

# The Flightline



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Newsletter of the Propstoppers RC Club

AMA 1042

September 2019



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#### President's Message

I want to send a thank you to all who came to the picnic. There were about 24 people, including the wives.

Everyone had a great time. We had great weather, light winds, and few crashes.

We started with about fifteen, and as the count improved, we took orders for a list of hoagies, condiments, soda and water. It kept us from having too much food.

All went well...sort of... Tom Sherman put a big plane in a big tree...needs a climber.

A great time was had by all.

Chuck Kime President

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Agenda for September 10th 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
- Old Business: Safety/Rules Committee review: Status report on FAA registration for our

#### fields.

- 5. New Business:
- 6. Show and Tell:
- 7. Adjournment

Minutes of the Propstoppers Model Airplane Club (to be approved in September due to cancellation of the July and August meetings)

June 11, 2019 at the Gateway Community Church meeting room.

Call to order took place at 7:04 PM by President Chuck Kime

Minutes of the May meeting as published were approved.

Treasurer's report was presented by Pete Oetinger who noted that the finances seemed adequate. Present were 12 members and two guests.

Old Business: The club discussed the picnic scheduled for July 20, 2019. We are planning hoagies and snacks for this event. Plans for the August picnic will be determined later. The president noted that in spite of the rain both fields are in good shape, even the entrance road.

New Business: Tuesday, June 11, 2019 was the last day for this season of Tuesday morning indoor flying. The next season will begin approximately at the beginning of October.

Show and Tell: Dave Harding delivered a report on a Drexel university course in aviation design. He showed several fuselages that he had made with motor receiver and servos installed. These serve as a beginning for the student project. The students design wings, tail, and accessories and calculate performance based on their design. The course has been successful and popular with the students especially when they get a chance to actually fly their creation. Dave plans on continuing this into next semester.

Adjournment took place at 7:58 PM.

#### **Propstoppers RC Club of Delaware County, Pennsylvania. Club Officers** President chuxtruk@yahoo.com **Chuck Kime** (610) 833-5256 **Vice President** pedronv@gmail.com **Pedro Navarro** (610) 331-2536 Secretary Richard Bartkowski rbartkowski@comcast.net (610) 566-3950 **Treasurer** Pete Oetinger Pete202@juno.com 610 627-9564 **Membership Chairman** Mike Black mike.black.13@outlook.com Safety Officers: **Eric Hofberg** 610 565-0408 bgsteam@comcast.net Ryan Schurman Throttle152@hotmail.com **Newsletter Co-Editors: Dave Harding** (610)-872-1457 Davejean1@comcast.net **Larry Woodward** 610 891-7936 Woodward.arry@gmail.comm Webmaster Propstoppers Web Site; www.propstoppers.org Material herein may be freely copied for personal use but shall not be reproduced for sale.

# Indoor Flying at the Brookhaven Gym

All indoor flying events are suspended through to October during the outdoor season.

#### 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.

#### **2019 DUES ARE NOW REQUIRED**

Membership renewal for 2019 is now past due. You can renew by mail or at the club meeting

Bring cash or check and your AMA card.

Dues are \$60.

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.

Mike Black, Membership Chair

#### **Editor's Note:**

#### Reporting From Crosby Landing Beach, Cape Cod, MA

Time here is marked in many ways. Labor Day has passed on my calendar and with that, the summer crowd has dwindled to the point that the water pressure is adequate again in my morning shower and the roads are open to a practical rate of travel. Most lovable are the natural rhythms of moon and tide, migratory species and local flora.

I started the summer with a photo of the wild beach roses in bloom. These hardy survivors surround our sandy "pit area." In the last issue I showed you my micro T-28 where it had landed in a bed of them at the end of the blooming cycle. Now at the end of the season, they once again take center stage with the profusion of bright red fruits, rose hips, replacing the spring blooms.

In the harsh dessert environment behind the dune line everything has to be tough and resilient. And, everything operates in an endless cycle tied to the seasons. The short summer here is when it all



comes out to play and show off for the sheer joy of it. Not least among the many migratory players is our favorite species *oldfartium airomodelariae electrofomus*, common name Crosby Landing Flyboys.

At this time each year, before our numbers dwindle from migratory imperatives, we congregate for a couple of mornings of winged folly and pointless exhibition known as The Fun fly. Shortly thereafter we convene for dinner at a favorite feeding station to recap the season's events and offer official congratulation or commiseration, whether appropriate, or not. This year the fall dinner just happens to be September 10<sup>th</sup>, the same night as the September Propstoppers meeting. I'm at complete odds trying to decide what to do.

The Fun Fly was a great couple of mornings with balloon breaking, ribbon combat and limbo pole flying. The highlights were a special guest appearance of the Baby Trump Balloons and complete carnage under the limbo pole.

Really, the fun never stops. Even flight disasters are more an opportunity for an adventure than a crisis. Here is a short video of the "rescue" of a fallen model out on the marsh. It turned out to be a two for one operation as a second model, lost in the tall grass a couple weeks earlier, was picked up along the way.

