



# The Flightline



Volume 34, Issue 11      Newsletter of the Propstoppers RC Club      AMA 1042      November 2004

## **Flying Field Affairs; Two New Ones!**

Ask and ye shall receive! Someone must be doing something good as almost as fast as we lost our fields we have come across two new places to fly, a public park and a new Propstopper field.

Dick Seiwel's persistence has paid off for our club in the form of a new field located on the former Christian Academy just over the far tree line from Moore field. About the same size as Moore this field is also bounded on three sides by tall trees, and the fourth side is open to an adjacent open area owned by Sweeney Construction. Dick has made arrangements to for our cost-free exclusive use of their old playing fields, an area formerly used for a soccer pitch and baseball diamond. It is relatively flat and the grass, although rather long at the present, is of excellent quality and should become a fine flying surface with care.

The Christian Academy

<http://www.thechristianacademy.org/> acquired the old Brookhaven Jr. High school some years ago and now leases their old building to Full Gospel Assembly. Their sports ground, however, is slated for development.

They are in the process of cleaning up the site and pumping out a large "lake" at the bottom of the

property. Dick understands that they must complete the clean up and make other provisions before they can ready it for sale. In the meantime, we have a verbal arrangement to use the field for flying. We (Dick) will maintain the site.

Mick Harris and I did a tour of the field during which I took the pictures shown later in this article. The field is substantially flat and, probably as a result, is rather swampy right now.

Creeks bound the property on both sides. On the North side the tree line and creek are the same ones as on the far side of the Moore field. This creek feeds the aforementioned "lake". Examination of the contour maps indicates that this creek once fell through a valley, down to Chester Creek. Apparently, a drain was installed to carry the runoff to the creek and the dumping operation on the Sweeney site has filled-in this valley. This drain has become blocked sometime in the past, forming the lake. The lake had now been pumped empty although it is filled with debris, both natural and man-made. The contractor is trying to find the original drain opening.

The creek on the other side of the property winds its way around the field, separating the school area from the playing field. In fact, we must cross a bridge to enter "our" gated field. After flowing under the bridge the creek passes through a swampy area on the south side of the field. It separates the field from the houses on Harrison Road, off Dutton Mill road. There are dense woods surrounding this creek, which eventually must flow through another drain and down the course of Dutton Mill Road into the Chester Creek.

I am explaining this geography because I believe it bears on the viability of the property for development into residential housing. Although we don't wish problems onto the Christian Academy, it would seem that a difficult lot might mean we will be there for a longer period while the necessary improvements are made and certificates obtained.

Access to the field is via a gate that is locked with a lock-to-lock setup; our lock connects to their lock so either one of us can open the gate. We may leave it open while flying, as, unless you plan to go to the field you won't see the gate. Of course, last one out closes and locks the gate.

The basis of our use is on a non-interference basis with the school activities on the site. Specifically, we are allowed to fly after 3 pm each weekday, all day Saturday and Sunday after noon. Dick has also agreed that we will only fly electric powered airplanes although the field is generally so remote from most directions and shielded by woods that I suspect we could eventually get permission to fly some gas powered models, particularly helicopters where the flight path can be kept within the field.

Keith prepared the picture on page four. It depicts the field area and indicates an over-fly zone over the Sweeney property. I suspect that if we plan to fly over this area that we seek permission first. Among other things there is a very large radio tower on this property with substantial guy wires. Woes betide us if someone strikes the tower or guy wire, there must be significant potential for damages there. **Continued on page 4.**

### **Agenda for November 2<sup>nd</sup> Meeting Marple Newtown Library, 7:30 pm**

- ?? Approval of October meeting minutes
- ?? Membership Report
- ?? Finance Report and Budget Review
- ?? Nominations for President
- ?? Flying Field Issues
- ?? Election of Officers
- ?? Show and Tell

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## Calendar of Events

### Club Meetings

Regular Meeting 7:30 pm  
Tuesday 2<sup>nd</sup> November  
Marple Newtown Library

Tuesday Breakfast Meeting  
The Country Deli, Rt. 352 Glenn Mills  
9 till 10 am. Just show up.  
Flying afterwards, weather permitting

