



# The Flightline



Volume 48, Issue 17 Newsletter of the Propstoppers RC Club AMA 1042 August 2018



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## President's Message

Picnic rained out big time! We'll plan for next month and hope for the best. .If there is something else you would like at the picnic, drop me an e-mail.

There are several subjects to be brought up at the next meeting:

First-where are people going instead of to the meetings? 6 members is a little slim.

Second: What time does the Elwyn Field open for flying on Sunday?

Third: we will hold the final vote to approve the revised Bylaws at the August meeting. With this approval, we will move forward with examining the field safety rules and procedures. Under the revised Bylaws this work will be carried out by the new Safety Committee composed of the VP and all Safety Officers. Bring your questions and concerns for improved safety rules to share at the meeting.

Chuck Kime

Vice President

## Agenda for August 14 th 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. Old Business  
Picnic Review  
By Laws Final Vote
5. New Business  
Safety Committee rules review  
Elwyn Flying Schedule Yahoo Groups  
Calendar problems.  
Member Dues Collection Problems
6. Show and Tell
7. Adjournment

## Minutes of the Propstoppers Model Airplane Club

July 10, 2018 at the Christian Academy meeting room  
Call to order took place at 7:10 PM by Vice-President Chuck Kime in the absence of the president

Minutes of the June meeting as published were approved by those present

Treasurer's report was postponed in the absence of the treasurer

Roll call showed nine members present

Old business:

The new bylaws were discussed among the group. In general, the members present approved what they saw.

The upcoming picnic on July 21 was discussed.

The secretary asked if people had gotten the e-mail notice for this meeting as we've had recurrent complaints about non-receipt. No one present could say that they received either of the two notices that should have been sent. The club calendar in Yahoo had the reminders posted for one and five days before by e-mail, but apparently none were received. The secretary will look into the issue to see if this can be remedied. It is not clear whether they were not sent or blocked somewhere along the way.

The issue of past members who have not paid for this year was discussed. Several members plan to contact these individuals to see where they stand.

Adjournment took place at 7:45 PM

Dick Bartkowski  
Secretary

## Propstoppers RC Club of Delaware County, Pennsylvania. Club Officers

President  
Dick Seiwell  
(610) 566-2698  
Vice President  
Chuck Kime  
(610) 833-5256  
Secretary  
Richard Bartkowski  
(610) 566-3950  
Treasurer  
Pete Oetinger  
610 627-9564  
Membership Chairman  
Ray Wopatek  
610 259-4942  
Safety Officers:  
Eric Hofberg  
610 566-0408  
Ryan Schurman  
Newsletter Co-Editors:  
Dave Harding  
(610)-872-1457  
Larry Woodward  
610 891-7936

Propstoppers Web Site; [www.propstoppers.org](http://www.propstoppers.org)  
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## **FLYING PRIVILEGES ARE NOW SUSPENDED FOR ANY MEMBERS THAT HAVE NOT PAID 2018 DUES**

***Membership renewal for 2018 is now required. 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:

**Ray Wopatek  
1004 Green Lane  
Secane, PA. 9018**

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

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

**Ray Wopatek Membership Chairman**

## Calendar of Events

### Club Meetings

#### Monthly Meetings

Second Tuesday of the month.  
Gateway Community Church. Doors open at 7:00

#### Gateway Church Meeting Room

#### Tuesday Breakfast Meeting

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.

Indoors at the Brookhaven Gym in winter

10:00-11:00 (subject to availability of the gym).

### Regular Club Flying

**At Old Christian Academy Field; Electric Only**

Monday through Friday after school till dusk

Saturday 10 am till dusk

Sunday, after Church; 12 pm till dusk

At Elwyn Field; Gas or Electric

Monday through Saturday 8 am till dusk

Sunday 12 pm till dusk

INDOOR Flying, see attached dates.

