



Volume 16 – 06

www.FlyingClub1.org

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The Privileged View

Steve Beste, President

Luther Taylor, master machinist. Have you ever tried to drill a pair of holes opposite each other in an aluminum tube? With a hand drill? You can make the holes, of course. But they won't be where you intended them to be. And they won't be opposite each other through the center of the tube. Nor will they line up with other holes in the tube. Nor will the holes be perfectly round. Knowing all this (don't ask me how I found out), I went looking for a machinist to fabricate the new mast for my trike. I called Chuck Tippett, of course, as we all do for everything. He recommended Luther Taylor. I went to him and couldn't be happier.

Luther's magnificent shop is in a building he built himself next to his house in the country just east of Culpeper. On arriving, I quickly found that I was visiting a master craftsman. The place was spotless. You could eat off the floor. How many 40-thousandths of an inch clearance did I need?



The next picture shows him drilling a pair of holes in my lower mast pylon. Here's the correct way to drill such holes.



1. Secure the tube on your drill press as shown below.
2. Find the center of the tube.
 - Put the side of the bit against the side of the tube. (He has a crank that moves the bed of the drill press sideways to the tube.)
 - Note the position of the side-to-side adjustment on the digital readout of the drill press (not shown in the picture).
 - Do the same on the other side.
 - Split the difference and crank the bed to exactly that position.
3. Begin drilling with a special bit that makes a tiny hole and then a conical countersink after the point of the bit is a quarter of an inch into the work. As Luther said, “Even in a drill press, a bit never goes exactly where you put it.” This pilot hole and wide countersink will guide the larger 6 mm bit.
4. Drill the hole as you see in the picture.

Easy peasy! I could have done it myself. All I needed was the fancy drill press, a building to put it in, the special pilot-hole bit, a 6 mm bit, and 30 years experience to know what the heck I was doing. It was a pleasure watching a master craftsman at work.

The picture at right shows the other parts I brought to Luther. You see the bent old mast and the new one that he fabricated, the old bowsprit and the new, and the old hang block and the new (with the safety cable).



The mast needed holes drilled at both ends, precisely 90° apart, or the trike will fly crooked.

The safety cable was a problem. The factory sent it to me attached to the hang block, which is the fitting that gets bolted to the top of the mast. The whole trike hangs from the wing via a bolt through the hang block. Looking at the plans for the trike and measuring things, I saw that the factory got it wrong. (They haven't built a trike in ten years, so I expect some discrepancies.) The safety cable should not attach to the hang bolt but to a bolt further down that includes the mast. How to remove the cable from the hang block? This requires pressing out the brass bushing that you see in the picture below. It's press-fit into the aluminum hang block. You don't want to just bang it out!

Luther did the job with his large hand press. However, the bushing is an odd metric size. To make the press work correctly, he machined the one-off steel mandrel that you see in the picture. The lower end fits snugly inside the bushing and keeps the mandrel straight and centered. The upper part presses on the end of the bushing while being skinny enough to not hit the hang block. "It didn't take me but a couple of minutes to make," said Luther. The result? He got the safety cable out and the bushing pressed back without a scratch on it.



As we talked, I saw this kind of care and inventiveness all over his work. I left in awe of his skill, his inventiveness, and his attention to detail.



My father's friends told me that he was "a lawyer's lawyer" - the one lawyers would go to if they needed legal work done for themselves. I put the same care into the computer software that I build. It's elegantly designed and built to be tough. I see that Luther is a kindred spirit. If anybody is going to be messing with my hang block, I want it to be him.

Fly safely,

Steve

Luther Taylor
L&J Machine
17274 Bel Pre Road
Culpeper, VA 22701
540-222-3927
luther.taylor@comcast.net



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, www.socialflight.com and the [Virginia Department of Aviation Calendar of Events](#).

