

Laurel Highlands Model Airplane Club - AMA #557

2780 Rte 981, Mt Pleasant, PA 15666

www.lhmac.org



Wing Tips

May 2018

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MEMBERSHIP FORM
available on our website

Officers for 2018

| | | |
|--------------------------------|----------------|--|
| President: Jim Andrews | (724) 837-4111 | president@lhmac.org |
| Vice President: Dave Oswald | (724) 454-3180 | vicepresident@lhmac.org |
| Treasurer: Rene Marquis | (724) 523-3320 | treasurer@lhmac.org |
| Secretary: Steve Mickel | (724) 953-5933 | secretary@lhmac.org |
| Field Control: Mark Yothers | (724) 423-4725 | fieldcontrol@lhmac.org |
| Editor: Linda Pollock | (724) 532-0210 | newsletter@lhmac.org |
| Website Admin: Vishal Jariwala | (734) 272-7029 | admin@lhmac.org |

Correspondences - Events, Other RC Club info, etc. – **PLEASE** send to the club **Vice President** (above)

Membership – Applications, Dues Forms, AMA information – **PLEASE** contact the club **Treasurer** (above)

Events and Times

Regular Meeting May 11, 2018 at 7:00 PM at the St. Paul Lutheran Church, Trauger.

This Month's Breakfasts will be at Cracker Barrel, 154 W Pennsylvania Ave, New Stanton

8:30 AM, May 9, 2018

8:30 AM, May 23, 2018

Foamy Warbird Racing & Trainer Pylon Racing -

May 6 & 20, 2018 at 1:00 PM at the field.

Field Cleanup Day - May 12, 2018 at the field.

Boy Scouts - May 19, 2018 at the field.

Opening Day Picnic - May 27, 2018 Caatered by Palombo's - food will be served at Noon and available until 2:00 PM. Covered dishes & desserts are needed from members.

Thursday Night Training - May 3, 10, 17, 24 & 31, 2018 at the field (weather permitting). Don't forget, if the weather is bad, we meet at Westmoreland Mall Food Court about 7:00 PM - venue & times could change and will appear in a notification via email.

The Prez Says

Don't forget the sun screen lotion when heading to the field. Finally. For a while it seemed the weather would never turn in our favor but it has. So get out to the field and fly. This Sunday, May 6th, is the first Warbird/ Trainer Pylon race. So come on out and fly or watch, either way it is great fun.

The US House of Representatives has passed their version of the FAA reauthorization bill, which includes Section 336 which we fly under. Thanks to all of you that took the time to fill out the online form the AMA sent you. It does make a difference. Now the Senate has to work on their version of reauthorization bill and vote on it. Then the two bills have to be reconciled and voted on again. Expect the AMA to again ask for your help. Remember, there are special interests that want to do away with 336.

The Boy Scouts are coming to our field on Saturday, May 19th. Rene is coordinating the event. To make the field look good for that



event and our Opening Day Picnic May 27th, we should have a cleanup day on May 12th. More about that at our regular meeting on Friday, May 11th. Hope to see you there.

Jim

Minutes of the Meeting of April 13th, 2018

There 25 members present

There were no new members or guests present.

The meeting was brought to order by President Jim Andrews with the Pledge of Allegiance

Officers Reports....

A. Secretary's minutes for the March meeting were accepted as printed in the April Newsletter.

B. Treasurer's report was approved by the members; first by Mark Yothers and second by Jim Pennington.

C. Vice President, Dave Oswald, announced that he donated the March raffle prize won by him for the April raffle drawing - a Hellcat F6F from Tower Hobbies.

D. Newsletter Editor reported that all is going well, nothing new to report.

E. Field Control reported - starting field stands, butt buckets in place, working on lipo cans.

F. Web Master report - Vishal wasn't present, feedback from others was web page is ok.

G. President's remarks - Jim spoke about AMA discussion at The Weak Signals Toledo show. The discussion was about Amazon and Google trying to abolish the bill for model airplanes known as section 336. By now you should have received an email from AMA asking you to respond to Congress. If you want to continue to have a hobby such as you have at present, you need to respond now.

Old Business.....

A. Fuel committee - Bill was not present but Dean has 5 gallons on hand.

B. Mark Yothers reported about the Meroke Portable flight stand built by Mike Bossick. He also said - don't use this stand until it has been sealed

C. Discussion pertaining to solar panel. Ed was explaining how much useable energy will be available with this panel. It was decided to go ahead with this set-up and see how well it works.

D. Discussion on runway material is still in the preliminary stages but Josh Miller of the county park wants to meet with us to discuss scope of work to be done. It was decided to go with 3 rolls of material and the club pay up to \$1500, with each roll costing \$900. Motion to accept first by Mark Yother and second by Tim Bartlow and there was also a gracious donation from Mark Withrow towards the purchase and installation of material.. "Thank You" Mark for the donation!

E. Small discussion on May picnic whether it is to

be catered or someone doing it .. Well it was decided to have it catered

Break for raffle sale and refreshments

New Business.....

A. Talked about road trip to Dayton, Ohio to visit Wright Patterson Air Museum. We would stay Saturday night and return Sunday. Linda has information on cost and such.

Show and Tell



1. Dean showed off his new yellow cub like airplane with his personal striping - very nice

2. Jeremiah showed his UMX Aero Commander - 28"



wing span, 2 180GL 3000 kv motors, flying weight 5.1 to 5.6 oz, 2S lipo 450 mah to 800 mah, flight time is 5 to 8 minutes, 2 counter rotating props. 3 blades

3. Jim Andrews showed his Carl Goldberg Eagle 63. OS 46 LA, 5lbs 2 oz. This was an original kit



Minutes continued:

Raffle

Drawing prize, a Hellcat F6F from Tower Hobbies, was won by Dean Pollock.



Also there was an auction after the meeting with John Hathaway's stuff

Meeting Adjourned first Steve Mickel and second Don Accorsi

Steve Mickel

Your Roving Reporter

From: The Roving Reporter

Hi again everyone – Well, the month of April didn't get much better until the last week, when we did get a couple of decent days. We did have the annual spring "Golf n Fly" at Donnie Gilbert's Ridgeview Golf Club. See my write-up and pics in another section of the newsletter.

We had a decent day to fly during the 3rd weekend of April, and Tim Bartlow brought out his recently finished "Old Timer". Tim powered this one with a Tower



Hobbies .40 2 stroke, and it is a great looker, and flyer.



The following weekend gave us a couple of decent days again, and a bunch of us took advantage of it. Rene Marquis, and Lester Faroux fires up Rene's Seagull Fly Baby, and gets ready for the maiden flight.



There was a problem with the tailwheel, so they postponed until the tailwheel issue was fixed. Tim Bartlow's Telemaster sits next to Rene's plane, and is powered with an OS 61 four stroke. Page 3

Your Roving Reporter continued

Lester Faroux brought out his newly built PT19, powered with an OS 46 AX, and Les got it maiden. I missed the maiden flight, but will get airborne pics later.



Dave Oswald fires up his P51 Mustang, and taxis out for his 1st flight of the day.



Jim Andrews throttles up his Trainer for a flight.

Tim Bartlow and I took a ride out to Ohio so that Tim could pick up a big Senior Telemaster that he wanted. While we were at this fellow's house, I spied this little kit built "Sorta Cub". I liked how it looked, and considered buying it for an electric project. After bringing it home, I decided it wasn't feasible to make it electric, and went with a glow installation. Since it was very light, only about 2 lbs., I had a NIB HB25PDP that should fly it nicely. After running 3 tanks of fuel through it for break in, I had Lester take it up for its' maiden. The HB25 had plenty of power, and after a



few clicks of trim, flew very nice. See my construction article in another section of the newsletter.

Rene Marquis brought out his newly finished Bush Mule, and I missed the maiden flight on it. Lester did the maiden, and said it's a great flyer.



Your Roving Reporter continued

Rob Craig and Jim Andrews sets Rob's "U Can Do" up on the new startup stand that Mike Bossick constructed, and gets ready for his first flight.



On another day, Rene Marquis fires up his Seagull Fly Baby, as Lester holds it, and readies for its' maiden. After Lester took it up, he needed some trim



adjustments, and as Rene tried to make a trim adjustment, the plane took a sharp nose dive, straight

into the cornfield. Needless to say, it crashed hard, and was a total loss.



This month has been crazy with very unusual weather patterns – high winds, thunderstorms, and extreme swings in temperatures; from 30s/40s to high 70s/80s for the last week of April. Hopefully the weather will settle down to normal spring temps, and better flying weather.

This is the time of year that we have many of our seasonal activities, picnics, contests, and training sessions, as well as pylon racing. Please do your part by helping, and being an integral and important part of these activities. It is the volunteers that make these a success, and hopefully we can attract new members to join our club.

On a final note, this is your newsletter, so if you have projects you're working on, please submit an article and pictures to us. If you have an article of interest that would be helpful, or an idea that you would like to share with others, please do submit it to us to be published in the newsletter. We would like to "THANK" Curt Hughes for the series he has supplied for the newsletter on "electric motors". We have gotten very good feedback on a "job well done" on those articles.

Your Roving Reporter
Dean Pollock

Project "Funky Cub"

by Dean Pollock

Tim Bartlow and I went to Ohio to pick up a Senior Telemaster that he wanted. While we were there, I spied this little Cub looking plane. It was kit built, and covered, but not finished. My original plan was to make it electric. After bringing it home, I saw that it wasn't going to be feasible to make it EP. Since it had a fuel tank



shelf, and nice front end, I didn't want to cut it up to put in a battery hatch and ventilation holes. I also didn't have an electric motor, esc, or batteries, so I opted for a glow engine. The plane is very light, only about 2 lbs., so I had a NIB HB25PDP that I felt would be perfect for it. An 8 oz. tank fit perfectly.



Project "Funky Cub" (continued)



I pulled out the HB25, and found a motor mount that was a perfect fit, and got it installed.



The unusual aspect of this plane is its huge wing chord. With a wingspan of 54", the chord is 14", and it should be a really "slow flyer", much like the design of the "Slo-Fli-Mustang" that Thunder Tiger made several years ago.

The servo tray was already installed, and pushrods were there, so I got servos installed. I added pushrod supports, and used steel pushrods instead of the nyrod inserts. After getting throttle servo installed, I got the fuel tank installed, and throttle pushrod made up. I installed a receiver, and cycled the servos for throws, and minor adjustments. All good so far.

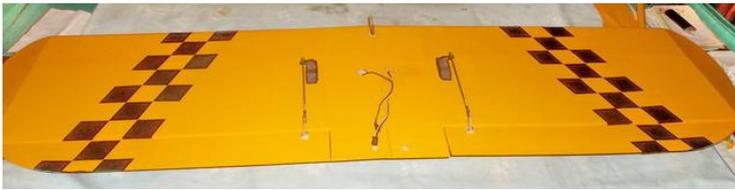


Since there were dowel rods in the fuselage to rubber band the wing on, I wanted a bolt down setup. I cut out a 1/4" ply plate, and drilled and tapped it for 1/4 x 20 nylon wing bolts. I needed to drill a hole in the front wing saddle for a dowel pin, and epoxy a dowel pin in the leading edge of the wing. The wing servo slots were already open, and I installed aileron servos.



Since there was no trim on it, I used Monokote trim sheets, and cut out all of the striping and trim. I made up a new landing gear, and new aluminum hub lightweight 2 3/4" tires. Finished AUW is about 3 1/4 lbs. I'm pleased with the way it came out.

Project "Funky Cub" (continued)



Golf & Fly

by Dean Pollock



The annual "Golf & Fly", hosted by Donnie Gilbert at his Ridgeview Golf Club, was held on April 21st. The grounds were too wet for golfing, but was good enough to fly off the fairway. The day was a little cool, with temps in the 50's and

breezes were on and off, around 10 MPH. We had a decent showing of members from our club, and a few members from another club.



Another fellow launches his Old Time EP powered plane for his flight, and it is a really neat little plane.



Jeremiah Ulishney readies his little cardboard plane for his 1st flight.



Mark Yothers launches his little, scratch built EP Vagabond for a flight around the course.

Jim Andrews launches Bill Cecchett's Corsair for his flight around the course.



Golf & Fly

(continued)

Jeremiah throttles up his FPV Flying Wing, and readies for a hand launch. It's a pretty fast flyer.



Jeremiah taxis out his EP Ultimate for another flight.



Jim Andrews taxis out his EP Stik for a flight.

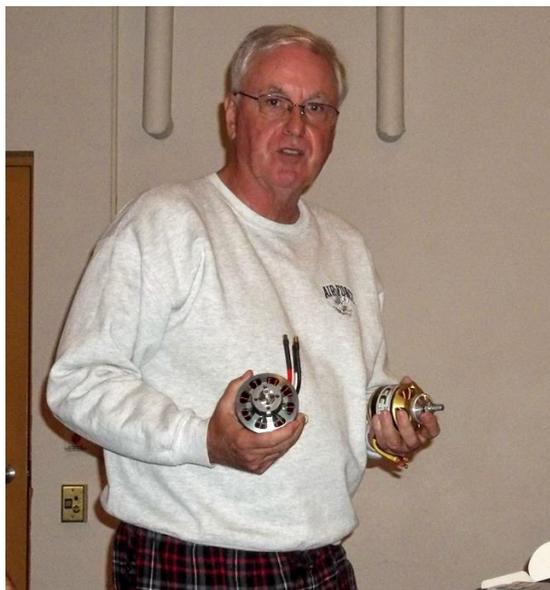
There was also a gathering of some nice British sports cars, courtesy of the "Laurel Highlands British Car Club".



All in all, it was a fun day at Donnie's and everyone had a great time. The food was excellent once again, and the desserts were superb. A hearty "THANKS" to Donnie for hosting this fun event, and doing all the cooking and prep work. It is greatly appreciated by everyone who attended.