### 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.

## Bylaw Revision: Process and Progress: Final Vote

by Larry Woodward

The proposed revisions to the Propstoppers Bylaws were distributed in the July Newsletter and discussed at the last meeting. This month the membership will vote on whether or not to adopt the revisions. A simple majority of the members present at the meeting will determine the outcome.

If adopted, the new bylaws will establish, among other things, a formal Safety Committee composed of the Safety Officers and the Vice President. This committee is charged with all matters related to safety, including periodic review of the Field rules and procedures. The plan is for this new Safety Committee to now proceed with examining current safety rules and procedures and making recommendation for possible improvements that will better reflect new AMA recommendations for advanced technology such as multirotors and FPV.

## Propstoppers Drexel University Support Update

In the January newsletter we reported on the Propstoppers support to Drexel Professor Ajmal Yousuff who teaches a course on Aircraft Design. [http://www.propstoppers.org/pdf\\_files/jan18.pdf](http://www.propstoppers.org/pdf_files/jan18.pdf) The conclusion of the course has been the students break into teams and design an airplane to a given specification.

Two years ago Professor Yousuff asked us if we could recommend a plan for the students to not only design but also build and fly an airplane to a specification. We suggested that designing and building a complete plane in the latter part of the course was a reach too far. But Chuck Kime suggested he and I build a basic airplane fuselage with propulsion and controls for which the students would design and build wings and tails to achieve a projected performance.

The plan was almost a complete success as ten groups did indeed design and build wings and tails with specifications for location, CG, Stability and performance. Trouble was the end of the course was in December and we were unable to fly. Here is one of the successful teams and their parts assembled to the fuselage.



Now Chuck and I took this set of parts and last month finally assembled them to one of the fuselages and flew it over Elwyn field. Remarkably it flew well!

Last week Chuck and I gave a lecture to the latest group on design and construction which they will accomplish over the next week or so.

The flight testing will take place on Saturday 18th August at Christian Academy Field from 9 till 4 pm. Come out and watch. Regular Propstopper flying will be allowed on a non interference basis.

Dave and Chuck

# The GoFly Prize Winners and the Next Step

The goal of the GoFly Prize is to foster the development of safe, quiet, ultra-compact, near-VTOL personal flying devices capable of flying twenty miles while carrying a single person. Here's the story so far, nine months into the two-year competition.

On June 14, the GoFly Prize announced the 10 award recipients after its Phase I competition. The GoFly Prize ( a two-year, three-phase, \$2M competition sponsored by The Boeing Company) has inspired teams of students, engineers and entrepreneurs around the world to “push the envelope” by designing an innovative vertical takeoff and landing (VTOL) aircraft capability of carrying one occupant 20 miles (32 km) at a speed of at least 30 kt (56 km/h) without refueling or recharging (see “Ready. Set. GoFly!,” Vertiflite, Nov/ Dec 2017). To make things even more challenging, the personal flying devices must have maximum dimensions of no more than 8.5 ft (2.6 m) and have a noise level less than 85 dBA, when measured 50 ft (15 m) away.

Launched in September 2017, the GoFly Prize was designed to prove that it's technologically possible to develop a compact VTOL aircraft with near- impossible range and performance capabilities. More than 600 innovators from 95 countries submitted 164 aircraft design concepts to GoFly by the Phase I deadline of April 18. A panel of 97 industry experts (including many VFS members) then carefully evaluated each submission in accordance with official technical guidelines (available on [www.GoFlyPrize.com](http://www.GoFlyPrize.com)).

Although Phase II is open to any competitor who registers, the 10 Phase I awardees — hailing from Japan, Latvia, The Netherlands, the United Kingdom and the United States — each received \$20,000 to advance their designs during Phase II, the building phase. These 10 designs resemble hoverbikes, passenger drones and more radical concepts.

