Volume 15 – 10 www.FlyingClub1.org October 2015



The Privileged View Steve Beste, President

Navigation. Years ago, I noticed that when people asked me for directions, some people wanted me to draw them a map, while others wanted turn-by-turn instructions. I'm a map person myself, and I suspect that you are, too.

After all, if you're finding your way by pilotage, you need to have a map of the area in your head. You can't say, *Turn left when you reach Route 29* because if you miss Route 29, you're lost. You need to have some notion of what's on either side of Route 29. That notion will be on a map, either one in your head or one on your kneepad or one in your iPad. But turn-by-turn instructions won't work. Unless you have a GPS, of course. Then you just follow the needle and don't even notice Route 29.

It turns out that brain researchers have looked into this turn-by-turn-vs.-map preference and found that the two methods use different parts of our brains. People who navigate by a map in their heads use their hippocampuses. By contrast, the turn-by-turn strategy "relies on activity in a different area called the caudate nucleus, which is involved in laying down new habits. 'This is because you're not actually learning about the environment, but following a sequence of steps.' "

This is all in an article provocatively titled, Is GPS ruining our ability to navigate for ourselves? They find that map people have larger hippocampuses, and further, that their hippocampuses get larger with practice. London cabbies - who famously have to learn 25,000 streets - have large hippocampuses, and they get larger as they practice for the test over several years. In other words, if you find maps challenging, don't despair. Ability comes with practice.



Yes, butt why bother if the GPS will get you to your destination? For me, the answer is aesthetic. To quote the article:

Researchers find that when people rely on GPS directions while driving, they tend to stare at the screen more and the outside world less. As Cornell's Gilly Leshed, one of the researchers, told the Walrus, "Instead of experiencing physical locations, you end up with a more abstract representation of the world." Your memory of your trip is of a route on a

screen, rather than the landscape you traveled through.

What? Not see the landscape I'm flying over? Seeing it is the whole *point* of the hobby for me. That's what I'm doing up there. True, sometimes I just want to get home. I'm cold and tired of being bounced around. I just want it to be over. Then, I watch the ETA figure on the GPS count down the minutes. But those flights are the exception. Mostly, I came for the view. So how can I increase my engagement with it? Try these ideas:

- 1. Ahead of time, take a map and plot your course on it. then practice pilotage. Notice every power line, highway, and railroad that you cross.
- 2. Turn the GPS off if you're in familiar country.
- 3. Once the GPS has headed you toward your destination, note the landmarks ahead of you and switch the GPS to some other display. Fly toward the landmarks.
- 4. Use the GPS on the way there but not on the way back. This will force you to pay attention to what you're flying over.

Lastly, always remember that your GPS can lead you astray. Remember the story from last March of the bus driver who was taking 50 Belgian skiers to a resort at La Plagne in the French Alps. Turns out there are two La Plagnes in France - one in the Alps and one 800 miles west near Spain. He chose the wrong one. The passengers woke up to vineyards instead of snow. Look at the map below. Which La Plagne is likely to have snow? I'm thinking that this bus driver would have profited from having this map in his hippocampus.



Fly safely, Steve



October Club Meeting

A friendly reminder that our October Club meeting was postponed until October 10th. Come out and enjoy our last 'warm weather' meeting of the year at the Warrenton Airpark!



Labor Day meeting at the Airpark

This Month's Fly-In Destinations

To encourage all of us to get in the air more, the following is a list of fly-ins I found within (about) 100 NM of the Warrenton Airpark which are occurring in the next month. Sources are: The EAA Calendar of Events, the AOPA Calendar of Events, www.flyins.com and the Virginia Department of Aviation Calendar of Events.

Date	Event Description	Location	Distance from 7VG0
Sat, Oct 10	Culpeper Air Fest	Culpeper Regional	8 NM
		Airport (KCJR)	
Sat, Oct 17 / 10 AM	DC Metro Aviation Services	Montgomery County	42 NM
- 2 PM	Annual Open House	Airpark (KGAI)	
Sun, Oct 18 / 11	Virginia Coastal Fly-in	Accomack County	113 NM
AM - 3 PM		Airport (MFV)	
Sat, Oct 24 / 8 AM	EAA Chapter 186 Fall Fly-in	Warrenton-Fauquier	5 NM
- 4 PM		Airport (KHWY)	
Sat, Oct 24 / 9 AM	Aviation Day and Monthly	Chase City Airport	117 NM
	Breakfast Fly-in	(KCXE)	
Sun, Oct 25 / 9 AM	EAA Chapter 426 Fly-In	Greater Cumberland	73 NM
- 1 PM	Drive-In Breakfast	Regional Airport	
		(KCBE)	

Quiz Time - Answer By Steve Beste

Last month's quiz asked for the location of this drive-in theater. The September meeting revealed that some of you knew all about it. It's the Family Theater, about eight miles south of Winchester. Here it is from the road, U.S. 11, known locally as the Valley Pike.