### Flying Events

Indoor Flying at Tinicum School 7 – 9pm  
Friday 5<sup>th</sup> November  
Friday 3<sup>rd</sup> December

### Regular Club Flying

#### At Moore Field

Daily 10 am til Dusk  
Saturday 10 am til Dusk  
Sunday 12 p.m. till Dusk

#### At Christian Academy Field

Daily 3pm till Dusk  
Saturday 10 am till Dusk  
Sunday 12 p.m. till Dusk

Note; Flying must be done in accordance with the agreement forged by Vice President Dick Seiwel. Specifically, only electric powered airplanes. Experienced pilots only at Moore.

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

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Propstoppers Web Site; [www.propstoppers.org](http://www.propstoppers.org)  
Check the web site for back issues of the newsletter, pictures of club events and the calendar of future events.

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## The President's Message

Fellow Propstoppers,

A stroke of luck and a whole lot of persistence on Dick Seiwel's part has landed us a new flying field just on the other side of the tree line from Moore field. I think Dick found the last field in Delaware County! We are definitely feeling the crunch from development!

We still are looking for a long-term field that will support both nitro power and electric flying and our bigger birds. Dave Harding's article in this issue details the two fields we now have access to. Dave Bevan and Jim Barrow have agreed to take some time to look around for flying site possibilities. Keep your eyes open for fields!

Sleighton Field is now removed from our club insurance listing with AMA and the Christian Academy's field insurance is in place. Moore field will remain open until the end of this year.

At this month's meeting we will outline the field rules, times and other details for the Christian Academy flying field and discuss some new indoor rules for our gym flying along with regular business. Our first indoor fly is on Nov. 5<sup>th</sup> so get your indoor flyers ready.

A special "Thanks" is due to Al Gurewicz for his continuous service to the club as treasurer for so many years. We should also give a warm welcome to Jim Barrow as our new treasurer for this coming year.

The Club President's position is still available. Please consider serving the club. This month's meeting is on Nov. 2<sup>nd</sup> Election Day, so don't forget to go vote early and come out to the club meeting 7:30pm at the Marple Library.

**Keith Watson**



Treasurer for 2005, Jim Barrow on the right and our dynamo, John Drake, on the left examine Jim's Crazy Max. Jim has been flying up a storm with this model after shredding two .40 glow trainers in his early training period.

**Minutes of the Club Meeting,****5<sup>th</sup> October 2004 at Marple Newtown Library**

Vice President Dick Seiwel called the meeting to order at 7:30 p.m.

The roll call taken by membership chair Ray Wopatek showed 23 members and 1 guest present.

The treasurer's report was given by Treasurer Al Gurewicz and accepted by the membership.

Minutes of the September meeting as published in the newsletter were accepted by the membership.

**Old Business:**

Sleighton Field is closed. Moore Field open until end of this year with restrictions: Electric airplanes only, Experienced Pilots or those with instructors on trainer cords, flying only within our boundaries.

**New Business:**

President Keith Watson opened the floor to nominations for Elections.

Treasurer nominee James Barrow was elected as club Treasurer.

Al Gurewicz was recognized and thanked for his ten years of service as the club Treasurer.



The Club President Position is currently open. Secretary and Vice President Positions to remain unchanged.

A budget proposal for 2005 is to be submitted at the November meeting.

The club discussed a field search and members Dave Bevan and Jim Barrow volunteered to devote time to searching for fields for the club.

Jim Barrow explained to the club that he had made some arrangements for club members to fly electric airplanes on the back field at Thornbury Park. A discussion was held on the merits and safety implications for such flying. (See article, Ed.)

Indoor flying dates were discussed and will be published in the newsletter.

There was a short break for coffee and discussion.

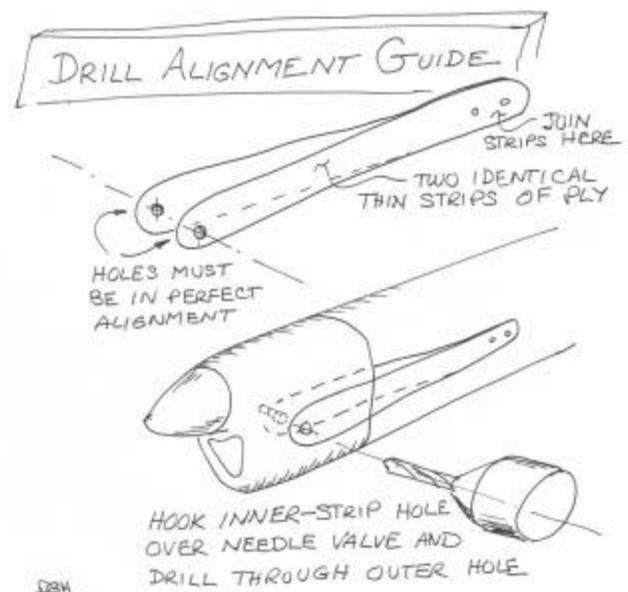
**Show and Tell:**

Al Tamburro showed a Ripmax Coyote ARF electric plane with 7-cell NiMh battery. He changed motors from a 380 to 480. It has aileron, elevator and motor control. The model is

available from Tower Hobbies for \$50.



Sam Nevins displayed drill guide tools to aid in accurately locating glow plug & needle-valve holes in cowlings. (See below).



The meeting was adjourned at 8:57 p.m.

**Minutes taken by Jess Davis**

**Editorial, continued from page 1**

Access to the field is off Dutton Mill Road where you turn onto Old Middletown Road. Turn left into the Christian Academy property by their sign; you cannot enter Old Middletown Road from the other direction. Follow the driveway into the property then follow around to the right of the school and continue around the back. Then turn right and you will find

yourself at the gate.

Enter the gate then turn right and drive around the perimeter to the parking area. At least, it will be a parking area when Dick gets done mowing it.

Keith has processed all the relevant documents with the AMA so the field is now dully blessed with their insurance umbrella and we are free to fly.



*The Christian Academy Field from the pilot's station, North end.*

Since this is our field and it is largely under our control we can once again encourage flyers of all levels to come out and use it. However, let's make sure we are perceived as good neighbors.

For a start we must drive slowly and carefully through the school property, as there are many people there during the day. They may also be tenants but we must have good relations with all the people we encounter.

Of course, all our rules about field usage including the safety rules and rules of conduct apply. Please remember that we have a rule that any airplane that lands outside the field must be immediately reported to a club board member. This is so we can manage the problems that may arise from such incidents. One of the factors cited in our last meetings with the Moore field owners involved what they claimed was an airplane landing next to a house on Moore Road. Dick Seiwel knew nothing of this alleged incident although I seem to remember some chatter at one of the Thursday evening affairs, so it may have happened. Had Dick known of the incident he could have addressed it.

