LIBERTY FIELD FLYERS
February 2012 Newsletter

EAA Chapter 106u (soon changing to 1534)

Officers:

President: Les Goldner
Vice Pres.: Harry Torgovitsky
Secretary: Mark Johnson
Treasurer: Vic Bologna

FEBRUARY 11th MEETING ANOUNCEMENT

At this month's meeting we will elect new officers and discuss and adopt our 2012 flight schedule. If you have a favorite flight that others would like to join, please tell us about it so we can add it to our schedule. We will also adapt revised By Laws based upon the vote taken at our last meeting *(see Minutes below and the By Laws at the conclusion of this Newsletter)*. Finally, everyone will have an opportunity to discuss their flying, aircraft, and flight related questions and concerns.

As usual, we will have free food for members attending the meeting. The food (pizza or burgers) will be available at 1230 hours and the meeting starts at 1300 hours.

JANUARY 14, 2011 MEETING MINUTES

by Mark Johnson, Secretary

Our meeting was called to order at 1250 hours by our President Les Goldner after an abundance of free pizza. There were 17 members present and three new guests.

The three new guests introduced themselves. They were:

(1) Wendell Watts

(2) Rod Rennie (lives in Sonoma and is looking for a two place Challenger II. He has a hanger at Petaluma 8-G, and invites everyone to visit him from time to time.)

(3) Nick from Skypark (a retired seaman, flew a Chipmunk [Canadian tandem low wing 2-seat tail dragger] out of Skypark. He eventually sold his aircraft to buy a boat, and is now interested in getting into the air again.)

OLD BUSINESS

Les asked for a vote on whether to change our club from an ultralight EAA chapter to a normal chapter since we have so few true ultralights left among our members. He specifically proposed the following:

We, the Liberty Field Ultralight Flyers, due to the changing nature of our EAA Chapter (106U), hereby resolve and agree to petition the EAA and State of California to change our Chapter from Ultralight to normal (General Aviation) status. The new official name of our Chapter shall become *"The Liberty Field Flyers of Petaluma, EAA Chapter XXXX"* (XXXX shall be the chapter number designated by the Experimental Aircraft Association).

He said that this change will make the Chapter more inclusive, increasing potential membership, and broadening our service to the flying community. However, we shall continue calling ourselves the "Liberty Field Flyers" and continue providing the services our members have enjoyed in the past.

After a lengthy and heated discussion, the motion was ratified by Chris Rampoldt and seconded by Luke Wings and we took a vote on the change. The yeas won it with 8 votes for and 3 against. Six members did not vote.

NEW BUSINESS

We agreed to create two fly-out schedules; one for long distance flyers and one for the slower more local flights with emphasis on combining long-and-short flights where feasible (like our camp out flight to Pillsbury lake and flights to Nut Tree to meet with the Lodi flyers).

The meeting was then turned over to our speaker, Don Smith, Don is a local pilot who was on the original Petaluma Airport Advisory committee and has flown out of Petaluma since the 40's. He gave us an interesting history of our airport. Few of us knew that the airport started as a private field, was turned over to the city, and that Petaluma has never contributed any funds to the airport since it is, and has always been, totally self-sufficient.

Don also made note of two important things that will impact UL and LSAs flights at Petaluma:

- First, that the Ultralight pattern at Petaluma (used by many LSAs) may soon be limited to slower planes since some of our members with faster aircraft are using this pattern.
- Second, Don informed us that the IFR minimums (in-cloud approaches) into Petaluma have been reduced to 250-feet. This means that IFR flights could break out of the clouds for landing as low at 250' and may be in contact with Center till then, unable to make an o69 approach call. Since the UL pattern is set at 600', he suggested that we not fly any lower patterns to stay below clouds, and recommended not landing at o69 unless the cloud base is 500' above our pattern altitude to avoid potential collisions with IFR traffic.

The meeting adjourned at 1345 hours.

(Please note that last two paragraphs, regarding the UL pattern safety issues are the concern of the next two articles in this Newsletter, which you are urged to read carefully.)

SCARY PATTERN

Vice Presidents Message, by Luke Wings

One bright afternoon, I found myself in the pattern for 29 doing touch and go. On the last run, I decided to do an "engine out" on downwind at 1100ft. So, power went idle, glide speed 80mph, I headed for the runway immediately (my plane glide like a streamline brick). I heard something on the radio but couldn't make out what it is. I called base and very soon final, then I heard some whistling noise. Out of my peripheral to right and high on my canopy there was a buzz jet. My heart sank. "Did I cut off that jet on final", I asked myself. On the ground, John, the airport manager on duty confirmed just that. I went and apologized to the operators of the jet. They were obviously upset but took it graciously. The pilot went on and admitted that: "we made straight in most of the time and people coughed at us".

