



FROM THE LEFT SEAT

Len Alt, President

Hope you all had a good time at the Poker Run. This was one of our best, with a great course on a beautiful flying day. I flew with five other powered paragliders on the PPG course and had a great time, including the first flights into a new landing field at Don Tharpe's house. The fixed wing flyers had similar luck. Bob Eaheart took the PPG poker hand, with Steve Beste winning the fixed wing pot (thanks to a donated hand from Jim Heidish). Thanks to Steve Beste for superbly organizing this event.



Four Jokers

Thanks to all the club members who have devoted so much time to the investigation of Jim's Trike accident. The extensive information gathered, photos taken, and evidence analyzed has resulted in a clearer picture of what transpired that day. The report is now in final coordination and edit. Release target is before the end of July. The preliminary drafts represent outstanding work. The information and conclusions make a substantial contribution to enhance the understanding and safety of all our members, no matter what type of aircraft they are flying. Special thanks to Steve Beste, who has led this effort and made this a major personal commitment for many weeks.

The several club members who flew up to Footlight Ranch for their annual Father's Day Fly In had a great time.



Marine Expeditionary Force HQ for the Father's Day Fly In

We have a couple of great articles from our members in this month's issue. Please see Larry Walker's instructions on how to check your fuel for ethanol content, an Steve Beste's article on latitude and longitude formats. Thanks to both for taking the time to contribute these.

Please join us for our July meeting and Summer BBQ at Warrenton Air Park on Saturday, July 12th. The meeting will start at 11:00 A.M., followed by our club Summer BBQ, with flying before and after. Please plan to invite your families. Hope to see you there.

Fly smart. Fly safe.



Take Off from Tharpe



Pink Poker Run

MEETING MINUTES

USUA Flying Club 1
Monthly Meeting and Memorial Fly In
Saturday June 7, 2008
Warrenton Airpark
Cedar Park Picnic Area
President **Len Alt** opened the meeting at 11:05 AM, 20 members were present. Len noted that a thank you note had been sent to Hara Bouganim for her contribution to the club Flying Leprechaun Library in memory of Ed Lynch. Flying Club 1 has two instructors and an A & P operating out of WAP: Chuck Tippet – Light Sport & Fixed Wing ultra-lights
Michael O’Daniel – PPGs
J.D. Ingram is an active A & P (AI) working part-time (weekends) at WAP. Non-hanger pilots using WAP are asked to submit \$100/year to Tom Richards (owner of WAP) for airport & hanger maintenance. (Checks should be made payable to Warrenton Airpark). David Middendorf was introduced as a visitor and prospective new member.
Officer’s reports:
Secretary:
Jim T. Hill – Not present. The Minutes published in the June 2008 Newsletter were accepted as submitted.
Treasurer:
Jim Birnbaum – Income (\$185.00) exceeded Expenses (\$157.31) by \$27.69. Club checkbook balance (05/01/08) is \$3,396.28.
Vice President: - No items.
Safety & Training Director – Present
Membership: Not present.
After the business meeting Larry Walker presented the Memorial to members no longer with us. The club was privileged to be joined by the widow and family of Woody Wood.

Gasoline Contamination with Alcohol

By Larry Walker

Alcohol (ethanol or methanol) is now appearing in gasoline in more service stations. Per the EAA both ethanol or methanol are harmful to our aircraft if they are in the gasoline. See item eight that starts “Actual engine runs and in-flight testing studies by EAA, Cessna, and the FAA...” in this document: <http://www.eaa.org/autofuel/> (drop down titled “State History on Ethanol”).

Recently I have just experienced a lot of difficulty obtaining 87 Octane Automotive Fuel near WAP. My old service station I have counted on for years just went 10% (or more) alcohol in their 87 octane Fuel. I started checking around and finally found one with no alcohol!!

Those that flunked my testing included, BP on Lee Highway (near Out Back), Shell, Texaco, and finally my old source for many years, East Coast in Opal. You ought to see the look on faces when you buy 75 cents worth of fuel then and stop!