THe picture is old, as you can tell by the shows that are playing. The only other drive-ins anywhere around are the Goochland, off I-64 40 miles west of Richmond and Bengies' northeast of Baltimore.

As to the U.S. 11, I thought it was just the old Shenandoah Valley road replaced by I-81. But no. It goes from New Orleans to the Canadian border. The highlight of the route, though is the Family drive-in there in Stephens City, VA.





Drive-Ins and Fly'n *By Jim Heidish*

You saw the walk, heard the talk! Even though the view was through a dirty windshield and the voice came from a tiny speaker hanging on the rolled up window, you knew it was the Duke. For kids, John Wayne in *She Wore A Yellow Ribbon* was a thrill and wonder to watch from the seat of your dad's car in the summer of 1948.

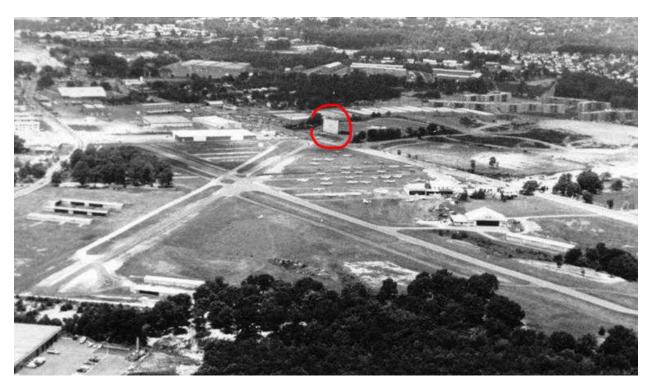
The drive-in theaters paid tribute to America's love affair with cars, as did the many other forms of drive-ins from dinners to banks, but the drive-in theaters' hay day was short. As soon as the TV came into everyone's living room in the early 1950's the movie theaters, both indoor and outdoor drive-ins dwindled very fast. Even though most of the drive-ins closed and weeds took over the parking area, the big screens stood for may years. They were still standing tall when I learned to fly in 1966.

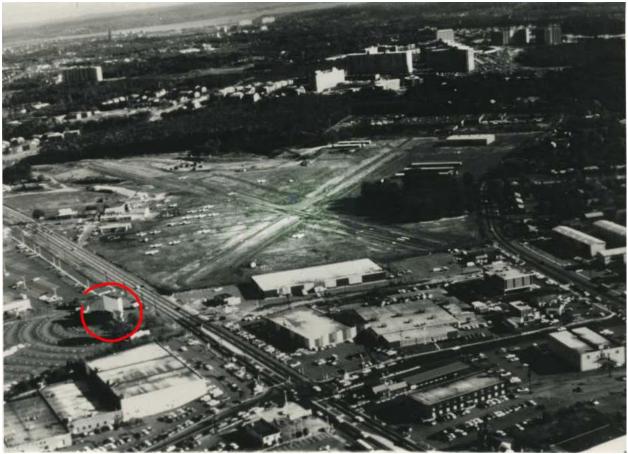
Learning to fly is one thing, knowing where you are flying is something else. Navigation, the art of knowing where you are in the world was hard to learn and even harder to trust at first. The old visual known object on the land scape was your first guide to flying away from the airport.

The airport where I soloed in New Castle, PA had two abandoned drive-in theaters along the fence line, their big white screens a beacon that could be seen for miles around. Many times I looked for them to guide me home. As I flew on longer cross countries I noticed many of these old drive-ins, many near airports, and used them as a reference points.

When I first moved to the Washington DC area in late 1969 I rented a Cessna 150 at the (now gone) Washington-Virginia Airport near Baileys Cross Roads, Va. I did not notice until take off that at the end of the runway was a big drive-in theater screen. I asked why? They said it was a great visual guide day and night! Just don't look at the movie at night, you can get distracted! (see the 2 photos).

I still remember the last time I was at a drive-in theater. It was 1969, and the rundown drive-in was located along side the Greater Pittsburgh Airport, PA. *True Grit* with John Wayne was playing, and I had popcorn, but for the life of me I can't remember the name of the girl I was with. Old age!





Two-cycle Engines and Auto Fuel Containing Ethanol

By Jim Birnbaum

I recently received my new Aerolite103, which has a two-cycle engine. As with many of us, I was concerned with using auto fuel containing ETHANOL. I sent an inquiry to HIRTH engineering [the engine manufacturer] and posed the following three fuel options and asked for their comments.

- 1. Using 93 octane with 10% ethanol
- 2. Using a 50/50 mixture of 86 octane without ethanol and 100LL
- 3. At time I may have to refuel at airports with only 100LL. Is this okay to use on occasion?

While his comments are based on Hirth Engines, I believe the comments will apply to most two-cycle engines. Following is his response:

ETHANOL Auto fuel-vs-AV GAS

In lower quality engines ethanol can be a problem as it can eat up the seals and gaskets. Hirth engines use Viton-tipped crank seals and high grade paper type gaskets and we have found no evidence so far that ethanol will damage them internally. So if you have no other option you can use it.

Ethanol should be avoided if possible if you can find an unleaded - non-ethanol fuel source. Racing fuel can be used if 100 or less octane. Another source is possibly from a marina and some gas stations sell small engine fuel that is pure. Sometimes small engine fuel is only 87 octane which is on the low side but we consider it better than ethanol fuel. If you elect to use low octane small engine fuel you should not store it for more than a month. Ethanol is nasty stuff that can shorten the life of fuel lines, fuel pump, primer pumps, and will destroy fiberglass fuel tanks. It attracts moisture into the fuel and engine, increases the EGT a little, is not as efficient and lowers the horsepower a small amount. If ethanol fuel is used, replacing all of the above mentioned fuel components yearly should be considered and precautions taken to keep moisture out during long down times. We do not recommend the use of synthetic 2 cycle oils regardless of what fuel you use but with ethanol fuel it is really important not to use synthetics. Use a high quality mineral-based 2-cycle oil.

Av gas has some very positive attributes but some negative ones that should be considered. 100LL has a higher octane which the Hirth engine loves and is supposed to be certified dry - no water. It has no ethanol, which is good. But it has lead and that is bad. Leaded fuel leaves a nasty yellow deposit in the engine that collects similar to carbon deposits. Unlike carbon which sticks like cement the lead deposits can eventually break off in large pieces. If they break off at the right time they go harmlessly out the exhaust. If at the wrong time, they can end up in the crankcase. The lead deposits are gritty like sand and if they get into the case will destroy the crank bearings in a short time. The lead also seems to make rings stick faster than carbon deposits. Another downside of 100LL is the high cost and the inconvenience of having to run out to an airport to get it. If 100LL did not have the lead added it would logically be your best choice and still can be. One option would be to do a top end de-carbon of the engine every 50 hours to remove the lead before

it builds up. Another option would be to use a fuel additive called TCP fuel additive. This is a product of which you add a few ounces to every tank full. It has the ability to trap the lead and make it go harmlessly out the exhaust. We have several customers who use it with our Blue Max oil and there does not seem to be any negative attributes. You can purchase it from Aircraft Spruce or Wicks. There is no problem with occasional use of 100LL like on a cross country. TCP is only needed for constant long term use.

So the short answer is: Unleaded pure fuel can be used as is, leaded fuel can be used with TCP and premium ethanol auto fuel can be used if you take some precautions.

Meeting Minutes September 2015 Flying Club One Meeting

Saturday, September 5, 2015 Warrenton Airpark Warrenton, VA

Selling 50/50 tickets before meeting

Call to Order

President, Steve Beste called the meeting to order at 11 A.M. 24 members present.