Date	Event Description	Location	Distance from 7VG0
Fri-Sun Jun 3-5	Shannon Camping Fly-in. Lots of activities on Saturday	Shannon Airport (KEZF)	28 NM
Sat, Jun 4 / 9AM-1PM	Young Eagles Rally	St. Mary's County Regional Airport (2W6)	62 NM
Sat, Jun 4 / 10AM - 4PM	Bay Bridge Wings and Wheels	Bay Bridge Airport (W29)	71 NM
Sat, Jun 4 / 12-7PM	Car and bike show fly-in including live music	Wakefield Municipal Airport (KAKQ)	107 NM
Sat, Jun 4 / 8-10AM	Pancake breakfast	Mecklenburg-Brunswick Regional Airport (KAVC)	119 NM
Sat, Jun 11 / 8AM-1PM	EAA 36 breakfast/lunch fly-in drive-in	Hagerstown Regional Airport (KHGR)	63 NM
Sat, Jun 11 / 8:30-10AM	EAA 1202 egg and pancake breakfast	Farmville Regional Airport (KFVX)	84 NM
Sat, Jun 11 / 9AM-4PM	Potomac Antique Aero Squadron 45th Annual Antique Fly-In	Massey Aerodrome (MD1)	100 NM
Sat, Jun 11 / 8-11AM	Smoketown fly-in/drive-in breakfast	Smoketown Airport (S37)	111 NM
Sat, Jun 11 / 8AM-12PM	EAA 240 Pancake breakfast fly-in and Young Eagles flights	New Garden Airport (N57)	117 NM
Fri-Sun, Jun 17-19	27th Annual Father's Day Fly-In	Shreveport North (62PA)	91NM
Sat, Jun 18 / 9:30AM-3PM	4th Annual Mid-Atlantic Gathering of RVs and Friends	Carroll County Regional Airport (KDMW)	68 NM
Sun, Jun 19 / 8AM	Somerset Aero Club fly-in breakfast	Somerset County Airport (2G9)	101 NM
Sat, Jun 25 / 9AM-3PM	EAA 231 Young Eagles flights	Hanover County Municipal Airport (KOFF)	59 NM

Date	Event Description	Location	Distance from 7VG0
Sat, Jun 25	5th Annual Dog Rescue Breakfast Fly-In Drive-In	Lancaster Airport (KLNS)	112 NM
Sat, Jun 25 / 8:30-10:30AM	Fly-in pancake breakfast	Franklin Municipal Airport (KFKN)	125 NM
Fri-Sun, Jun 24-26	Chester County Balloon Festival	New Garden Airport (N57)	117 NM
Sat, Jun 25 / 9AM-4PM	Women Can Fly - volunteer pilots and ground crew needed. See website .	Warrenton-Fauquier Airport (KHWY)	5NM
Sun, Jun 26 / 9AM-1PM	Fly-in breakfast	Greater Cumberland Regional Airport (KCBE)	73 NM

28 Notable Aircraft Incidents Involving Warrenton Airpark or Flying Club 1 Members (2002-2016)

By Tom Richards

The table that follows lists 28 of the most notable airplane incidents (aka “crashes”) that have occurred since 2002 which involved Warrenton Airpark or Flying Club1 members. In addition to the 28 noted during this period, 20 or more ultra-light emergency landings have been made due to (two-stroke) engine failure. In each case, successful off-field landings were made that resulted in little or insignificant damage to both airplane and pilot. As noted (yellow highlight) in the table, six incidents involved fatalities with two incidents involving two fatalities each for a total of eight deaths.

Of these six crashes, three were determined to have resulted from failure or malfunction of aircraft components, while two were the result of pilot error, and the cause of Jim Willess’ crash was undetermined (although flying over mountainous terrain in high winds is believed to be a factor). It should also be noted that while the first three of these crashes did not occur at, or even near Warrenton Airpark, not only did they involve Club 1 members, but three of the four fatalities were Club 1 officers.

The last three of the six fatal crashes directly involved Warrenton Airpark operations and occurred within a 40-month period from Spring 2008 through August 2011. Jim Gotschalk had taken off from the Airpark and had flown about 8 miles to the southeast before a critical connector broke that allowed the wings of his trike to fold back at 500 feet above ground level sending his craft into a tight, rapidly-descending spiral before impacting a very large tree.

In Woody Wood’s case, he had made adjustments in the rudder pedal-to-nose-wheel connectors that eliminated the “play” between pedals, nose-wheel and rudder - not realizing that this would cause the rudder to become stuck in full deflection when he turned after take-off. This maneuver put him down in the trees by Licking Run with wings vertical within 20 seconds after take-off.

The Float Maule (M-7) crash resulted from a chain of unfortunate circumstances and bad decisions on the part of an experienced pilot with whom this writer had flown just two days before the crash. This crash was covered in detail in an article titled “[Basic Mistakes - an experienced pilot gets careless](#)”, published in the July 2013 issue of Flying Magazine. As an eye-witness to this crash, I disagree with some of the details presented therein and can correct or supplement certain details such as wind speed (i.e. the wind was out of the southwest at 10 mph). I was also owner of the airplane and friend of the pilot.

