



# Wing Tips



## May 2016

### The Newsletter of the Mid-Hudson Modelmasters

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### 2016 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:

- **Saturday, May 7, 9:00am: Field Maintenance**, West Road flying field.
- **Friday, May 13, 7:30pm: CLUB MEETING**, Highland Middle School Gym, 71 Main St., Highland, NY 12528. 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.*
- **Thursday, June 2: April Wing Tips articles & photo submissions due**, Send your submissions to [wingtips@modelmasters.us](mailto:wingtips@modelmasters.us) Due date is first Thursday of each month.

#### Other Events:

- **MONTHLY MEETINGS:** Beginning in June, monthly meetings will be held on Saturday morning at 11am. Dates to be determined.
- **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.
- **INDOOR FLYING AT SCHENECTADY ARMORY** –. For more information please see <https://sites.google.com/site/epamodelers/home/schenectady-armory-indoor-flying> for current information concerning dates and times. Jesse hopes to see Modelmaster members in Schenectady.
- **2016 U.S. Drone Racing Championships, August 5 - 7**, Governor's Island, NYC. Also to be aired live on ESPN. <http://dronenationals.com/>
- **AMA District II Fly In, August 27-28, 2016**, Trinca Airport, 131 Airport Rd., Andover, NJ 07821 For more information see [toponewjersey.org](http://toponewjersey.org)

## From the President's Cockpit

Always remember the small things!

I was reminded of this a couple of weeks ago while making my second flight of the morning with my 80" Extra 300. My plan was to take off from right to left (into the wind), immediately roll to inverted, then climb out with a quarter of an outside loop before I got to the trees. The first step worked well. I took off, rolled to inverted, held a fairly level inverted flight, then pushed forward on the elevator stick. This is where things went wrong. As I increased the forward motion on the stick, the plane remained level. I never got a chance to reduce the throttle before the plane made a nice straight inverted flight, right into the trees. As you can see from the photo, it didn't end well. When I got it back to the pits, I took hold of the elevator and it swung freely. The control horn, push rod, and servo horn appeared to be in place, but the servo offered no resistance. I first thought that I had ripped the teeth out of some of the servo gears, but upon further investigation, I noticed that the screw holding the servo horn in place had backed out and the servo horn had come free of the splines that drive it. I probably assembled this loosely when I built the plane, figuring I would have to move the horn when I finally got the radio powered up.



This is why I fly R/C instead of ultralight aircraft!

The good news is that I had the plane back together and in the air by the following weekend (gotta love foam planes).

In other news, thanks to Bob DiGiacomio for sharing his knowledge with us at the last meeting about the tools he uses when building stick built rubber powered planes. Next month, Rick Rizza will be sharing some soldering techniques with us.

(Thank You to Larry Kunz for contributing the photo on the right)

*Tighten those servo arm screws, or else  
Gear should not be visible*



## MEETING MINUTES – Highland Middle School, April 22, 2016

**Open Flying:** from 6:30 till 7:30

**Business Meeting** conducted by MM president Brad Quick. - Called to order at 7:30.

- Minutes of previous meeting in Wingtips. Accepted.

**- Treasurer's report:**

\$1646.88 (\$227.21 of which is the mowing fund) plus \$500 in escrow to Highland Middle School. We have **43 members** renewed for 2016 plus several youth members. All paid members have received their 2016 cards. If you have renewed and haven't received a card, please contact Tom Eng or Larry Kunz. **If you have not renewed** (shame !), please read the following reminder!

**- REMINDER .... MM dues & AMA membership:**

Please be sure that your AMA membership is current through the entire year, and send your Model Master membership renewal. Go to <http://www.modelmasters.us/index.htm>

Near the bottom of the first page is a link to the membership application form.

**- Build Workshop:**

An extra workshop is scheduled for April 23 at Brad's factory on Salt Point for those who have not yet finished their planes.



*John teaching his Mom how to fly RC*

**- Show & tell:**

- a) Bill Bolitho donated a collection of old model kits to the club. He also has a number of old glow motors he will donate to anyone interested
- b) Bob DiGiacomio showed the "Spirit of Saint Louis" model he is working on.
- c) Rick Rizzo showed (and flew!) some of the goodies he bought at the Toledo show:
  - A flying wing quad, a delta wing quad, and a camera packing micro quad controlled by a smart phone.

**Presentation: ( Please volunteer to do a future presentation ! )**

Bob DiGiacomio presented a selection of tools he uses for model building.

- Carrier Landing contest:** This challenge was to land on the folding table in the center of the gym.  
8 or 10 members entered the Vapor division (won by Flavio)  
4 or 5 members entered the quad division. (won by Rich)

## Airline Travel with Lipo Batteries by Richard Kleinhenz

Last month I wrote about my experience with the US Postal Service and shipping lipos. After I researched that, I decided to look into the air travel regulations. After all, laptop batteries are lithium batteries, and I've never run into a problem there, so perhaps the rumors of problems when transporting lipos on airlines were also not quite true. I found indeed that within certain parameters there are no problems!

Here's what I learned from the TSA and FAA websites. I am talking specifically about spare Lipos here. Lipos installed in equipment may be carried in checked luggage. This will rarely be the case for us, unless you are checking an assembled plane, heli or mullti-rotor. The danger again is fire - lipo batteries, when damaged or shorted, burn extremely hot, and in a luggage compartment there is less oversight. So lipos need to be in your carry-on. If your carry-on is gate-checked, the batteries need to be removed and brought into the cabin. I think it's a VERY good idea to keep lipos in a lipo-sack, a bag made from fire-retardant material. These can be bought inexpensively in hobby shop or on amazon. They serve multiple purposes here: they offer some mechanical protection, they keep your batteries together and can easily be identified and pulled out, and the connectors are protected from accidental shorts. Yup, even though the connectors a female, you can dream up a situation where something can get in there and create a short, if they are left loose in your carry-on! It's recommended to add some tape over the connectors just for travel, but in a lipo-sack with just a couple of other batteries that's belts and suspenders, IMO. But some electrical tape is easily applied and removed and sure can't hurt either, and if nothing else will demonstrate your diligence to a TSA inspector :-)

There are again some limits to the number and size of the batteries you can take in your carry-on. For up to 100 Wh per battery there is no limit. To arrive at the rated mAh, divide the Wh by the voltage and multiply by 1000. So for a 3S battery with 11.1 V, 100 Wh is equivalent to 9 Ah or 9000 mAh. Most of our 3S batteries are less than than 9000 mAh so there is no limit for those 2200 mAh and 3000 mAh and even 4500 mAh. Since unlike laptop batteries our lipos typically do not have Wh printed on them, it's a good idea to be prepared to show the conversion in case you run into a diligent but ignorant TSA inspector!

For 4S the voltage is 14.8V, so the limit becomes 6,750 mAh. Again most 4S are probably below that and you can take any number.

For 5S the voltage is 18.5V and the 100 Wh limit is 5,405 mAh. It's getting marginal. So 5S 5400 mAh and below, any number of batteries can be carried.

For 6S the 100 Wh limit translates into 4505 mAh so 6S 4500 mAh are OK to carry in any quantity.

You CAN carry some larger batteries also! But there is a limit in quantity and size. You can carry up to 2 batteries with up to 160 Wh each, in addition to the smaller batteries. Just add 60% to the limits above to find the 160 Wh limits. So absolute limit for 6S is 7,208 mAh, for 5S is 8,720 mAh, and for 4S is 10,800 mAh. These are some hefty sizes, and possibly used in boats, but not very likely in planes (in my admittedly limited experience :-)

I ended up taking 2 largish batteries (6S 4000) with me in my carry-on on my flight to and from Florida and ran into no questions. I had them in a lipo sack and had not bothered taping over the connectors. They went through the inspection belt OK were not pulled out for detailed inspection by the TSA inspectors.

## Interesting Stuff

Dillon has returned to this month's issue with more interesting videos. We missed your contributions to the newsletter.

**Dillon Losee** - "Flying wappingers creek With the flyzone Tidewater Flight 1" -- <https://youtu.be/LJp4ngFyh8k>

**Dillon Losee** - "Engineered Mini Flying Wing" --

[http://www.youtube.com/attribution\\_link?a=bHrnF4kbMWI&u=/watch%3Fv%3DaSD69jdi2CE%26feature%3Dem-share\\_video\\_user](http://www.youtube.com/attribution_link?a=bHrnF4kbMWI&u=/watch%3Fv%3DaSD69jdi2CE%26feature%3Dem-share_video_user)

**Dillon Losee** - "3D Printed Flying Wing Pod" -- <https://youtu.be/sHyfQ7ewP0o>

**Dillon Losee** - "Lead Acid Powered Plane" -- <https://youtu.be/-eHv3F9bkto>

**Bill Bolitho** - Saw this during the opening credits to "Stalingrad" (2013) - One of the companies involved in the films' production was ART PICTURES STUDIO (a Russian film studio). This short advert is very evocative of why we fly. Run time is 23 seconds. <https://www.youtube.com/watch?v=41sAfJvgScs>

**Bill Bolitho** - DESIGN A DRONE SOLUTION, TOGETHER WITH AIRBUS GROUP & LOCAL MOTORS, AS A SOLUTION TO TRANSPORT URGENT, MEDICAL CONTENT TO PEOPLE AND PLACES THAT ARE TRADITIONALLY DIFFICULT TO REACH. AND DON'T STOP THERE - CONSIDER OTHER TYPES OF CARGO THIS AMAZING TECHNOLOGY CAN TRANSPORT. THEN, SEE YOUR VISION BROUGHT TO LIFE BY THE BEST IN THE BUSINESS. READ MORE ABOUT THE CHALLENGE ON OUR BLOG (<https://localmotors.com/blog/airbus/>) . SIGN UP TODAY. THE CHALLENGE OFFERS \$117,500 IN TOTAL PRIZE MONEY!

**Can you help?** The club's printer (USB connected) is no longer recognized as a valid USB device. Error is received when attempting to physically connect it. It was functioning (printing) documents fine. I've tried to use the printer via different computers and operating systems (Windows Vista, Windows 7 and Windows 10), all with same error. I've also done Google searches for the printer model and error, performed suggested remedies, also with no luck. Also tried using different cable, one which I know works, again no luck. If there is a member who has the expertise and/or willingness to attempt fixing the problem please contact the editor at [wingtips@modelmasters.us](mailto:wingtips@modelmasters.us). Otherwise I will, with the board's approval, dispose of it and clear some space on my desk. The printer is a Brother HL-2240, laser black and white printer.

## For Sale

**NEW NIB Fighterbird** . Was purchased few years ago but never used. It is a complete RTF Fighterbird and the box has never been opened. If anyone's interested, it would be a best offer. Contact information is Charlotte Scott, telephone 845-229-2924. Charlotte is not a club member but stopped by the field and provided this info to a member.



**2 NEW Turnigy 4 cell, 2200 mah 40c batteries.** I intended to purchase 3 cell and by mistake ordered 4 cell. These are new, purchased in January, never used. This is the battery → [https://www.hobbyking.com/hobbyking/store/uh\\_viewItem.asp?idProduct=16683](https://www.hobbyking.com/hobbyking/store/uh_viewItem.asp?idProduct=16683) \$20 each, if interested, contact Dom at Email: [wingtips@modelmasters.us](mailto:wingtips@modelmasters.us)