I especially enjoy this video for the way it gives you a feel for the majesty of this place we are privileged to fly over, known since Native American times as the <u>Great Namskaket Marsh</u>.







CLICK HERE FOR VIDEO OF SLOPE SOARING

A few days afterward we were blessed again, this time by the best slope soaring wind of the summer. For us that means 10 mph or better straight out of the North directly onto the dunes. Not exactly spectacular by some sloping standards, but for us this is as good as it gets. One Radian flight went way over the hour mark and probably only came to an end because the pilot's parking permit ran out.

Hurricane Dorian showed up last night and put a stop to our fun for now. There are a few more weeks of great conditions here yet, but the end of the season is not far off. I'm looking forward to seeing everyone back in PA soon.

Larry Woodward Editor

# **Summer Picnic 2019**

After a summer of delays and disappointments the Propstoppers Picnic is a Fun Day for All!







### **Drexel Students Final Exam/Flight**

# Engineering Students from Drexel complete their third consecutive course in Aeronautical Design at Elwyn Field

By Dave Harding

Drexel engineering students take Professor Ajmal Yousuff's Aero Design class and their final task and grade require them to design and build wings and tails for fuselages we provide. They must predict the performance of the model in terms of payload capability and also define the wing, tail and CG location for the model to be stable in flight.

This is the third time we and the Propstoppers have supported this activity. It is a joy to work with the students who rarely have such a chance to turn their book learning into a real physical result.

Dave





## **Anchoring Threaded Fasteners in Foam.**

#### By Larry Woodward

One of the common problems in working with foam models is that there is no simple way to make a removable connection between foam parts. A classic example is to make a removable wing that can be made secure enough to hold rigid in flight yet easily be removed for transport and storage. Rubber bands are one common solution, but they are notoriously unreliable, unless you are looking for a "break-away" connection.

Traditional built up wood-and-covering models often incorporate a screw fastener system. Metal or nylon machine screws are easily screwed into threaded holes, which are typically reinforced by metal blind nuts and plywood plates. This technique is adaptable for foam construction by gluing reinforcing plates to the foam surfaces and making screwed connections to the wood. But even though the screwed connection to the wood is very strong, the total joint is only as secure as the glued joint between foam and the wood. The joint strength is largely dependent on the amount of glue surface, or the size of the wood plate. This makes for lots of construction complexity and added weight.



I was faced with this problem recently when planning for the wing saddle connection of a small EPP foam trainer. The entire model was made from wire cut EPP foam. Other than a few pieces of carbon fiber rod reinforcement in the wing and stabilizers and a plywood motor mount, there are no other materials used in the general construction. I wanted a strong, light and simple wing connector.

I started by selecting a couple of ½ x 20 nylon machine screws from my parts bin and thought about ways to reinforce the foam to receive them without using heavy wood reinforcement plates. I had been recently working with Bondo Body Filler on some repairs to my boat and wondered if it could be molded around the screw to create a suitable reinforcement. The key would be finding a suitable bond release agent to allow the screw to be removed from the cured composite material.

I tried a few experiments using light household oil as the release agent with poor results. Eventually I tried some white lithium grease and it worked quite well, allowing the screw to be easily backed out of a glob of Bondo after the composite had completely cured. The threads were clean and strong and the screw could be easily inserted and removed.

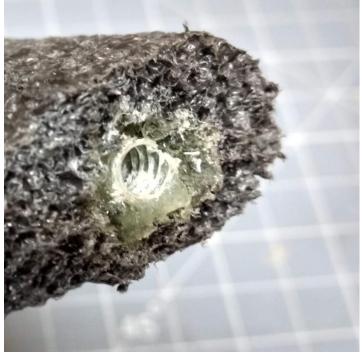




Next I tried it in foam. I drilled a hole in the foam slightly larger than the screw diameter and filled it generously with Bondo, I tied another one later with regular 5 minute epoxy that was equally successful, and then inserted the nylon screw that had been coated with white lithium grease twisting it a little to assure the composite was completely surrounding the screw and filling the void.

Once the composite cured, I backed off the screw again and reinserted it a few times until the threads were cleaned out and the friction was acceptable. When screwed into the foam the screws were extremely solidly embedded with no possibility of being pulled out.





Finally, moving on to the model, I positioned the wing in its final position on the fuselage and drilled holes through the wing into the fuselage. Next I filled the holes with composite material. I lubed the screws with lithium grease. I cut a strip of polyethylene film that would fit between the wing and the fuselage to keep any excess composite from gluing the wing to the fuselage. I cut small slits in the film to allow the screws to go through the wing into the fuselage and assembled the parts, holding them securely in place with rubber bands and weights. Once the composite cured I removed the screws and the polyethylene separator sheet. The wing easily came off the fuselage and the screw holes had nice clean threads.

Now the wing can be mounted and removed by the screws alone and the only added weight to the model is the screw themselves and a very small amount of composite material.



# A Moment in Flight:

Flight Video by Pedro Navarro

True Love, you know it when you feel it! What's not to love about this Apprentice flight on a warm summer evening?

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