From the perspective of where these 28 incidents occurred, the great majority (23) occurred at Warrenton Airpark. Fatalities, however, are evenly divided, with three having taken off from, or attempting to land at the Airpark and three occurring at other locations. In terms of aircraft that were destroyed (cost of repair estimated to be in excess of aircraft value), 15 of the 23 occurrences at the Airpark were “totaled”, whereas four of the five occurring at other locations were “totaled”.

The total value of aircraft destroyed or repair cost for substantial damages of the 26 aircraft (Maule M-5 and Challenger II were involved in two incidents each) is approximately \$700,000 with the salvage value of the destroyed aircraft in the neighborhood of \$100,000. In most cases, the engines were salvaged, repaired and re-used, as were certain other parts (wheels, radios, and such). In summary, one might conclude from the information presented herein, that Warrenton Airpark is a dangerous airport. That conclusion is supported by quotes from internationally-known glider pilot, Derek Piggott who was at the Airpark for a soaring association convention in 1984, and flew with some of the glider school staff and customers. With typical British reserve, he called it “a difficult place to land”. He also said later, “You can’t fly gliders out of here”. Two fatal glider crashes occurred in the 1969-1992 period when the Warrenton Soaring Center operated at Warrenton Airpark.

**The owners of Warrenton Airpark want everyone who flies in or out of here to know:
THIS IS NOT YOUR TYPICAL AIRFIELD.**

And, while we do not want to discourage pilots from using it, we do want you to be aware that use of this private airfield carries with it risks that are somewhat greater than a typical “public use” airport - as evidenced by this document.

Date	Aircraft/Incident	Pilot	Location	Injury/Damage	Note
2002	Rans S-12 struck trees on landing	Jim Birnbaum	Airpark north end of 22	Shattered elbow, a/c destroyed	Sudden gust & stall?
10/25/2003	Rans S-12 propeller hub failure in flight	Rich Pendergast, Mike Moulds	20 miles south of Airpark	2 fatalities, a/c destroyed	Club 1 President and Treasurer
11/12/2003	Struck trees on take-off	Jim Fry, Club 1 member	Jim’s property in West Virginia	Pilot killed, a/c destroyed	Newly-created airstrip
4/27/2005	Maule M-5 ground-looped on take-off	Tom Richards	Culpeper Airport runway 04	No injuries, a/c \$25,000 repairs	No tail-wheel experience
Mid 2005	Powered Parachute ‘Chute Riser failure	Barry Forer	Midfield Airpark	No Injuries, PPC destroyed	Very hard landing
Mid 2005	Challenger II landed short of runway	Ron Ray	Just short of runway 04 Airpark	No injuries, a/c some damage	No Ultralight experience
Mid 2006	PPG went down on/thru hangar roof	Phil Hyland	Airpark hangar 4	Broken ribs, lung puncture	Loss of situational awareness

Date	Aircraft/Incident	Pilot	Location	Injury/Damage	Note
Mid 2006	2-seat Ultralight Trainer	Ralph Kew, John Ohlinger	Just short of runway 04 Airpark	No injuries, a/c some damage	No Ultralight experience
Mid 2006	Kolb Slingshot - started engine with open throttle	John Shalestock	Airpark hangar area	Slight injury, a/c some damage	Volkswagen engine failure
Mid 2006	Dart impacted trees on landing roll-out	Justin Carrier	Right side Airpark runway 04	Minor injury, a/c destroyed	Passenger had bump on head
June 2007	RV-6 crashed en-route from CA	Jim Willess, Club1 Safety Officer	Remote area of New Mexico	Pilot killed, a/c destroyed	Took months to find wreckage
Mid 2007	Challenger II aborted take-off	Ron Ray	50 ft altitude on Airpark runway 22	Minor injuries, a/c destroyed	Misread “fire in cockpit”
Mid 2007	PPC hard landing with overload	Mike Blackwell	Adjacent to Airpark runway 33 left	No injuries, PPC destroyed	Crosswind took PPC into hill
03/23/08	Trike came apart at 500 feet AGL	Jim Gotschalk	8 miles south-east of Airpark	Pilot killed, a/c destroyed	Critical connector broke
04/14/08	Phantom experimental LSA	Emry “Woody” Wood	250’ north of Airpark runway 04/22	Pilot killed, a/c destroyed	Rudder stuck in full deflection
Mid 2006	Kolb Slingshot veered off runway on take-off and flipped	John Shalestock	Hard surface runway, Airpark	Slight injury, a/c some damage	Maiden flight inexperience
Mid 2009	3/4-scale P-51 engine out near field	Billy Thodus	Airpark runway 33 right	No injury, a/c destroyed	High wind, very hard landing
Mid 2010	PPG engine out - landed in tall tree	Henry (last name unknown)	South east edge of Airpark	No injury, a/c minor damage	Difficult recovery
08/14/11	Maule M-7 w/floats - accelerated stall	Shannon Bebee	500 feet south of Airpark runway 04	Pilot and passenger killed, a/c destroyed	Base-to-final too steep bank angle