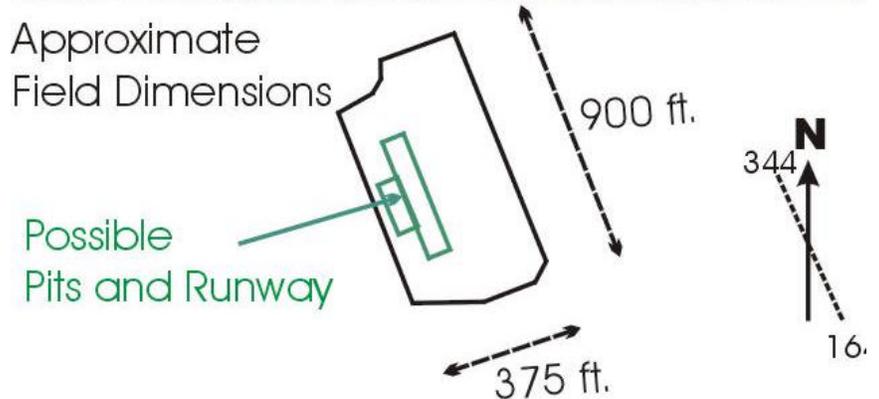
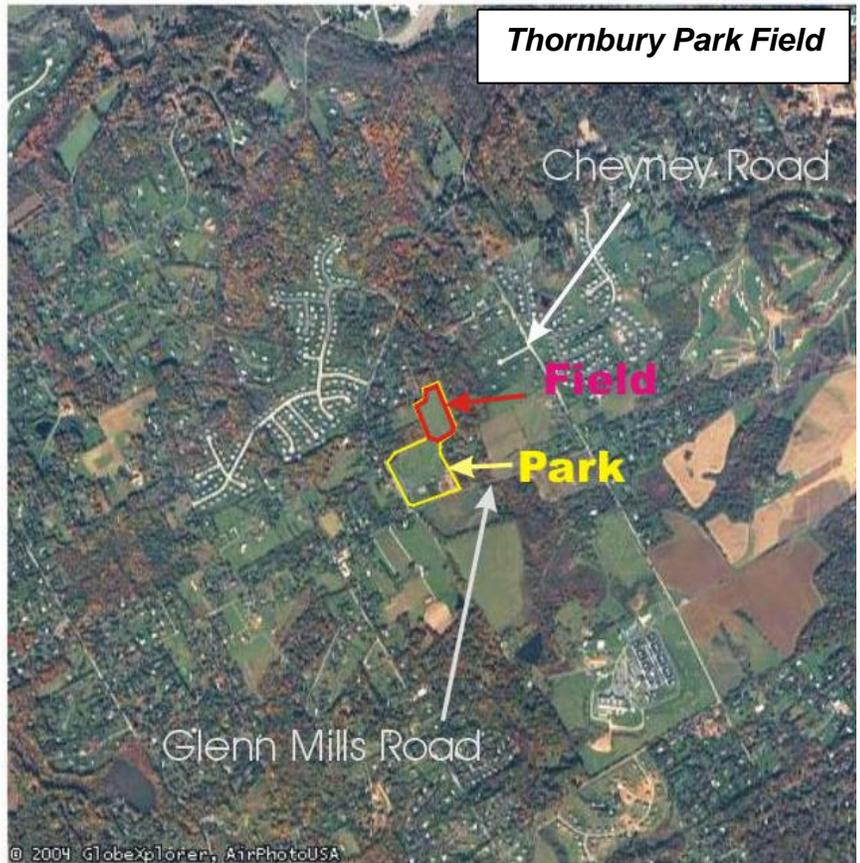
So, enjoy our new field while we have it and give a vote of thanks to Dick Seiwel the next time you see him. His persistence paid off handsomely.

**Field two; or at least another place to fly.**

A potential new member attended one of our Tuesday breakfast meetings and told us that he and others had been flying at Thornbury Park in Thornbury Township; yes, that same Thornbury Township that treated us so badly at Dallett Field even as we threw a party for their residents.

Anyway, it seems that all the "difficult" council members have long since gone and there is a fairly new Township maintenance chief in charge of parks. Thornbury have been improving the four parks in their township including Thornbury Park, which is located a couple of miles West of Sleighton Farms in Glenn Mills. The park is on Glenn Mills Road just West of Cheyney Road.

The park is arranged in two distinctly different fields. In the front the field is beautifully developed to include a two parking lots, a children's playground, a soccer field, ball diamond, tennis courts, a pavilion and bathrooms. A macadam walking-track runs around the perimeter.



*The Christian Academy Field from the pilot's station, South End.*



The back half of the park is an open meadow surrounded by trees on three and a half sides. The grass is allowed to grow tall but there is a mown path around the perimeter here too. The field slopes gently from the North to South steepening somewhat as it reaches the main park.

The runway location is similar to Sleighton so it is ideal with respect to the sun. One limitation is that you must carry your planes and equipment from the parking lot as driving through is not allowed. Maybe we will use wagons or carts.

Jim Barrow, who until recently lived in the township, is on good terms with the maintenance chief. So on a recent Tuesday, after breakfast, we paid a visit to the field. We discussed the use of the field for flying and he said that several people already fly there and we were welcome too. Jim asked if we could mow the grass for a runway and the response was absolutely not; we will do it for you. How would you like it?

So, on the following Tuesday, when we went back, we found that he had indeed mown the runway and pit area.

