Vice President: Scott Fellin

Treasurer: Tom Eng

Club Calendar

Coming Up:

- **CLUB MEETING , Saturday, July 18:** Watch your email for further details. Possibly to be held at the field.
- **August Wing Tips articles & photo submissions due, Thurs., August 6:** Send your submissions to wingtips@modelmasters.us Due date is first Thursday of each month.
- **August 15th, The 10th Annual Picnic/Fun-Fly:** We will be having our annual picnic/fun-fly this year on August 15th, although in somewhat of a modified form. Obviously, because of the pandemic, necessary changes need to be made. Special attention will be given to practicing safe hygiene and preventative measures. We will follow the Center for Disease Control and Prevention guidelines. The details as to exactly how the event will be conducted will be given in the August issue of Wing Tips.

Regardless of what changes we need to make I feel strongly that it will be a fun event. We will bring members together in a safe manner to enable they to enjoy flying and participating in friendly competition.

I hope many of you will be interested and able to attend the event. In the mean time stay safe and fly when you can.

Thank you, Bob

Other Events:

- **MONTHLY MEETINGS:** Watch your email for dates.
- **OUTDOOR FLYING SESSIONS AT WEST ROAD FIELD** – Every Saturday Morning, weather permitting. Social distancing is practiced.

MEETING MINUTES - June 20, 2020

+ Open jawing 9:00 to 9:10

+ Virtual Meeting called @ 9:10 by president Kent Wien.

Meeting conducted by VP Scott Fellin (since Kent is headed for some Adirondack camping)

- Next meeting is July 18 ...maybe at the Flying Field ! depending on Covid19 status.
 - And, unofficially, flying every Saturday morning at the field (8 AM till about 1 PM)
- We are now legal to gather 10 at a time, but please remember to maintain your distance !

+ Treasurer's report: by Tom Eng

- Club treasury now at \$1337.65
(but Highland Middle School still has not cashed our 2019-2020 \$500 security check)
- We owe Brad as yet undetermined \$\$ for mower repair parts.
(if he ever charges us for labor we are in deep trouble)
- 2020 membership now at 35.

+ Flying Field status & Mowing:

- Brad has mowed several times this Spring, but we have now gone back to volunteers. .
(Please email Brad (brad@jamestaylor.com) if you would be willing to mow on occasion)
- We have had some trouble with the mower and Brad has done some diagnostics and replaced a number of parts including a battery, a tire and a belt.
- Dirt bike damage seems to have diminished.
Dom contacted the Pleasant Valley town supervisor and Scott put up some yellow warning tape.

+ MM Newsletter: Editor Dom Fusca

- Please send photos and articles to Dom.
- He is collecting info on your long delayed projects, so send photos with notes !
- send any material of interest to Dom at wingtips@modelmasters.us

+ Dillon is in remission and out of the Hospital. He is thin with thin hair, but is gradually rebuilding strength.

+ MM Summer picnic / party: Saturday, August 15

- Bob Santoro has volunteered to coordinate our summer Picnic / party.
- We voted to restrict it to members only this year due to Covid19. (No guests)
- Simplified menu with hotdogs, burgers and watermelon. Tom will cook with Larry and Paul assisting.
- Scott will run the flying contests.

+ FAA Recreational Flyer Registration

- You must renew your FAA registration by Dec 12 this year.
- Go to the "FAADroneZone dashboard" (<https://faadronezone.faa.gov/#/>)
- You will register under the "exception for recreational flyers"
- Sign up (or sign in), give them a credit card number for \$5 and they will renew you for 3 years.
- Put your FAA number (and your AMA number) on each plane.

+ Show & Tell:

- Brad demonstrated his latest building technique which involves laminating one surface from thin coroplastic (yes - slit the hard way!) to each side of DollarTree foam. Just a tad heavier than one layer of thick coroplastic, but substantially stiffer !

Long Delayed Projects

Rick Rizza: My (extreme) long term unfinished project is a 1/4 scale Vailley Stinson L5. When Roy Vaillencourt was working on developing his WW1 project which turned out to be an SE5, I happened to own a giant SE5 and DR1 that had been given to me from the estate of a friend, Bud Coffin, of Bridgeport CT. I offered them to Roy for him to research and analyze, and he gifted me his Stinson plans plus all of the hard parts his business produced. Some time later I bought the kit from Larry Katona, a well known kit cutter at the time, and according to my build log on RC Groups (<https://www.rcgroups.com/forums/showthread.php?1843987-Vailly-Aviation-1-4-scale-Stinson-L-5-Sentinel>) the build began in early March of 2013. I worked on it on and off for about a year, but at some point I packed it away and it lay untouched until sometime in May of 2019. By that time, I had retired and became single again living in my trailer, so I went back to work on it. I made good progress on it for a few months, but although it sits prominently in the middle of my kitchen, I have not touched it (actually, I have touched it, but I have not done any work on it, for many months. Actually. It will be a year come September. Someday...Unless an interested modeler makes me a decent offer...



