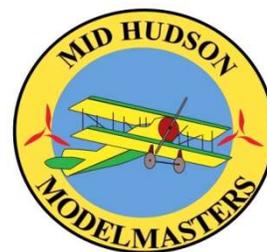




Wing Tips



March 2017

The Newsletter of the Mid-Hudson Modelmasters

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2017 Club Officers

President: Brad Quick

Secretary: Larry Kunz

Sgt. at Arms: Flavio Ambrosini

Vice President: Lloyd Quick

Treasurer: Tom Eng

Junior VP: George Amenta

Club Calendar

Coming Up:

- **CLUB MEETING , Friday, March 10:** James L. Taylor Mfg. Co., 130 Salt Point Turnpike, Poughkeepsie, NY 12603. Highland Middle School has an event the same night and is unavailable.
- **East Coast Swamp Flyers, 3rd Annual Swap Meet: Sunday, April 2,** 9am, Zandri's Stillwood Inn, Wallingford, CT, go to www.swampflyers.net for more information
- **WRAM Club Swap Shop: Saturday, April 8,** 201 Veterans Rd. Yorktown Heights, NY, \$5 entry, \$20 table, for more info see www.wram.org
- **April Wing Tips articles & photo submissions due, Thurs., April 6:** Send your submissions to wingtips@modelmasters.us Due date is first Thursday of each month.

Other Events:

- **MONTHLY MEETINGS:** Indoor meetings for the winter will be at the Highland Middle School Gym, 71 Main St., Highland, NY 12528, on the following dates, Apr 7, May 12. Indoor flying begins at 6:30pm, meeting will begin at 7:30pm or 8pm. *Note: Please limit flying to indoor types -- fly the larger, more aggressive models outdoors or at larger indoor sites. Sneakers or other gym floor type footwear should be worn.*
- **OUTDOOR FLYING SESSIONS AT WEST ROAD FIELD** – Every Saturday Morning, weather permitting. It is also possible to find some members at the field on Sunday mornings. Even during the winter months as long as the driveway is not snow covered.
- **Indoor Flying at Schenectady Armory** - Wednesdays, 1:00 to 4:00 & Saturdays , 2:00 to 4:30. This is an update for the month of March. Scheduled sessions may be canceled for a variety of reasons. Check the EPA club website <http://sites.google.com/site/epamodelers/> for cancelation notices before you come. (Provided by Jesse Aronstein)
- **Warbirds Over the Hudson: Saturday, June 10, 2017,** West Haverstraw, NY 10993, sponsored by Hudson Valley Radio control Club, go to www.hvrcc.com for more information.

From the President's Cockpit

As I continue my series of articles on molding fiberglass parts, I thought I would take a minute to list the materials and tools I've been using. I hope some of you are finding these articles at least a little bit interesting.