Now this is a public park and although we may use it we must recognize it is not "our" field. So, how are we going to

fly safely and what is to stop people who do not have AMA membership and insurance flying there. Well, we think that this is not our problem so long as we handle it right.

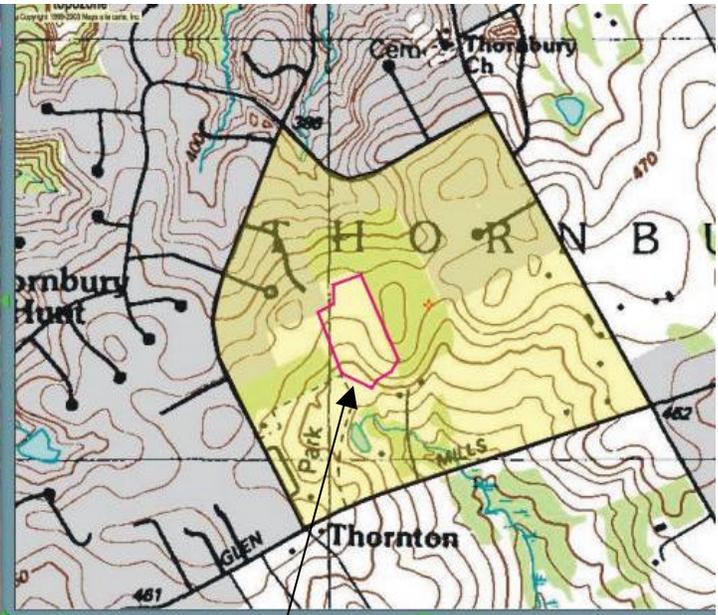
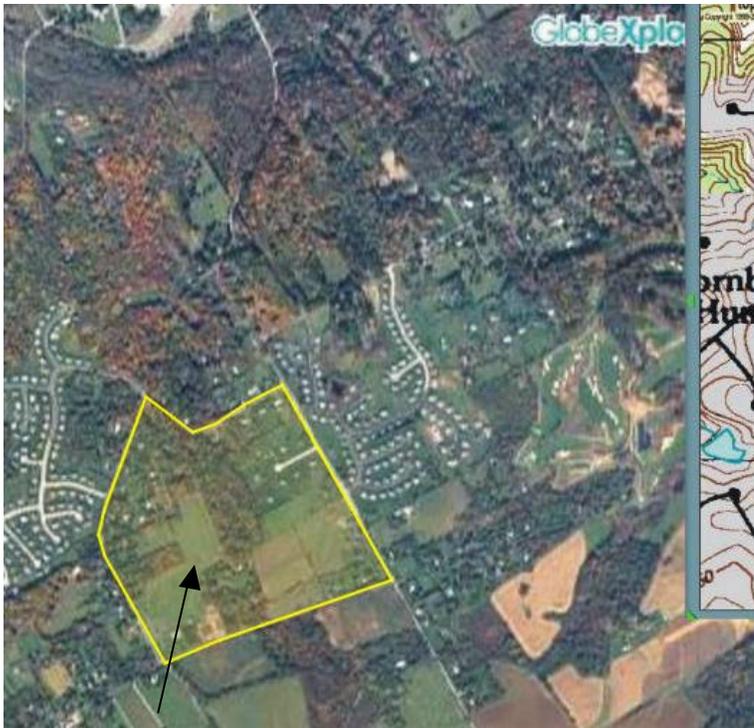
We must ourselves fly in accordance with AMA and Propstopper safety rules, including not over-flying the pits and parking areas and providing assistance for beginner pilots. But we can't force these rules on non-members.

The South Jersey Silent Flyers fly under similar circumstances, but they have convinced the township that they should manage the flying activities so as to promote safety. I have read of similar circumstances including flying in public parks where the experienced flyers lead other inexperienced flyers to safe flying practices, including frequency management.

Perhaps, if our members fly regularly at Thornbury and the area becomes popular, we should suggest a frequency management process suitable to the site.

Electric only? Well, yes, this field is surrounded by perhaps the highest price real estate in the county! Just look at the aerial photo, particularly the large lots next to the field.

**Dave Hardina, Editor**



**Thornbury Park Field looking in this direction**

### Lehigh University Student MAV Project

A group of final-year Lehigh University engineering students, with support from some Boeing and Propstoppers engineers, are building a Miniature Air Vehicle for an AIAA (American Institute for Aeronautics and Astronautics) competition.

This event requires the students to design build and fly an air vehicle that can perform specific "missions" while having the smallest overall dimensions. There are two missions, one to fly out to a spot and send back a picture, the other to fly out to a spot and cruise for the longest time (can you say Texaco event!).

Propstoppers Dave Bevan and I have helped from time to time. Last year Dave encouraged the students to start with paper airplanes to test the stability and glide performance of various shapes. Remember, an airplane with the smallest overall dimensions can't have a high aspect ratio wing, so shapes tend towards saucers, deltas and rectangles. Of course they must be stable and easy to control too.

This years students are starting over with a new plane and to get things sorted out they are starting with a larger machine, about 10 inches span with micro servos, Speed 280 motor and Hitec Feather Rx.

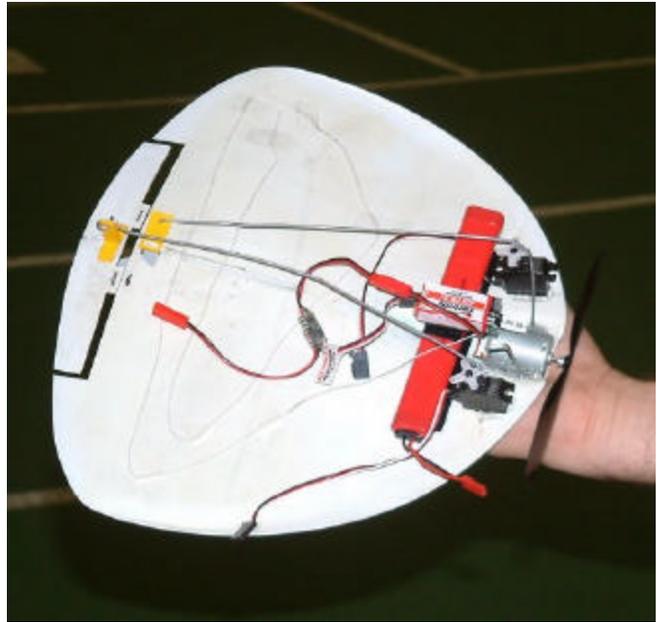


Now, the purpose of these competitions is to engage the students in a real-world engineering problem and they are expected to use the tools of their trade.

These students are mechanical engineering types so they started by building their wings using the University's thermo forming machine. They first designed the wing surface as a 3D model on the computer, and then they had a mold machined using a CNC (computer numerical controlled) mill. Then thermo formed wings were made from a single sheet of rather heavy plastic. The result, once they added the components, weighed almost eight ounces. Hmmmm..... rather high wing loading. Then they made up some gliders using the same wings but ballasted to the flight weight.

Lehigh have a wonderful flying facility, a football field sized field house! This place is equipped with nets to restrain the errant footballs and models! An ideal setup really, as they were able to try launches into the nets so as to minimize damage while they sorted out the flying problems.

When we visited they were rather dispirited, as they had not had any real success in making these models fly well. The main problem is that with such a high wing loading it is difficult to launch them in a stable yet fast enough manner.



The first thing we did was to make some test flights of the powered model into the nets. While it did not sustain flight it was possible to see that the pitch trim was off, so with several tries we got it close, but had broken the model. While the model was being fixed, they use hot melt glue for fast fixes, we tried some further experiments with the gliders. First we tied a string on the wing tip at the CG location and whirled it like a U/C model. This way you can explore the pitch trim and stability without having to deal with the other axes. Once we got that right and it was stable we tried some more free flight launches.

The field house has a second story balcony looking out over the lower floor; an ideal launching point. The first few launches were still disappointing as the model went almost vertically into the ground, but we realized that we weren't throwing it fast enough. This was the trick as it almost immediately flew a good distance with a gentle turn to the left.

Further tests saw us reduce the weight by cutting two large holes in the aft surfaces and covering them with packing tape. The lighter model flew even better and the students measured the height and length of the flight and with the flight time from the video they can calculate all the aerodynamic information needed to design the propulsion system. The L/D seemed to be about 4, not bad, the model should be OK.

Finally we flew the powered model off the balcony, but it was a poor flight. It was obvious that the power and probably the prop pitch were inadequate for the necessary high flight speed. Back to the drawing board, but that is why they are doing it; engineering lessons. Watch this space for updates.

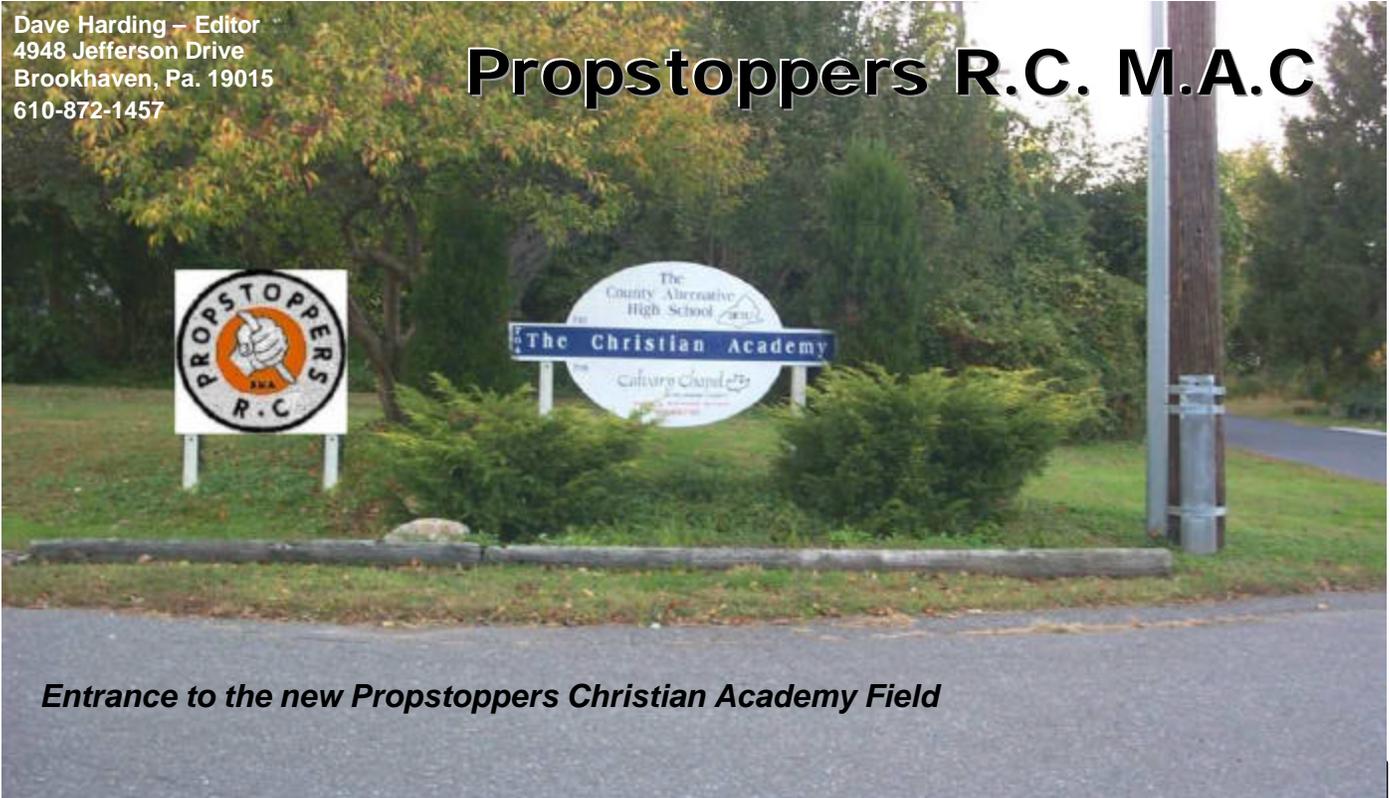


*Dave Harding*



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# Propstoppers R.C. M.A.C



*Entrance to the new Propstoppers Christian Academy Field*

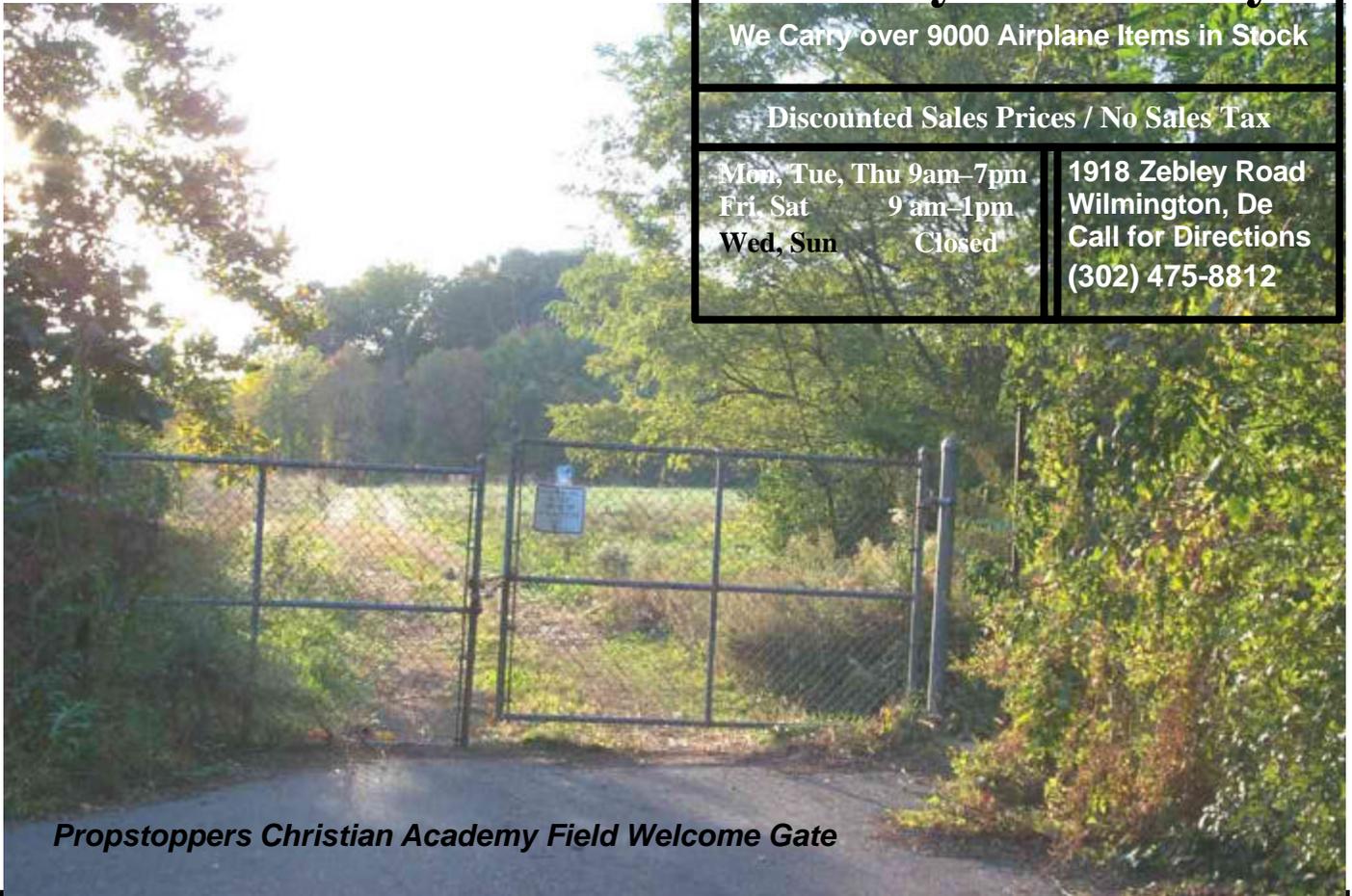
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*Propstoppers Christian Academy Field Welcome Gate*