1st Glue



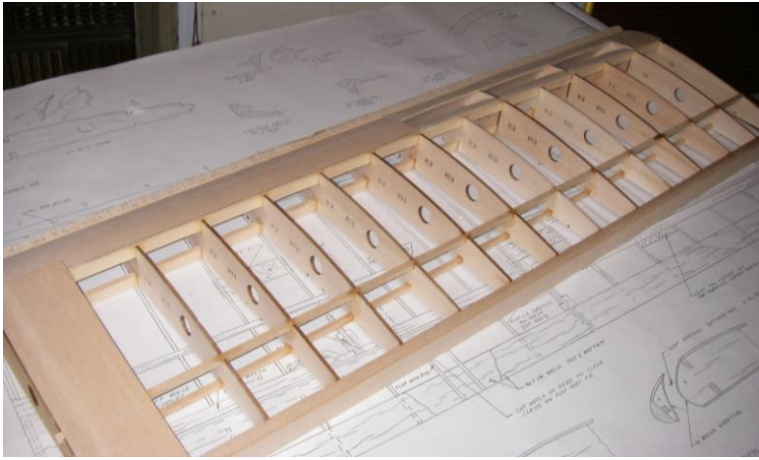
Elevator



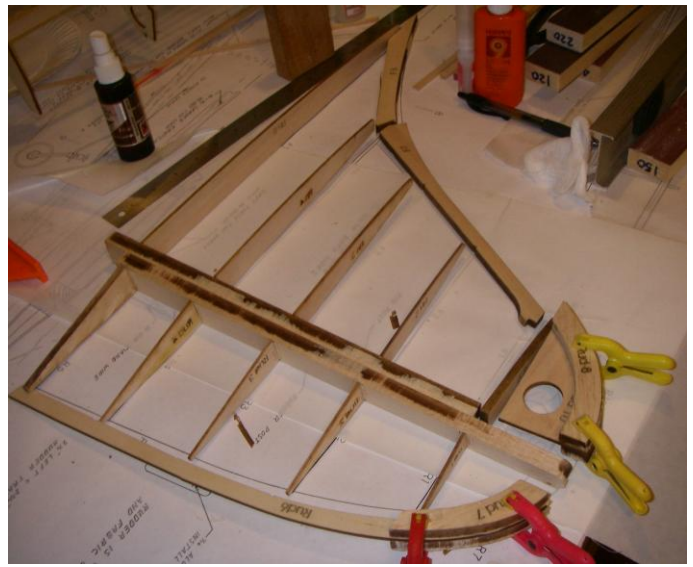
Both Wing Halves



Fuselage



Right Wing



Rudder



Tail

Better Batteries by Brad Quick

When I built my 9' coroplast cub a year and a half ago, I needed batteries to power it. When you get into bigger electric airplanes, batteries can start getting expensive. I was getting tired of buying expensive LiPo packs, just to have them degrade over the span of a couple of years. Years ago, my dad and I put together some battery packs using A123 batteries that we scavenged from power tool packs. These packs lasted a long time despite how we abused them. This made me think that it may be time to build some new packs using cylindrical lithium ion cells.

I first thought of using Tesla cells since they are known for having a long life. Tesla uses Panasonic NCR18650b cells. These cells have a capacity of 3400mah, but have a maximum discharge rate of 6.7 amps. I need around 60 amps for the motor I have in the cub.

After much research, I found the Sony VTC5a cell. The 'a' is important because it signifies that the cell is the high current model. This cell has a 2500mah capacity and has a maximum discharge rate of 35 amps, which is very high for an 18650 cell. For our 9' coroplast cubs, we use eight in series and two in parallel. This gives us a 8S, 5000mah pack capable of putting out 70 amps. The cost of building one of these packs is around \$100.

To build your own pack, you really should have a battery welder. Soldering to the cells isn't recommended because the heat can damage the cells. I built my own welder using plans I found on the internet that uses a 12V automotive battery charger, a big capacitor, and an SCR.

These packs can be charged with a standard 8S LiPo charger using standard LiPo settings. They probably end up slightly heavier than an equivalent LiPo pack, but not by much.

I built my first pack about a year and a half ago and have built two more since then. I use these batteries just about every weekend and have yet to see any degradation in performance. They all will still let me hover my 9' coro-cub with enough power to spare to pull out of the hover vertically.

If you are looking for batteries to power a big R/C plane, I recommend Sony VTC5a's.

Interesting Stuff

- **Dillon Losee**

- Drone Helicopter Hybrid - <https://youtu.be/d80oXSCcHTk>
- Flying FPV... and then a full-sized plane came along! - https://youtu.be/m_OlcAHkWzc
- Building & Flying a Liquid Powered Airplane! - <https://youtu.be/5KVCBiRrV-Y>
- Most Durable Prop?? - <https://youtu.be/fAjiDd3R45c>
- Eagle attacks RC glider - <https://youtu.be/2nMOcjMZna0>
- Red Eye quadcopter fpv,and non fpv flight collage - <https://youtu.be/zRPBfXwbO2E>
- I built a 12S fpv miniquad that runs at 50 volts and sounds INSANE - <https://youtu.be/fIKgIDaGysA>
- How to FPV? FASTEST WAY | First Purchase? | (Part 1) - <https://youtu.be/HKhzd--jVbQ>
- How To FPV? (Part 2) Controller and Sim Setup | START Flying! - <https://youtu.be/dOwW6PFZU3Y>
- How To 10 FPV Freestyle Tricks | LEARN THESE FIRST - <https://youtu.be/0EqJ9C8KuTQ>
- DRONE Simulator 2017- HOTPROPS - <https://play.google.com/store/apps/details?id=com.madkey.Hotprops>
- FPV Freestyle Tricktionary! - <https://youtu.be/n6RX8iI6gcQ>
- Build a PRO FPV Racing Drone for ONLY \$99 Full guide - 2018 UAVFUTURES \$99 Build - https://youtu.be/GFNGUDT_9_c