Converting Glow and Gas Models to Electric Power - Part 1 of 2

by Curt Hughes



Many modelers are rightfully confused by all of the jargon associated with electric flight so I have written two articles to help those who wish to understand the principles of an electric conversion into a simple and straightforward manner.

The two most common questions I get asked from fellow flyers are:

1. Can you equate an electric motor to an equivalent glow motor?
and
2. How do you go about converting a glow or gas model to electric power?

This article will cover the first question and will be followed up by a second article which will go through the steps required to answer the conversion itself.

The answer to the first question on equating glow or gas engines to an equivalent electric motor is technically, "no" but manufacturers do so and they are really doing the modeling community little service when they do. Let me explain why.

First, let's look at why it is generally unfair to compare an internal combustion engine with an electric motor. Unlike a fuel engine an electric motor does not have a narrow operating range. When you buy a standard .40 cu. in. displacement glow engine you would likely equip it with a 10X6 prop and it would most likely turn around 12,000 RPMs. At sea level that is about one horsepower. The first thing to learn when comparing electric motors to IC engines is that if we are swinging a glow size prop at a typical glow RPM on our models, we are doing something wrong. The biggest advantage to electric flight is being able to choose a motor/prop combination that swings a larger prop to better match not only the way you want to fly but also the ability for the model to fly in the manner it was intended.

Calling the motor a 46 and then using it on a .40 glow sized model may work well for a sport model that, because of its design cannot swing a much larger prop. However, it would not be the best power combination for a lumbering glow trainer with lots of room for prop growth. That 46 motor could be powered by 3 LiPo cells effectively with a large prop and fly a lightweight but large, model or could also be powered by 5 cells for use on a fast moving sport model with a much smaller prop. The electric motor is capable of running effectively at 1/3 hp as well as 1 hp! This is the main reason why we should not give the motor a glow equivalent designation. It makes things easier for the marketing department of hobby manufacturers but not so much for the modeler.

Now, here is the important part... watts as a measure of power has a direct application here and that is why I focused primarily on the topic in the first few electric articles. Instead of using cubic inches or horsepower to describe engine output, electric motors use watts to quantify their output. In simplest terms, the watts of power that an electric motor has available to convert to mechanical energy (by means of the propeller) is equal to the voltage multiplied by the current, both supplied by the battery. This then, is the power available on the input side of the motor's power system. With some loss due to many factors not really important to this article, the power output is what is available to propeller to convert to thrust. This ratio of power in to the motor, versus the power out to the prop is a measure of the motor's efficiency and is greatly affected by the quality of the motor's components.

Converting Glow and Gas Models to Electric Power - Part 1 of 2 (continued)

Just as a quick summary of the types of electric motor design there are two: "inrunners", and "outrunners". In simplest terms, outrunners are mainly used in sport and scale modeling applications because their design allows for much greater torque, since the entire outer motor casing (inertial mass) turns with the propeller. The magnets of the motor are glued to the inside of the motor housing and rotate around the motor shaft. These motors generally run at lower RPMs than their inrunner counterparts and are capable of turning much larger propellers. Inrunners on the other hand, are usually used in model sailplanes, some helicopters where higher RPMs are needed and generally require the use of a gearbox to reduce those RPMs to the prop or rotor blades. EDF ducted fan units in jets are a great example of where an inrunner is best suited as no gearbox is used, due to the many thousands of RPMs needed to power the fan unit to produce the needed thrust.

Understanding how to choose the best motor, battery and prop combination for our models is essential to the glow to electric conversion process, and is the topic I will discuss in the next and final electric article where we will look at converting a Sig LT-40 for our example.



TOLEDO PICS

**jim and Ed Andrews in front of Ed's
Cub and GeeBee R2.**

From Mark Yothers





Fred Snyder

John Hathaway

Walt Rubino

Tim Bartlow

Ralph Gaebel

John & Joan Marshall

Vaun Hile

Paul Cunningham

Jim & Timi Pennington

Dick & Shirley Schmitz

Don & Joan Accorsi

Bob Bushmire

**And anyone else who
needs our Prayers!**



May Birthday Wishes

WE WOULD LIKE TO EXTEND A HAPPY
BIRTHDAY TO THE FOLLOWING CLUB MEMBERS!



Happy birthday!

Happy birthday!

**James J Andrews
Arthur K Cook
Donald L Gilbert Jr
Jay Grabiak
John Hathaway
William H Kline
Philip Laymon
Bruce R Light
Brian G Moore
Lucas O Morgan
James R Pennington
Richard O Schmitz
Gerald R Thomas
Jeremiah Ulishney**

Happy birthday! Happy birthday!

LHMAC CLUB PATCHES

FOR SALE!

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for \$5.00

• **TYPES** - available in
Velcro or sewn on

• **HOW TO PURCHASE** -
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Rene Marquis,



at ram158@msn.com or (724) 523-3320.

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