CONNECTIONS

Visitors & New Members

None

Old Members

Two old members that have not been at our meetings in a long time stopped in. Scott Schreiber, who flies a Super CUBy with big tundra tires and Arvind Singh, a PPG pilot. Steve Beste and Peter Richter flew their trike in from Front Royal, VA for the meeting. Don Sheehan said that the local sheriff's office questioned him about Treasurer: Jim Birnbaum reported August Inwhy he was flying his trike (doing 360s at 500 ft) above a county training area south of Remington, VA. He said he performed the maneuver many times over their big ground circle in the past 2 years without complaints. Wood Weaver said he had an engine out and was able to land ok, but had to trailer his Kit Fox Lite back to the Airpark. Jim Hill accomplished his LsA

solo and with some more flying, should have his ticket soon. With the guidance of Tom Simmons, Rob Doak and Naga Tallvri flew their first cross-country down to Shannon Airport in Fredericksburg, VA.

SERVICE PROVIDERS

Recap our standing list of service providers:

- PPG instructor and dealer: Michael O'Daniel
- CFI: Pete Bastien
- Fixed wing instructor: Chuck Tippett
- PPG, Ultralight, LSA and General Aviation flight instruction: Grass Roots Flyers
- Welder: Tom Kotsch
- A&P mechanic (not at Airpark): **JD In**gram
- Light Sport Condition Inspections, Rotax Certified: Tim Loehrke

REGULAR REPORTS

Secretary: Jim Heidish reported that the Minutes of the August meeting were published in the September club newsletter and were approved as published.

come: \$23.00, Expenses: \$63.00, the Flying Club 1 Checkbook Balance: \$2882.00.

President: Steve Beste said members that are looking for flying destinations and events should look in our Newsletter's This Month's Fly-In Destinations section. Editor Lucy Ooi compiles a monthly up-to-date list of fly-in destinations within 100 NM of the Airpark.

Safety and Training Director: **Pete Bastien** reported that we still have a great safety record this flying season. He said because of the increased activity of the skydiving operation on good flying days we should be alert to the jump plane's radio announcements on 122.9. Also, it is best to approach the Airpark's pattern on the east side at a 45° angle to the down wind of runway 22 (no matter the runway you're landing on). This way you can see the activity of the skydivers and if the big jump plane is still flying or on the ground.

Membership Director: **Jim Birnbaum** reported that we have 49 paid-up members. He said members should check the published roster to see if all their information is correct and up-to-date.

Warrenton Airpark Owner: **Tom Richards** reported that even though his other job of writing proposals for government contractors is keeping him busy, he is still cleaning up the older hangars and replacing or repairing the sliding doors. He said that his ultralight training is very active. Many of his students that have soloed are flying a lot and are asking about fly-out destinations. He would like to organize some short distance group flights to airports like Shannon that have an on-field restaurant.

Old Business

None

New Business

Because of the big EAA 186 fly-in at the local Warrenton-Fauquier Airport on Saturday, October 3rd, the same day as our October meeting, we changed the date of our next (October) meeting to October 10th so members can fly to the

EAA event. Also, the Club will have a booth in the activity hangar to promote membership.

Rob Doak is organizing the Annual Color Run for October 24th with rain dates of October 25 or 31. All participants will fly to or meet at the Front Royal Airport in Front Royal, VA and fly as a group following the Shenandoah River as it zig-zags through the spectacular fall colors. Last year there were 9 aircraft and 16 flyers. More information to come.

MONTHLY PROGRAM

None.

50-50 Drawing

Winner **Arvind Singh** donated his winnings to the Club.

Adjourn

President, **Steve Beste** adjourned the meeting at 12 noon.

Cook Out

Jim Birnbaum served a very tasty lunch.

Submitted by **Jim Heidish**, Secretary

Activities

2015 Flying Club 1 Activities Schedule

Designated Club meetings will be held the first Thursday of each month in the Centreville High School, Union Mill Rd., Centreville, VA, at 7:30 PM. Others will be held at 11:00 AM at the Warrenton Airpark as shown in the 2015 schedule. Changes in time or location will be posted in this newsletter and on the Club website.

Date	Activity	Location	Description
Sat, October 10th	Club 1 Fly-in and	Airpark	Monthly meeting, Club 1 Fall
	meeting		Fly-in and cookout at Warren-
			ton Airpark
Sat, October 24th	Club 1 Color Run Fly-	Airpark	Club 1 Color Run fly-out at
	out		Warrenton Airpark
Thu, November 5th,	Club Meeting	CVHS	Conversation, club business
7:30 pm			meeting and program.
Sat, December 5th, 5	Club Meeting / Holi-	Airpark	Monthly meeting and Holiday
pm - 8 pm	day Party	Club	Party.
		House	

Classifieds

resubmitted, or renewed by telephone or e-mail. Please advise the editor: Lucy Ooi (Ooi.Lucy@gmail.com) when the ad is no longer start). \$6500 OBO. Fernando Alvarez 703-589needed.