The awarded designs are as follows:

## 1. **Aeroxo** — ERA

Aviabike (Latvia) Aeroxo LV described the ERA Aviabike as “a tiltrotor aerial vehicle type that combines VTOL capabilities of [a] helicopter with range and speed of [a] fixed-wing aircraft.” The design features a motorcycle- style seat with eight tilting ducted fans mounted in front of the pilot and eight more behind the pilot.





2. **Georgia Institute of Technology** — HummingBuzz (Georgia, USA) The students and faculty of Georgia Tech said their HummingBuzz design “utilizes the fully electric, ducted coaxial rotor configuration, with the fuselage on top, in the shape of a motorcycle.”



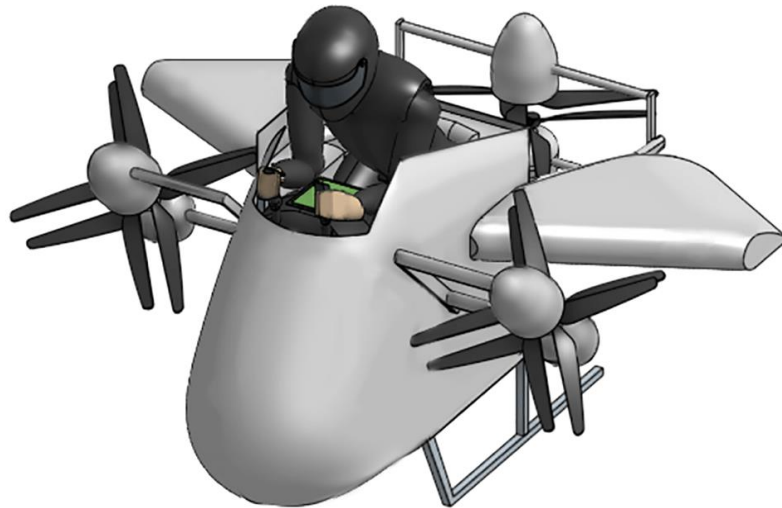
3. **Leap — Vantage** (UK) The UK’s Leap team described its hybrid-electric Vantage as a “five-rotor airbike that is ridden like a motorcycle.”



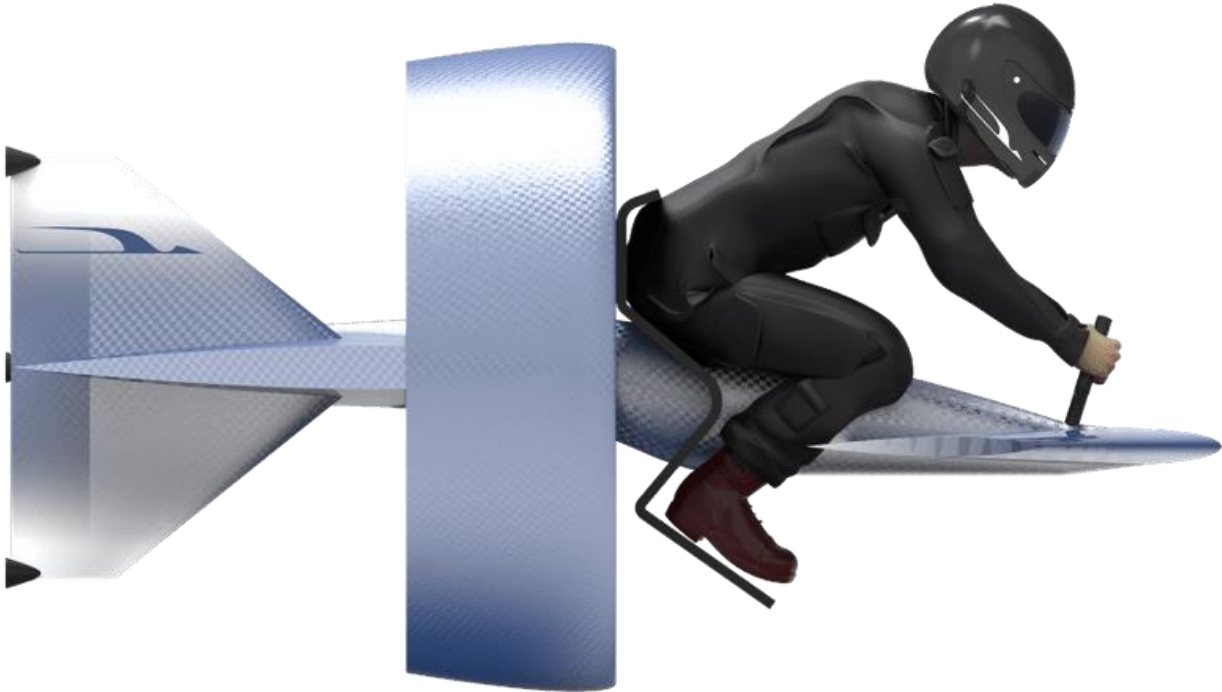
4. **Pennsylvania State University — BlueSparrow** (Pennsylvania, USA) Students and faculty at Penn State Aerospace Engineering “designed Blue Sparrow to be scalable, robust, safe, and fun to fly.” The aircraft features a small cab with three pairs of overhead coaxial propellers.