- Fiberglass Resin - I have been using AdTech 820 resin and hardener. I get it from Express Composites online. Many people use West System Resin, but someone online recommended AdTech and it's worked well for me, so I haven't switched. I'm currently on my 2nd gallon!
- Fiberglass Cloth - I have been using 2.3 oz/sq. yard cloth number 2113 from Thayercraft. Thayercraft has good cloth and reasonable prices. I also have some 9.6 oz/sq. yard cloth (number 7500) that I use for making molds. The 2113 cloth has a nice tight weave, so I don't end up with pinholes after it cures.
- Wax - As I stated in a previous article, I will only use PartAll Mold Release Wax from now on. Using the right wax makes a world of difference.
- PVA Mold Release - We'll get into this next month. I buy whatever I can find inexpensively on eBay. So far, they have all worked fine.
- Styrofoam - I buy 1" thick pink insulation foam from Home Depot. They no longer carry the 3/4" thick foam. I've also bought a similar material from Lowes. It's green and it's quite a bit heavier than the pink stuff, so I'll probably only use it for molds.
- Microballoons - I just got some from eBay and I'll probably need more. Mix this with epoxy resin to create a filler material that's sandable.
- Sandpaper - I've been using 220 and 320 grit 3M sandpaper from Home Depot. It works well for wet sanding the molds.
- Orbital Sander - sometimes used in the first stage of mold sanding. Power sanding can be tricky because it's very easy to damage the mold by oversanding.
- Foam Paint Brushes - I get these in ten packs from Walmart. Don't use the ones with the plastic handles that you get at the dollar store. The ones with the wooden dowel handle work better, some better than others. Epoxy resin eats the foam on these brushes. The cheaper ones fall apart before you finish using them.
- Rubber Gloves - I just picked up 100 nitrile gloves from Harbor Freight. I have been using latex gloves from Dollar Tree, but I frequently seem to put small holes in them because when I take them off, my fingers are covered with epoxy resin.
- White Gorilla Glue - I use this to glue foam to the bottom of my mold and to glue foam structures inside my finished parts.
- Tongue Depressors - From Walmart. For mixing epoxy resin.
- Plastic cups - From Dollar Tree. For mixing epoxy resin.
- Single Edge Razor Blades - For cutting fiberglass cloth as it's laid into or over a mold. The cloth needs to be cut and overlapped anyplace where a compound curvature would cause a wrinkle.
- Paper Towels - I use a lot of these. They are for wiping up messes and buffing the wax on molds.
- Respirator - I just got a new one from Home Depot. Dust from fiberglass is very irritating to the lungs and inhaling epoxy resin isn't healthy either.
- A Hot Box - I made a box by using Great Stuff Foam to glue together sheets of foil covered insulation foam. I put a 60 or 100 watt light bulb in the box along with whatever I'm trying to get the cure. It speeds up the curing process in my cold basement.
- A hot wire setup - Used to make the foam that I glue to the bottom of my molds flat so they sit nicely on the table. I also use this to level the structural pieces I put in my finished parts.
- Jig Saw - Used to cut excess fiberglass from the perimeter of molds and parts.

That's all I can think of for now. I'm sure I missed some things.

Looks like quite a few of us are headed to the WRAM show tomorrow. I look forward to seeing everyone there.



MEETING MINUTES – James L. Taylor Mfg. Co, Feb. 10, 2017

Open Flying: 6:30 till 7:30

(Mostly Vapors, quads, and an, AS3Extra due to low ceiling)

We met at Brads business location on Salt Point turnpike since the Highland Middle School had an conflicting activity.

Business Meeting called to order at 7:35

- Minutes of previous meeting in Wingtips. Accepted.

Note: Next meeting is Friday March 10. (also at Brad's place)

- Treasurer's report: by Tom Eng

\$1567.21 (\$117.21 of which is the mowing fund) plus \$500 in escrow to Highland Middle School.

(We now have a letter from the school confirming that they have our money in escrow)

- Membership:

+ We now have **28 members** for 2017

+ Renewing members need only check that their AMA membership is valid through 2017, and get their dues to Tom)

+ Tom will investigate opening a PayPal account to make paying easier.

- Party Follow-up:

The annual party on Jan 20 was a great success with 31 members attending. Coppola's lets us use their big party room, and only charges for

the number of people who come. Bob did a great job organizing. Lloyd organized the gift exchange (very popular quads & chocolates!), and Dom ran the auction with help from Tom. Bill did

a fine job with the MM dollars, and issued some fine looking aeronautical money.

+ If you missed the party, 50% of your 2016 dollars will be added to what you earn in 2017

- Possible Group build:

There was discussion of doing another group build this winter. Possibly the Science Olympiad Write Stuff Model. See the MM Google Groups discussion. .

- 10 minute presentations:

Anyone with an interesting idea on building, flying, etc. – Please share it with the club !

+ **Feb 10:** Barry led a discussion on longitudinal stability, Yaw, Pitch, CG, and Angle of incidence.

+ **March 10:** Dillon will discuss FPV flying and equipment.

- Show & tell / presentation:

+ Bob showed the spinner he had custom made with a 3D printer for the BF109 model he is building. 3D printing service provided by makexyz.com



Brad Quick presenting awards at annual dinner



Barry Knickerbocker discussing longitudinal stability

+ Brad showed his latest custom made fiberglass wing mold. (no 3D printer involved!)

- Limbo Flight competition:

Fly under the horizontal 2x4 – Won by Tom on his first attempt !