Ultralight "Banty" 440 with trailer and spares \$6k. Contact Joe Carter (703) 938-3246.



Ads will be run twice and then dropped unless FOR SALE — Airborne T-Lite trike T-Lite trike base for sale with 22 HP four stroke Bailey engine (it has only15 hours on it but does not 4202







Membership Dues Policy

The period of membership follows the calendar yearJanuary through December. The renewal period starts on 1 October with regular dues at \$20.00 and family at \$25.00. Members who have not paid their dues by the end of February will be dropped effective 1 March and will not receive the Newsletter or Membership Roster. New members joining after 1 October will be charged \$20.00 or the family rate, if applicable and will be credited will full membership for the following calendar year. Please mail payments to Flying Club 1, 8570 King Carter Street, Manassas, VA 20110. Payment can also be made at the regular monthly meeting. Please include the 2015 Membership Application form with your payment. This will be used to ensure that our records are current. A copy of the membership application is attached and also printed at the end of the Newsletter.

Jim Birmbaum Flying Club 1 Membership Director, Treasurer

MEMBERSHIP APPLICATION



Type of membership: \square New,	☐ Renewal,	☐ Regular,	☐ Family membership
Name(s):			
Name To Go On Your Name Tag:	:		
Street or PO Box:			
City:		State	::Zip:
Telephone, Home:	Cell: _		Work:
Spouse's Name:			
Emergency Contact: Name:			Phone:
E-mail Address:			
Aircraft Liability Insurance throu	ıgh:		
Aircraft make and model:			N-Number (if any):
Pilot rating(s):			
Club Activities or Services for Wh	nich You Volur	nteer•	

Instructions:

- 1. FILL OUT THE ABOVE FORM.
- 2. Enclose a check for \$20 (\$25 for a family) made out to "Flying Club 1".

Information from this application will be in the club's membership roster which goes only to members.

3. SEND THE FORM AND CHECK TO:

Jim Birnbaum, Treasurer 8570 King Carter Street Manassas, VA 20110-4888

To join the national USUA, go to http://www.usua.org
To join the national USPPA, go to http://www.usppa.org

Flying Club 1 General Information

The Flying Club 1 is a nonprofit, recreational club dedicated to the sport of ultralight and light sport aircraft flying.

2015 CLUB OFFICERS AND DIRECTORS

President: Steve Beste 703-321-9110 Vice President: Dick Martin 703-242-2367 Secretary: Jim Heidish 703-524-5265 Treasurer: Jim Birnbaum 703-361-7478 Director & Past President: Len Alt

703-945-9314

Director At Large: Larry Walker 540-347-7609

Director At Large: Pete Bastien 703-568-5778

meetings regularly may prefer to support functions associated with Club weekend activities.

ANNUAL DUES (Jan 1-Dec 31) \$20.00. Family membership (typically husband and wife): \$25.00. A spouse who wishes to participate will please complete a membership appliant of the form

cation form.

2015 CLUB VOLUNTEER STAFF

Safety & Training: Pete Bastien Membership: Jim Birnbaum 703-361-7478 Club Artist: Jim Heidish 703-524-5265 Newsletter Editor: Lucy Ooi ("Wee")

Ooi.Lucy@gmail.com
Web Master: Steve Beste,
president@flyingclub1.org

A club is only as good as the members who volunteer to support its activities. The following listed activities with the club require member support in varying amounts. Please indicate on your membership application the function(s) (can be more than one) you will support as a Club member. All active Club members are expected to participate. However, members who live some distance away and cannot attend

CLUB WEB SITE: http://flyingclub1.org

MEETINGS are monthly, year-round. See the web site for dates and places.

THE NEWSLETTER: The newsletter is published by email on the first of every month.

SUBMITTING ITEMS FOR THE NEWSLETTER Members and non-members are encouraged to submit items for this newsletter. Send submissions to Lucy Ooi at Ooi.Lucy@gmail.com at least one week prior to the end of the month.

If you are interested in joining the U.S. Ultralight National Organization go to their website for membership information at: www.usua.org

Likewise, if you are interested in joining the U.S. Powered Paragliding Association, the National PPG Organization, go to their website for membership information at: www.usppa.org