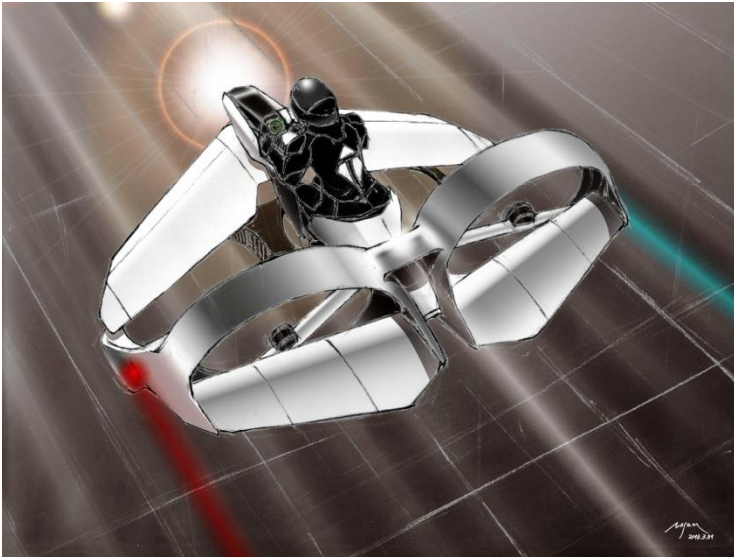
5. **Scoop — Pegasus I** (US) The Pegasus is a “Y6 tiltrotor with a wing and a hybrid powertrain with a cruise speed of 70 knots.” It has two stub wings and three pairs of tilting coaxial propellers mounted at the rear and to either side of the pilot.



6. **Silverwing — S1** (Netherlands) The Dutch designers said the tailsitter has “a canard-wing configuration around a person in motorcycle-like orientation powered by two electric motors with ducted rotors. The aircraft makes a 90-degree transition from vertical take-off to horizontal cruise flight.”

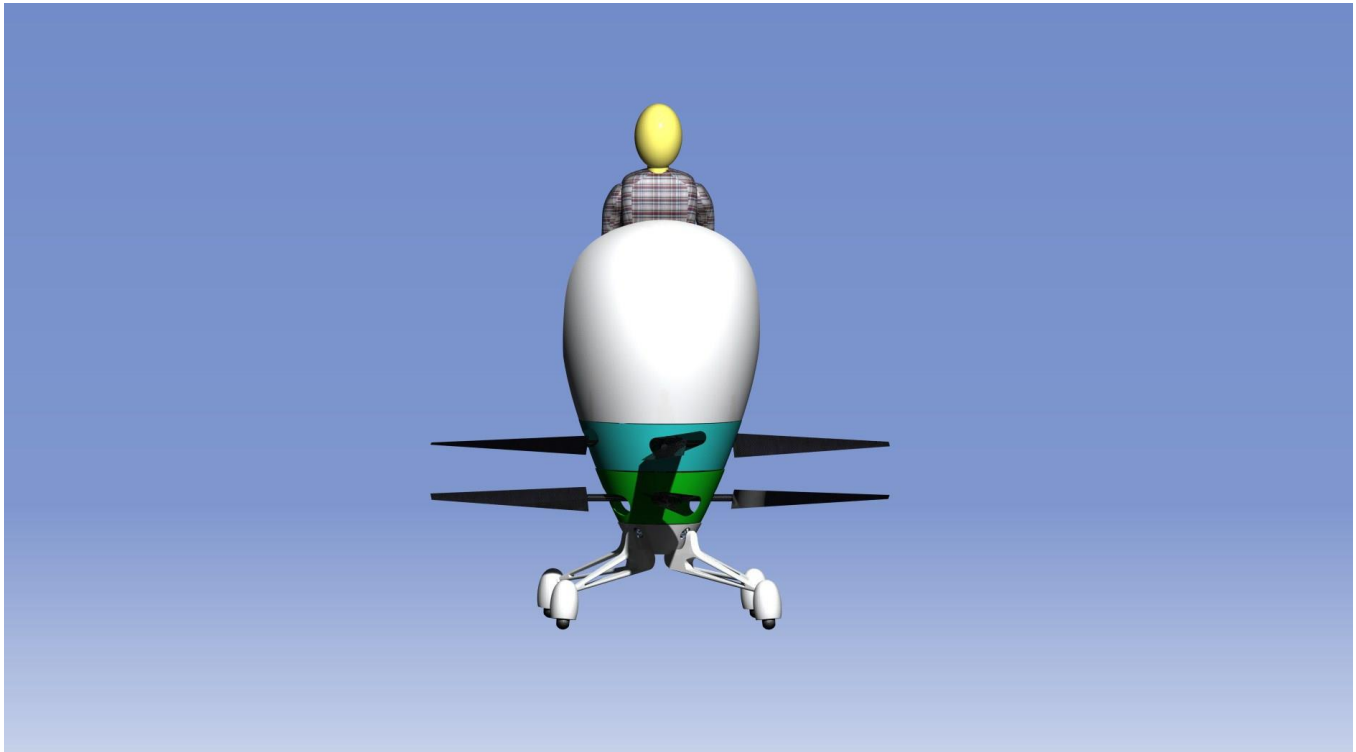






7. **teTra Aviation — teTra 3** (Tokyo, Japan) The teTra 3 features two ducted propellers positioned below the pilot with two additional vectored thrust propellers to the rear. The Japanese designers are supported by iRobotics and the University of Tokyo.

8. **Texas A&M University — Harmony** (Texas, USA) “Harmony is a high-TRL compact rotorcraft designed to minimize noise and maximize efficiency, safety, reliability, and flight experience,” the team said. The aircraft has counter-rotating propellers near the bottom of the egg-shaped chassis with a wheeled landing gear.



9. **Trek Aerospace — FlyKart 2** (California, USA) The team said, “FlyKart 2 is a single-seat, open-cockpit, 10-rotor, ducted fan, electrically-powered, VTOL aircraft.” Trek has designed the device for a maximum speed of 55 kt (100 km/h) and a cruise endurance of more than 30 minutes.



10. **University of Kansas — Mamba** (Kansas, USA) The Mamba is “a hexacopter emphasizing safety, certifiability, and performance. Shrouded rotors and a tilting empennage are incorporated.” The design features two large and two small shrouded fans for lift and a pair of thrusters at the rear.



## **Next Steps:**

The deadline to register for Phase II is Dec. 8, 2018, with submissions due Feb. 6, 2019. At the conclusion of Phase II, GoFly will award up to four \$50,000 prizes to existing or new teams in the competition. These four teams, and any other compliant designs, will receive invitations to participate in the fly-off competition. One of the requirements to fly is demonstration of significant safety margins.

Finally, in October 2019, GoFly will hold a fly-off competition of the top VTOL aircraft designs. The fly-off will consist of two phases: tech inspection and flight demonstration. Various scored and unscored attributes will be measured or validated during each phase. The parameters scored will be size, noise and speed.

A total of \$1.6M in fly-off prizes are planned:

A \$1M Grand Prize awarded for the best compliant overall fly-off score;

\$250,000 for the quietist compliant entry;

\$250,000 for the smallest compliant entry, and;

\$100,000 for disruptive advancement of the state of the art.

***Dave Harding, from Vertiflite the organ of the Vertical Flight Society***

# BlackFly is latest attempt at flying car

Submitted by Dave Harding



[Dave Lee](#) North America technology reporter

- 12 July 2018



**A flying car that will not require a pilot's licence to operate has been unveiled in California.**

BlackFly can travel for up to 25 miles (40km) at a speed of 62mph.

Its makers say it will eventually cost the same as a typical sports-utility car, but early models will be more expensive.

It was revealed on Thursday the company is funded by Google co-founder Larry Page.

Mr Page is also behind Kitty Hawk, a separate US start-up currently testing its personal aircraft in Las Vegas.

Several other rival flying cars are in development across the globe.

BlackFly's creator is the Palo Alto-based firm Opener. The car has been tested in Canada, where the country's aviation authority has authorised its use.

Like Kitty Hawk, BlackFly could perhaps be more accurately described as a human-carrying drone. It is not designed to be driven on roads.

The vehicle carries one person in a small cockpit, powered by “eight propulsion systems, spread across two wings”.

It works best, Opener says, when taking off and landing from grassy surfaces.

**'Total command'**

“Watching BlackFly take flight just blew me away,” said Darren Pleasance, director of the US Experimental Aircraft Association. “I’ve never seen anything like it.”

While the vehicle will not require a pilot's licence, Opener said as a precaution riders would have to undergo a training programme in order to become acquainted.



Image copyrightOPENERImage captionThe BlackFly flying car is said to work best when taking off from grassy areas

“Even though not required by Federal Aviation Administration regulations, BlackFly operators will be required to successfully complete the FAA Private Pilot written examination and also complete company-mandated vehicle familiarization and operator training,” it said.

- [Self-driving air taxi lifts off](#)
- [Degree in 'flying car' engineering offered online](#)
- [Would you take a ride in a pilotless sky taxi?](#)



Opener's chief executive Marcus Leng said the on-board controls offered "instant gratification". "You have total command of three-dimensional space," [he told CBS News correspondent John Blackstone](#).

"When you press the thumb-stick to climb, you have absolute full control. When you stop in the middle of the air and go off the joystick, the aircraft freezes.

"And when I say freezes... it literally freezes in the air."

BlackFly can also fly autonomously, Mr Leng said.

### **'Will they crash? Probably'**

Opener joins a long list of companies chasing the ultimate science fiction dream of a flying car, and thanks to rapid improvements in drone capabilities, that future seems closer than ever.



Image copyrightKITTY HAWKImage captionKitty Hawk promises to deliver a "world free from traffic"

As well as BlackFly and Kitty Hawk, companies such as Uber are also seeking to get into the flying car market - if indeed there ever is one.

The Hiller Aviation Museum in Northern California is a graveyard of failed attempts to create a flying car.



Image copyrightOPENERImage captionThe vehicles will eventually cost the same as a typical SUV, its creators claim

But the museum's head of operations, Willie Turner, believes this latest batch might be on to something - as long as aviation authorities can accommodate the new ideas.

"Now we have the technology," he said.

"But the regulations are 'well you can't do this, you can't do that'. They don't understand it."

He added: "Now will they crash? Probably, but cars crash every day.

"You know it's not going to be foolproof but it will be much better than the current system we have now."