87 octane Fuel purchased June 16 at Quarles in Opal tested NO ALCOHOL!

This is specifically addresses 87 octane fuel. I did not test any other octane fuel at these service stations and it is possible other octanes may differ. I do NOT believe any station personnel when they say “we do not have alcohol in our gas”. I Test!

I will have a technical talk At our next Club 1 meeting and cover making your own tester and a demo test of alcohol present and not present in fuel.

The tester I use is a long pill bottle. I make a mark ~1/7 the way up from the bottom of the tube. Fill the tube to the mark with water, then fill the rest of the tube with the gasoline being tested. Cover the tube,

shake it up and let it sit for 5 minutes. If the water is still at the level of the mark you made, there is no alcohol in the fuel. If the water level has risen, there is alcohol in the fuel. See my picture in this newsletter. The question is which has alcohol - the one on the right or left? The mark must be clear and the filling to that mark must be accurate. One is looking for change. The exact amount of water and fuel does not matter but accurate process does.



Alcohol Test

Fly Safe, Larry :-)



Ready for Take Off

ACTIVITIES

2008 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 2008 schedule. Changes in time or location will be posted in this newsletter and on the Club website.

2008 Club Activities Schedule

Jul 12, Sat	Monthly Meeting & Summer BBQ, WAP
Aug 2, Sat	Monthly Meeting, WAP
Sep 6, Sat	Monthly Meeting, WAP
Sep 13, Sat	Club 1 Fly-Out, WAP
Oct 4, Sat	Monthly Meeting & Club 1 Fall Fly-In, WAP
Oct 11, Sat	Color Run Fly-In, WAP
Nov 6, Thu	Monthly Meeting, CHS
Dec 6, Sat	Monthly Meeting & Holiday Party, TBD



Next Flight

Latitude and Longitude Formats

By Steve Beste

We all know about latitude and longitude written as degrees, minutes, and seconds. The Warrenton Airpark is at 38° 39' 20.433" N, 77° 47' 13.975" W. Call this format **Degrees-Minutes-Seconds**. Other formats are coming into use, however, so be prepared for people to send you coordinates in a notation that you might not be expecting. Consider this listing for the airpark in www.airnav.com. It shows three formats:

- Degrees-Minutes-Seconds
- Degrees-Minutes
- Decimal Degrees

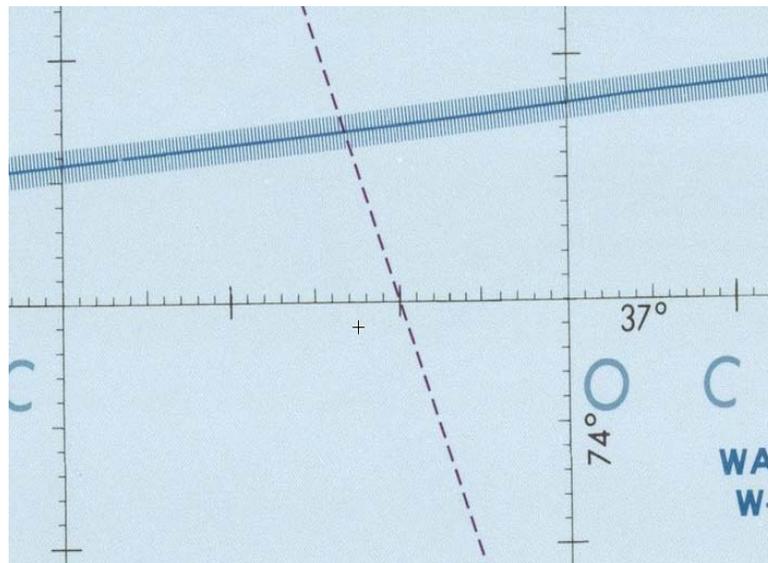
FAA Identifier: 7VG0
Lat/Long: 38-39-20.4330N / 077-47-13.9750W
38-39.340550N / 077-47.232917W
38.6556758 / -77.7872153

Which Format to Use?

Typically, we'll set our GPS up for one of these formats, and that will become our favorite. I've chosen Decimal Degrees, but here are the tradeoffs.

Degrees-Minutes-Seconds. This is traditional. Everyone understands it. But it has all the cumbersomeness of any non-decimal system – feet and inches; hours and minutes; pints, cups, and ounces. To this old problem, computers have added a new one: the ° symbol is not on the keyboard. This has driven various web sites and GPS makers to invent their own workarounds. Airnav, for instance, uses hyphens, as you see above. But if you copy that into Google Maps, it won't take. Google wants spaces instead of the hyphens. This is Babel.

Degrees Minutes. Here, the airpark is 38° 39.34055 N, 77° 47.23291 W. Decimal minutes have replaced the seconds.



To me, this format echoes John Kennedy's take on Washington as a city with Northern hospitality and Southern efficiency.

It's virtue is that it makes a location easy to find on a paper map. The map gridlines have tick marks at the minutes, but not at the seconds. This picture shows 37° N, 74° W from the Washington sectional chart (87 miles east of Virginia Beach). The tick marks show degrees. Usefully, the degrees of latitude – the tick marks going up and down the chart – equal one nautical mile. That means you can use them as a quick mileage ruler. (The degrees of longitude equal one mile only at the equator, so you can't use those tick marks this way.)

Decimal Degrees. In this notation, the airpark is 38.6556758, -77.7872153. To me, this is the way to go. Only one unit of measure, the degree. No figuring out how various web sites work around the ° symbol. Plus, all my online tools use it – Google Maps, Skyvector, and Airnav.

What Are You Trying to Do?

The GPS is what started me using latitude and longitude. Before that, I never paid them any mind. But now I want to enter waypoints into my GPS. Airports are easy. I get the coordinates from www.airnav.com as shown at the top of the article. I use Airnav instead of the FAA's Airport/Facility Directory because it includes the private airports that I fly to. But also, the Airport/Facility Directory, lists coordinates only in degrees-minutes, as here.

FRONT ROYAL–WARREN CO (FRR) 3 W UTC–5(–4DT) N38°55.05' W78°15.21'

For places that are not airports, I get coordinates from Google Maps. This is because I need to see what the terrain looks like, and satellite pictures are the best way to do that. Last month, for example, I was planning a return from the fly-in at Shreveport North, northeast of Gettysburg, to my home base at Front Royal. P-40 was small, so it was a rare chance to fly over the Catoctins north of Camp David. But I don't fly over 10-mile stretches of forest in my trike with its non-certificated engine. I needed to see the terrain, pick a way through that had some fields, and then put those coordinates into my GPS. Easy. Here's how.

Google Maps. Want to know the coordinates of the Washington Monument? Zoom in on it as shown here. Then right-click and pick **Directions to Here**. The coordinates will appear above in decimal degrees:



End address e.g., "94526"

38.889459,-77.035242

Using this process, I got the coordinates of the waypoints I needed. I then created them in my GPS, strung them together into a route, and was all set. Come the actual flight, of course, I could see the chain of fields. I didn't need the GPS. But I felt much safer having seen the terrain in Google Maps and having that route in the GPS as a backup.

Skyvector.com. This great site shows sectional charts online in scrollable, zoomable format. If you right-click anywhere on the chart, Skyvector will give you the coordinates of that point as shown below. Notice that Skyvector uses decimal degrees.



How to Convert?

No matter what format you prefer, you will sooner or later have to convert. There are several sites on the web that will convert between degrees-minutes-seconds and decimal degrees. Here's one: <http://www.geology.enr.state.nc.us/gis/latlon.html>. You can also do this in Google Maps, although it's not as straightforward. I suppose there's also a converter for degrees-minutes, but I didn't find one.

* * *

In the end, the gridlines on paper charts still show Degrees-Minutes. The world of online tools has settled on Decimal Degrees, sometimes offering a conversion to Degrees-Minutes-Seconds on the side. Take your pick, but know that your first task when someone sends you coordinates is to notice what format they're using.

CLASSIFIEDS

Ads will be run twice and then dropped unless resubmitted, or renewed by telephone or e-mail. Please advise the editor when the ad is no longer needed.

FOR SALE — 1957 Beech Bonanza.

Good cross-country machine with excellent fuel mileage, retractable gear and nice instrument panel. Airframe has 5500 hours. Engine: 240 H.P. Continental. 15 hours since overhaul (1500 hr TBO) Cruise speed at 75%: 160 knots Fuel burn: 10 gph at 75% Range: 4.5 hrs (with IFR reserves) Instruments: STEC 50 AutoPilot, King HSI, slaved compass, dual Nav / Comm radios. Other features:

- HSI is coupled to the glide slope
- Storm Scope
- KA134 Audio Panel with Marker
- Inter Comm
- Second Glide Slope
- Digital OAT gauge
- Shoulder Harnesses
- Engine Heater
- Cleveland Wheels and Brakes
- Digital EGT
- DavTron Clock
- Complete new circuit breaker panel
- Pressure Carburetor (the mixture is automatically set barometric pressure)

More information and a photo is available at: http://www.reserveairplane.com/rap_forsale. Asking \$80,000.
Inquiries: Tom Gottschalk
tom.gottschalk@hugheschris.com (07/08)

FOR SALE -- Brand new and unused Blackhawk one-piece flying suit in red and black. Size Medium. **\$40.**

Inquiries: Bob Bell
(W) 540-351-1081 or (C) 703-943-7129
cedarfield540@juno.com (12/07)

1952 PIPER TRIPACER — Project. Airframe and engine with less than 800 hours since new. Fuselage and one wing have been recovered. Other wing needs cover. Needs paint job. Engine needs

assembly. Asking \$ 12,000.

FOR SALE -- Brand new and unused Blackhawk one-piece flying suit in red and black. Size Medium. **\$40.**

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Inquiries: Ralph E. Kew via e-mail at
REKP1@MSN.com (08/07)

TRAINING -- Powered paragliding instruction, motor and wing sales.

I will be based out of Jerry Starbuck's hanger space.
Inquiries: Michael O'Daniel
540-270-8855
onegooddoc@starpower.net
poweredparaglidingusa.com (04/08)

FLYING CLUB 1 MEMBERSHIP APPLICATION - 2008

All members are encouraged to provide an e-mail address to the Club. It is our best means for fast communications with a large number of Club members in minimum time. We welcome you to USUA flying Club 1 and hope your membership will be rewarding to you in flying and fellowship.

*Name: _____ New _ Renewal _ Regular __ Family__ Membership

*Street or PO Box: _____

*City: _____ State _____ ZIP

*Telephone(H) _____ Telephone (W) _____

*Spouse's Name _____ *Name To Go On Your Name Tag _____

Emergency Contact: Name: _____ Phone: _____

To Receive Your Newsletter By E-mail, Enter Your E-mail Address:

*USUA Member: Yes ___ No ___ If yes, enter member number: _____ USUA Pilot: Yes ___ No ___

*UL Registration # _____ *Aircraft Liability Insurance _____

Type Aircraft Cessna 150 Stored/Flown from Warenton Air Park

Other Ultralights (Owned or flown) _____

Flying Hours: Dual UL _____ Single UL _____ Conventional _____

*Club Activities or Services for Which You Volunteer _____

(NOTE: References to Ultralight aircraft above include Ultralight-type aircraft). Starred must be completed. Mail application to the Club 1 Treasurer, Jim Birnbaum, 8570 King Carter St., Manassas, VA 20110, accompanied by dues for regular (\$20) or Family (\$25) membership for a full year or \$10 and \$12 (Family) for the period 1 July through 30 September. Payments after 1 October should be for the full rate and the member will be credited with membership for the following calendar year. NOTE: Information from this application will be included in the Club 1's membership roster intended for internal use only. (*Roster__E-mail__USMaiI__Name Tag____).

To join USUA Flying Club #1, fill out the forms on the reverse side. To join the national USUA, fill out the form below: (Canadian and non-US membership add \$5.00)

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

____ **\$30.00** U.S. Ultralight Association annual membership does not include magazine subscriptions. All publications are optional, and are available to USUA members at the discounted prices below. A current USUA membership is required to take advantage of these discounts. Subscribe to your chice when you renew your membership.

Name: _____

Address: _____

City: _____ State _____ Zip _____

Phone _____ Date of Birth _____

**Ultralight Magazine - \$24.95
Light Sport and Ultralight Flying - \$34.95
KITPLANES Magazine - \$19.95
Air & Space - \$19.00**

Enclosed is my Check ___ Money Order ___
Visa ___ Mastercard _____

____ Enclosed is \$2.00 for work in ultralight safety by USUA.

**United States Ultralight Association
104 Carlisle Street
Gettysburg, PA 17325**

USUA FLYING CLUB 1 GENERAL INFORMATION

The United States Ultralight Association's Flying Club 1 is a non-profit, recreational club dedicated to the sport of ultralight and light sport aircraft flying.

2007-2008 CLUB OFFICERS, DIRECTORS & STAFF

President Len Alt*	703-467-0586	
Vice President Pete Bastien+		703-568-5778
Secretary Jim Hill*	540-659-8366	
Treasurer Jim Birnbaum+		703-361-7478
Past President Dave Riedel		703-815-4924
Dir, Safety & Tng Dave Riedel		703-815-4924
Dir, Membership Phil Williams		703-361-3320
Dir At Large Jerry Starbuck		301-928-8755
Dir at Large Larry Walker		540-347-7609
Club Artist Jim Heidish		703-524-5265
Events Coord.		
Librarian Dick Walker	202-363-4546	
Newsletter Editor Kim Alt		703-655-4137
	e-mail:	
kim.alt@gmail.com		
Web Master Greg Palmer		703-912-3774
PPG Web POC Par Karandikar		703-201-8909

Terms of office: +2007-08 *2008-09

ANNUAL DUES (Jan 1 - Dec 31) \$20.00. (Includes newsletter.) Family membership: \$25.00. After July 1, dues for remainder of year are \$10.00. Family membership: \$25.00 (husband and wife). (A spouse who wishes to participate will please complete a membership application form.)

NEWSLETTER SUBSCRIPTION (without membership) is \$10.00 per year.

CLUB WEB SITE: <http://usuaclub1.org>. Note the change in web site. Flying Club 1 now has an officially registered name on the internet.

MEETINGS are at 7:30 PM on the first Thursday of the month at locations announced in the Club newsletter and on the Club web site. (Times and days may vary. check the newsletter and/or the web site.)

SUBMITTING ITEMS FOR THE NEWSLETTER Members and non-members are encouraged to submit items for this newsletter. Send submissions to Kim Alt, 13102 Mares Neck Lane, Herndon, VA 20171. E-mail is shown at left. Deadline for entry of items into the newsletter is 10 days before each meeting.

Ads will run twice and then dropped unless resubmitted or renewed by phone or email. Advise editor when item is sold.

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 meetings regularly, may prefer to support functions associated with Club wek-end activities.

Club Management/Administration: Club Officers (elected, Directors and Staff). (Talk to current officer for more detail.) Fly-ins: Food supply, preparation; Facilities; Grounds; Ground Support. X-country & outside events: ground support. Safety & Education: Flight Safety & Training, New Member Mentoring, Library, Monthly Program Development. Communications: Membership, Newsletter, Web Site. Fund Raising: 50/50 Raffle. Miscellaneous: Meeting Facilities, Property Management, Clothing Sales, Tool Custodian, Ad Hoc Committees.