Open Flying: till 9:30

Steering Tail Wheel without Loading Rudder Hinge by Larry Kunz

Having recently had the rudder hinge give up on my Visionaire due to tail wheel mounted on rudder and too many fine Kunz landings, I was inspired by a tail wheel design on my nephew's new 60" Laser (see photo of blue&yellow plane). Unfortunately, I had already repaired my Visionaire, and decided to leave it alone until I saw evidence of trouble (of course, my landings are going to be much better this year anyhow!)

But then I took a look at my Twisted Hobbies Velocity. It originally came with a nylon tail skid on the body - works fine if you have the guts to turn the rudder and blip the throttle on a narrow runway, but it won't taxi-steer without extra throttle. So last year I installed a tail wheel on the rudder. Recent inspection showed that the bottom of the rudder hinge was already giving up !



So, I have created the tongue depressor version of the fancy Laser tail wheel, (See two photos of white plane) I considered a spring mounted wheel, but did not want the extra height. I get a little less wheel deflection than rudder deflection since the rudder pivot is forward of the hinge line, but I did not want to disturb the hinge. See photos...

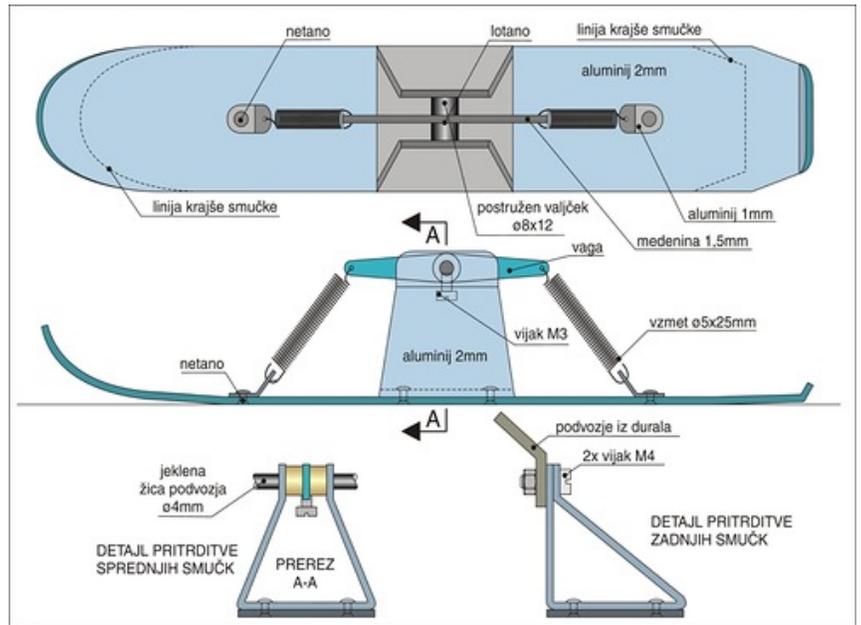
Interesting Stuff, Contributions from Members

Dillon Losee

- CHEAP FPV UNDER \$100: <https://youtu.be/vFZS4j8VPTU>
- eptile S800 SKY SHADOW 820mm Wing EPP FPV Airplane Gliders Frame DIY Kits | eBay: <http://www.ebay.com/itm/302146212603>

Bill Bolitho

- I have, one small contribution. Someone at the last meeting asked about skis for model airplanes. I found this illustration on a website in Slovenia. Yes, I know the labels are in Slovak, but it shouldn't take a genius to figure out how the ski attachment is constructed. Be wary of CG changes before you fly - I had a rather spectacular crash with a CL Ringmaster, because I neglected to check the CG with those heavy crude skis upfront. This device is quite more sophisticated than what I used. The right hand detail is for the tail ski attachment.
- Flight Simulator for Professionals: <http://www.prepar3d.com/product-overview/>
- The Poughkeepsie Public Library District (PPLD) allows library card holders access to one of their 3D Printers. The estimated cost is approximately 10 cents/gram. There are units at both the Main and Boardman Road branches.



FOR SALE

Larry Goshkarian, a former long time member of our Club, for health reasons is no longer able to fly his planes. He would like to sell some of the planes in his collection. They are mostly gas, but I am told can easily be converted to electric. Larry lives in Saugerties and can be contacted by phone at 845-247-0587. Following are pictures of a few of his planes that are for sale:

