

The Flightline



Volume 49, Issue 10 Newsletter of the Propstoppers RC Club AMA 1042 October/November 2019



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President's Message

I have been having a rough time this fall with health problems and I'm at the point that I realize I can no longer carry out all my duties as club President. So, it is with deep regret that I must announce I will not be standing for another term as President in the new year. I want to thank everyone for all the help and support I received over the last year.

I look forward to continuing to serve the club as an active member and enjoying the fun and friendship that I have experienced for so many years

We are a little late getting the election process under way. You will be receiving an email message explaining the situation. We will be voting the 2020 slate of officers at the November meeting. I hope to see you there.

Chuck Kime

President

Agenda for November 12th Meeting At Gateway Church Meeting Room 7:00 pm till 8:30

- 1. Call to Order and Roll Call
- 2. Approval of minutes
- 3. Treasurer's Report
- 4. 2020 Officer Elections
- Old Business:
 Membership status
 2020 Dues Increase
 Bi-monthly meeting proposal
 Appointed Officer Vacancies
- 6. New Business:
- 7. Show and Tell:
- 8. Adjournment

Minutes of the Propstoppers Model Airplane Club

Tuesday 10th of September 2019

Roll Call: Mike Black called the roll and 9 members were present.

Treasurer's Report: No report.

Approval of the minutes: Minutes of the previous meeting (June 11, 2019) were approved.

Old Business:

VP Navarro reported that we have updated the info on our fields with the AMA.

There was a general discussion of the continued issue of membership numbers and the overall "health" of the organization with regard to participation and membership growth. The Board and the new Membership Chair will continue to examine these challenges confronting the club.

New Business:

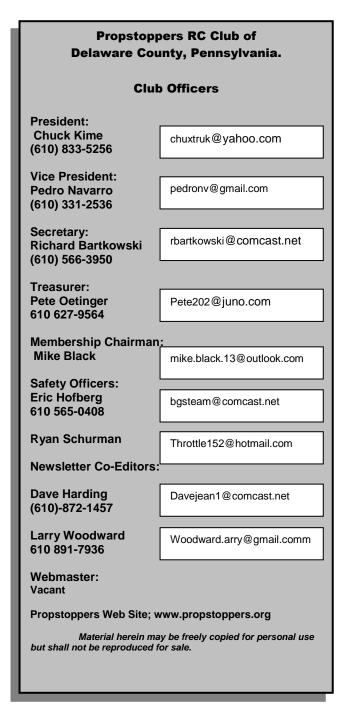
A proposal was discussed that the monthly meeting be reduced to every second month. It was agreed the bylaws will need to be reviewed and the general membership consulted further before such action could be taken...

. There was some discussion about the need to improve our website appearance and information. The Webmaster position is currently vacant and being monitored by Larry Woodward, Newsletter Editor.

Show and Tell:

Andy Peterson presented his new DJI Mavic Air Drone Quadcopter.

The meeting was adjourned at 8:15 pm.



Indoor Flying at the Brookhaven Gym

Indoor flying is now available at the Brookhaven Gym Tuesday mornings at 10:00-11:00 am following Breakfast Club

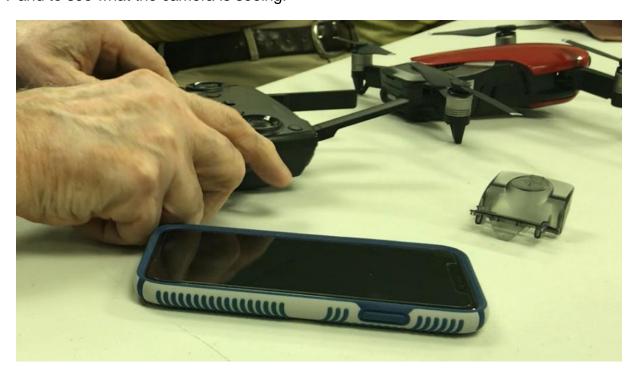
Show and Tell

DJI Mavic Air Drone Quadcopter

By Andy Peterson



The DJI MAVIC AIR capabilities include a 12 MP camera capable of either still shots or video. This Drone uses a cell phone, which you attach to the transmitter and connect to the aircraft via WIFI, for FPV and to see what the camera is seeing.



Because the position tracking and control system depend on GPS, this model is only suitable for outdoor use where a strong signal is available.

Below is a shot, taken at Elwyn by this Drone, of Joe, Eric and I with me using the command transmitter to control the Drone position and camera.

This Drone also has the capability of tracking a target, although I have not yet programed it for this purpose. I am currently experimenting at home, and will try some more features at the Elwyn field



Calendar of Events

CLUB MONTHLY MEETINGS:

Second Tuesday of the month.

Gateway Community Church. Doors open at 7:00

Gateway Community Church Meeting Room

TUESDAY BREAKFAST CLUB:

Tom Jones Restaurant on Edgemont Avenue in Brookhaven. 9 till 10 am. Just show up.

Flying after in the summer at CA or Elwyn Field 10 am. Weather permitting.

Flying Indoors in winter at the Brookhaven Gym 10:00-11:00 (subject to availability of the gym).