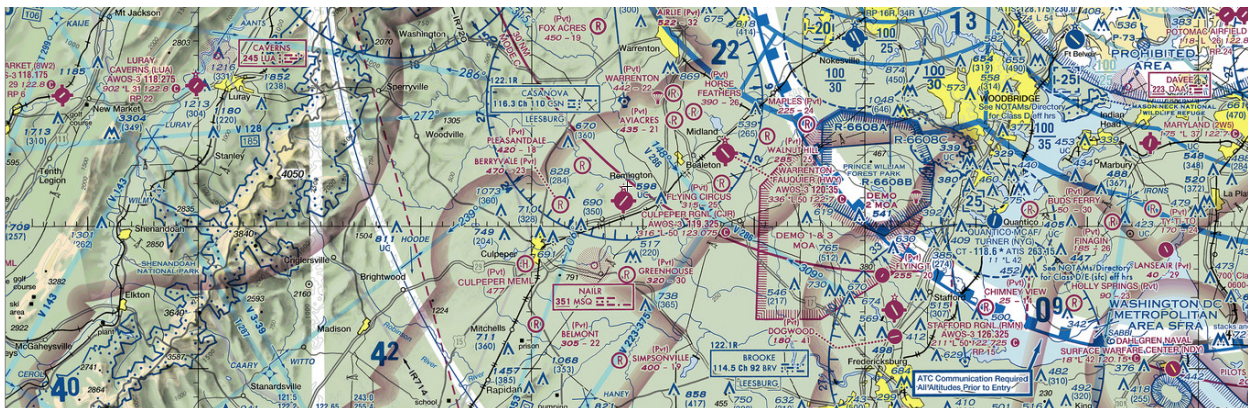
Date	Aircraft/Incident	Pilot	Location	Injury/Damage	Note
Mid 2012	2-seat Quick Silver hit gust during fast taxi	Edwin Guzman	Airpark runway 33	Minor injury, a/c destroyed	Fast taxi in too strong wind
May 2014	PAC 750 accelerated stall on hard landing	Bill Briely	Runway 22 hard surface	No injury, a/c severe damage (\$1.5 M plane)	Pilot pushed plane past limits
May 2015	Hurricane lost power - off field landing	Edwin Guzman	Rt 29 - 1/2 mile west of Airpark	No injury, a/c minor damage	a/c destroyed in recovery attempt
Fall 2015	Minimax engine lost power at 50 ft	Naga Taluri	Runway 22	No injury, a/c severe damage	Hard landing damage to gear & struts
10/03/15	Northwind Trike blown into trees by wind gust	Steve Beste	Right side of Airpark runway 04	No injury, a/c severe damage	Flying in to Club1 meeting
10/24/15	Maule M-5 landed short of runway	Tom Richards	At south end of Airpark runway 04	No injury, a/c destroyed	Gear caught, flipping plane
10/24/15	Aerolite 103 Ultra Light	Jm Birnbaum	Runway 33 County (KHWY)	Severe injury, a/c destroyed	Maiden flight, rearward CG
03/17/16	Aeronca Champ escapes hand-prop	Jim Hill	In Airpark hangar area - hit tree trunks	No injury, a/c destroyed	Hand prop w/ open throttle
05/05/16	PAC 750 landed long - prop tip strike	Justin Cobaugh	Runway 04 Airpark	No injury, prop blades replaced	Taxiing off hard surface

Aeronautical Charts Online

By Steve Beste

FYI, here are three places you can view current sectional and TAC charts online for free.

1. [Skyvector](#) puts the charts online and lets you do flight planning.
2. [iFlightPlanner](#) does the same thing but is a little more complicated to use. However, it lets you toggle between chart view and Google Maps view. This is useful for seeing the terrain you intend to fly over.
3. [FAA](#). The FAA makes its charts available for free in both PDF and TIF formats. These are large downloads, not interactive charts. No flight planning is offered. However, if you want to snip out an arbitrary rectangle of any chart, these give you the most possibilities.



Meeting Minutes

May 2016

Flying Club One Meeting

Saturday, May 7, 2016

Warrenton Airpark

Warrenton, VA

Selling 50/50 tickets before meeting

Call to Order

President, Steve Beste called the meeting to order at 11:10 A.M.

18 members present.

CONNECTIONS

Visitors & New Members

Jeff Kane came to our meeting with his dad, long-time member and *Challenger UL* flyer **Robert Kane**. **Hugh Caldwell** stopped by to get more information on flying ultralights and PPGs.

Old Members

With all the bad flying weather we had this past winter and early spring many members said that they were just getting into the air. Even on the good days they have encountered strong winds by mid-day and most of the grass strips are too wet to use.

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 Ingram**
- Light Sport Condition Inspections, Rotax Certified: **Tim Loehrke**

REGULAR REPORTS

Secretary: Jim Heidish reported that the April Minutes were published in the May Club newsletter and they were approved as published.

Treasurer: Jim Birnbaum reported April Income: \$165.00, Expenses: \$315.68, the Flying Club 1 Checkbook Balance: \$2921.96.

President: Steve Beste had an update on re-building his Trike. He showed the members a new motor mount that a company in South Africa made to fit his HKS engine. The surprising thing about it was the price. With the favorable exchange rate, it only cost a third of what it would be in the USA.

Safety and Training Director: Pete Bastien - not at meeting.

Membership Director: Jim Birnbaum reported that we have 37 paid-up members. If your name

is not on the roster, you did not renew your membership. Again, as a reminder, the monthly roster that is emailed out has a date after each member's name. If 2016 is on it you're paid up!

Warrenton Airpark Owner: **Tom Richards** reported that because of all the bad weather the field is too wet and muddy for the DC Skydivers' big jump plane to operate, so it is flying out of Warrenton-Fauquier Airport. The jumpers are bused over to Warrenton-Fauquier and the big turboprop flies them back over the Airpark to skydive. Tom said he is still working on the hangar doors, and as always, cutting a lot of grass.

Events Coordinator: **Robert Doak** reported that close-by Shannon Airport is having a Camping Fly-In from June 3-5. We could fly to the event as a group in the afternoon of June 4 after our monthly meeting (more info to come by email). Also, a time needs to be found to continue on the brush and tree trimming near the runway that was started a few months ago.

Old Business

None

New Business

None

MONTHLY PROGRAM

None

50-50 Drawing

Winner **Robert Doak** donated his winnings to the Club.

Cook Out

Monty Betts prepared a special Deli Delight for our lunch.

Adjourn

President, **Steve Beste** adjourned the meeting at 11:55 A.M.

Submitted by **Jim Heidish**, *Secretary*

Activities

2016 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 2016 schedule. Changes in time or location will be posted in this newsletter and on the Club website.

Date	Activity	Location
Sat, June 4th	Club meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, June 18th, 7:30 am	Poker Run	Airpark
Sat, July 2nd, 11 am	Club meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, August 6th, 11 am	Memorial table, monthly meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, September 3rd, 11 am	Club meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, October 1st	Club meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, October 22nd	Club 1 Color Run Fly-out	Airpark
Thu, November 3rd, 7:30 pm	Conversation, club business meeting and program	CVHS
Sat, December 10th, 5 pm - 8 pm	Monthly meeting and Holiday Party	Airpark Club House

Classifieds

Ads will be run twice and then dropped unless resubmitted, or renewed by telephone or e-mail.

Please advise the editor: **Lucy Ooi**

(Ooi.Lucy@gmail.com) when the ad is no longer needed.

To place an ad in the newsletter, contact ooi.lucy@gmail.com

Membership Dues Policy

The period of membership follows the calendar year - January 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 with 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 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 Birnbaum
Flying Club 1
Membership Director, Treasurer

MEMBERSHIP APPLICATION



Type of membership: 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 through: _____

Aircraft make and model: _____ N-Number (if any): _____

Pilot rating(s): _____

Club Activities or Services for Which You Volunteer: _____

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

Instructions:

1. FILL OUT THE ABOVE FORM.
2. ENCLOSE A CHECK FOR \$20 (\$25 FOR A FAMILY) MADE OUT TO **“FLYING CLUB 1”**.
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.

2016 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

Events Coordinator: Robert Doak 703-897-4989

Director & Past President: Len Alt
703-945-9314

Director At Large: Pete Bastien 703-568-5778

Director At Large: Lucy Ooi 585-410-5573

2016 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 follow-

ing 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 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 application form.

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