REGULAR CLUB FLYING:

At Old Christian Academy Field (Gateway Community Church); Electric Only-

Monday through Friday after school till dusk

Saturday 10 am till dusk

Sunday, after Church; Noon till dusk

At Elwyn Field; Fuel or Electric

Monday through Saturday 8 am till dusk

Sunday 10 am till dusk for Electric, Noon till Dusk for Fuel.

INDOOR FLYING:

See notice of dates, pg. 2.

Special Club Flying:

Saturday mornings 10 am

Wednesday Helicopter evening in summer

Thursday evenings in the summer

Tuesday mornings 10 am weather permitting after breakfast.

Check our Yahoo Group for announcements;

http://groups.yahoo.com/group/propstoppers/

BEGINNERS:

Beginners using due caution and respecting club rules may fly Apprentice or similar models without instructors at Christian Academy Field.

The club also provides the AMA Introductory Pilot Program for beginners without AMA insurance.

2020 DUES ARE DUE in DECEMBER

Membership renewal for 2020 has now begun. You can renew by mail or at a club meeting

Bring cash or check and your AMA card.

A proposed DUES iNCREASE will be discussed at the NOVEMBER meeting

To renew by mail, please send a check made out to the *Propstoppers* to:

Mike Black 110 Poplar Walk Ridley Park PA19078

Please enclose a *copy* of your current A. M. A. Membership card,

And Please, Please enclose a Stamped self- addressed envelope.

J

Editor's Note:

Reporting From Crosby Landing Beach, Cape Cod, MA



Another couple months have passed by and the hits just keep coming. Recently, we had a little more fun with a simple ad-hock competition. It was an "all-up and last down" limited run flight. Each pilot picked a favorite duration flyer and everyone took off at the same time for a predetermined duration motor run. After that it was just stay up as long as you can. Last man down gets points and closest to the landing zone gets points. It is a no brainer to organize and adds a fun bit of competition to the daily flight session.

At Crosby Landing, even the mishaps can be an excuse for more fun. If we set one down in the water by mistake....then someone gets to go for a nice kayak run! More often than not, with foamies, all they need is a fresh water rinse off and a cool blow dry.



We are all AMA members here, but not an AMA chartered club. We pay no dues and hold no meetings, except for the annual fall awards banquet dinner that I mentioned last month. As predicted in the spring, I won the award for Most Spectacular Crash for my "flaming inferno at sea" episode with a P-51 downed in the drink.

A new award this year was for Best New Pilot.

During the summer we get a fair number of "civilians" that see us from the beach and come over to talk. As often as not this includes youngsters with a light in their eyes. I keep a nearly indestructible EPP foam trainer and buddy box in the back of my pickup to be ready for these occasions. This year's award went to Everett.

Since this picture was taken he reports back that he has joined AMA and built his first rc model already, The Flite Test Tiny Trainer.

I'm sure we'll be seeing more of him next summer.

Larry Woodward



Drexel Program Modifies the Aero Design Project for Indoor Flying

BY Dave Harding

We have informed you over the last years of our support to Widener and Drexel universities in a variety of aviation projects, all of which result in building and flying of the student's work. Recently we have supported Drexel Professor Ajmal Yousuff's Aero Design class which he teaches several times a year. In four successive classes we have had three excellent fly-offs with student designed and built wings flying on fuselages with power and control.

One time in the fall semester we failed to fly as it snowed on that day. So, for this fall class the professor asked if it might be possible to change the test vehicle to one that could be flown indoors. We did, and Dave Harding, Dick Bartkowski and Chuck Kime have presented the challenge in a lecture to the class.

This time the basic airplane was chosen as the very popular Vapor. However, maybe we screwed up. Believing the basic Vapor is no longer available, we selected the Vapor Lite. Now this is an even more difficult challenge as the flying weight of a standard Vapor Lite is less than 20 grams, less than one ounce!

So, the challenge is to design and build a wing to fit the Vapor lite fuselage, which we have prepared, to achieve the maximum payload. This means it must fly with their wing on the body we provide and demonstrate that it could also carry a payload.



Now the basic airframe weighs about ten grams and the 70mah battery an additional 2.5. So the student's challenge is to design and build a wing in the 5-10 gram range. Dick Bartkowski suggested they use foam from throw away foam plates as being one way to build such a wing. Now just coming up with a wing of suitable size and weight is not enough as it must also have an airfoil which maximizes the lift without adding too much drag.



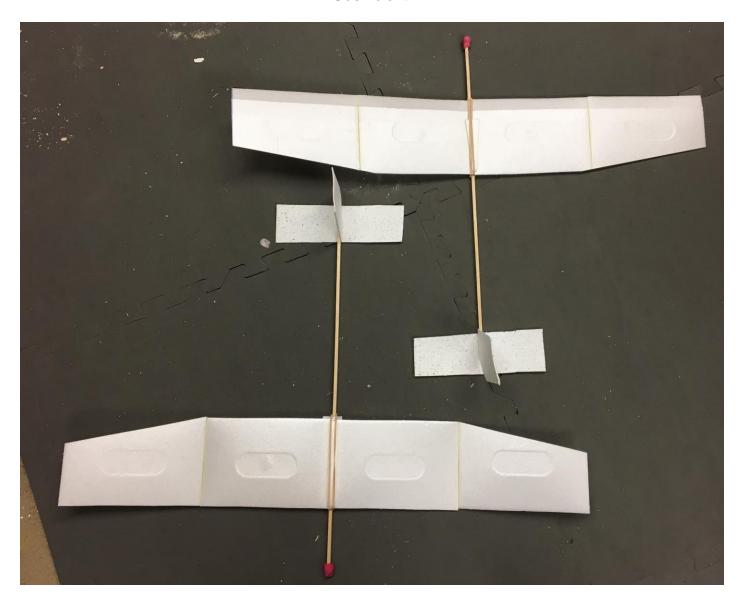
These airplanes fly so slowly, and with a wing chord so small, that the Reynolds Number ~ the factor that addresses the way air moves over a wing, is very small. This means the airfoil behaves like it is flying in molasses and normal shapes don't work well. But thin airfoils even including flat plates do best, although there is not much information out there in this area. It is being researched now however because of the growth in commercial drones. So, there are variations on flat plates that might be used and the student's must explore ways of reproducing them.







We have suggested that the student's think about testing their ideas by mounting the candidate wings on hand launched gliders. In the lecture we explained that gliding the wings on these platforms allows them to actually measure the wing performance. Measuring the glide slope; height over distance you can calculate the Drag as the slope is equal to the Drag divided by the Lift (which must equal the weight!). Furthermore, if they can measure the flight speed; seconds to fly a fixed distance, then they can also calculate the wing lift performance in a parameter called the Lift Coefficient.



Meanwhile, it was not obvious that the project could actually work as the Vapor Lite wing weighs almost nothing and whatever you replace it with will surely reduce the performance. It was not even clear that the challenge we presented was possible. So, we breathed a sigh of relief when a prototype wing worked in the first test, which we held one morning after Breakfast Club at the Brookhaven Community Center.

The final fly off of this event will take place in one of the open areas within Drexel University at the end of November. Of course we will report it here.

Dave

Continental US Bombed!

Submitted by John Reilly

During the dead of winter, March 21st 1944; Miles City, Montana; local residents woke to their quaint little town being overrun and submerged by the rising frozen waters of the Yellowstone River. Ice jams were building quickly, raising the subzero river water levels over 16 feet. As the blocks of ice, slush and freezing waters flooded into the city, residents were forced to flee their homes for safer grounds.

Miles City Mayor L.S. Keye knew immediate action must be taken, and brought in explosive experts



from a nearby town. Two local pilots took a small aircraft over the river and attempted to drop and detonate 50 pound homemade bombs on the Yellowstone ice jam, but unfortunately it had little effect.



Mayor L.S. Keye then decided to do the unthinkable, and placed an urgent request to the Governor's office. His request was short, and to the point !!! Send in the Bombers !!! At a USAAF base in Rapid City S.D., the crew of an Army Air Force B-17 were quick to accept the unusual mission, and preparations to bomb an American city were fast underway The crew hastily began fusing and loading 250-pound bombs into the bomb bay of their USAAF Boeing B-17 Flying Fortress. Shortly thereafter, the loaded bomber with her crew of eight, took to the skies in a harsh blizzard and low ceilings.



The plan was to deliver the bombs to Miles City where the load would be transferred to a waiting Dive-Bomber to execute the bomb delivery. As the lone B-17 was nearing Miles City, low clouds forced the plans to be changed. Under a blanket of 1000 foot overcast skies, the B-17 was then ordered to handle the bombing run themselves.

Originally planned to release the load at 10,000 feet, the low overcast forced the bomber crew to take their ship lower. At 1930 hours, in heavy snow, winds and cold, the bomber appeared over the river and executed two dummy bombing runs as crowds of locals watched in amazement. On the third pass, the B-17 released a test bomb that exploded precisely on target. Unsure of the effect, the crew brought their bomber around again.

Making a two more passes, releasing all six of the 250 lb bombs. Hundreds of residents watched motionless, and none speaking a word. The entire town, their homes and their family's future hung in the balance as they watched the bombs fall. Seconds later a huge plume of ice, mud and water exploded skyward from the frozen Yellowstone River.

The ice jam quickly broke apart, and the frozen waters slowly receded, saving the small town. The next morning, local residents were thrilled to watch as the water levels had dropped a full 10 feet from the day before.



That night the crew of the B-17 were welcomed by the thankful and relieved residents of Miles City Montana. The entire crew were put up at the local hotel, and each received a well-deserved steak dinner.

The next morning, the crew departed, and the B-17 made a final victory pass low over the town at 50 feet over the rooftops, rocking their wings as they flew back home to Rapid City SD. And so the story goes, the only time the continental United States was ever bombed.

A Moment in Flight:

Flight Video by Pedro Navarro

You had better sit down for this one. Pedro has paired his usual aerobatic antics with the exhuberant power of Bramhs'HD #5.

Click here to see this month's Moment in Flight.