I am sure there is plenty of discussion could come out of this, but the moral of this story is: I am a VFR pilot, I need to be vigilant on the "see and avoid". Till next time, FLY LIKE A GENTLEMAN.

WEATHER MINIMUMS FOR TRAFFIC PATTERN OPERATIONS

By Marlin Jones, CFI

What are the weather minimums to fly the traffic pattern at Petaluma? First, a distinction needs to be made between safe vs. legal. What is legal may not be safe and what is safe is not always legal. The legal requirements depend on which pattern you are flying. The published pattern is at 1,100 'MSL (1,000'AGL) and is in Class E airspace. The unpublished ultra light pattern is at 600'MSL (500'AGL) and is in Class G airspace. Weather minimums for flying in Class E airspace are 3 miles visibility, 500'below, 1,000' above and 2,000' horizontal clearance from clouds. Minimums in Class G airspace are 1 mile visibility clear of clouds for private pilot or better and 3 miles visibility clear of clouds for sport pilots.
So to legally fly the published pattern, the ceiling needs to be at or above 1,500' in order to maintain the 500' clearance below the clouds at pattern altitude. On the other hand, flying the ultralight pattern when the ceiling is 500' or higher meets the legal weather minimum requirements. But is this safe? Furthermore, if there is an incident, the FAA will probably allege a violation of FAR 91.13, Careless or Reckless Operation.
What VFR pilots need to take into consideration is that Petaluma has two instrument approach procedures. The VOR 29 approach has minimums of 1,200'. However, the GPS 29 approach minimums were reduced to 270' last August (previously, they were 800'). That means while you are out there playing tag with the bottom of the clouds at 500' AGL another aircraft could descend out of the clouds into you. So flying the pattern when the ceiling is near your pattern altitude is probably not safe. Instrument pilots are focused on locating the runway when they break out of the clouds and are not expecting other aircraft to be at or near the cloud bases. I have personal experience having almost hit another aircraft when we broke out of the clouds on an instrument approach a number of years ago in the Midwest.
With the recent lowering of the GPS 29 approach minimums, I suspect it is only a manner of time until the Class E airspace extends all the way to the surface at Petaluma. When this happens, there would have to be a ceiling of 1,000' or higher to fly legally at ultra light traffic pattern altitude.
The FAR's only set forth the legal minimums. Every pilot needs to set his own personal minimums based on his experience, capabilities, the aircraft he is flying and local conditions. Personally, I do not fly in the traffic pattern when the ceiling is below 1,500' and visibility less than 3 miles. To venture beyond the traffic pattern, I prefer the visibility to be least 5 miles.
Fly safe and enjoy.

Memories of Past Aces

By Mark Johnson

This month we are featuring one of the most beloved flyers this club has ever had. Carl Wilby didn't let his polio nor his leg braces slow him down for one minute. We sometimes had to lift him into his "Super Hawk" but once inside he flew beautifully and very often. He was a great builder and mechanic but he had one fatal weakness... he never knew when to leave well enough alone. He was always tinkering and adding on stuff. Before his fatal flight, he had added another 100 lbs to the front of his plane and his instrument panel. (See below) It rivaled any 747. Because of the extra forward weight, he added lead weights to his tail for balance. All that innovation proved to be fatal.

I was unfortunately present at his crash and death and I will never forget it. I took off in my Orange Hawk just before he did and as I circled the field waiting for him to take off, I heard someone say on the radio "plane down!" I then saw his plane lying upside down off the right of the runway in a wet, cold swampy area. I landed immediately and ran over to his plane. Because it was upside down, gas was

pouring out all over his body. I pulled him out with the help of people from the restaurant. We called for a helicopter from Santa Rosa. As he laid with his head in my lap, a doctor from the restaurant sucked blood out of his lungs with a syringe until his breathing was stabilized. He was relaxed and breathing normally when the helicopter arrived only 15 minutes later.

I drove to the hospital immediately with blood all over myself to learn that he was DOA. What a shock. I thought he was fine. But the doctors said there was severe brain damage so it was better he died. As Bud Stordahl observed, his prop was stuck in the mud straight down... which means he had enough where-with-all to shut off his engine while going inverted. I had a paralyzed right leg for weeks after the incident just out of sympathy for him. Strange huh?

A witness to every detail of that incident said his boom tube going to his rudder and elevators snapped in half so violently his rudder hit his canopy! For a few seconds before the plane rolled over and crashed upside down, the plane was in the shape of a V. Our best engineers decided the extra weight he put on that frame caused it to crack in half. The elevators straining to lift that heavy nose caused the tube to snap in half. Let this be a lesson to all you over enthusiastic builders... don't over engineer the basic structure.

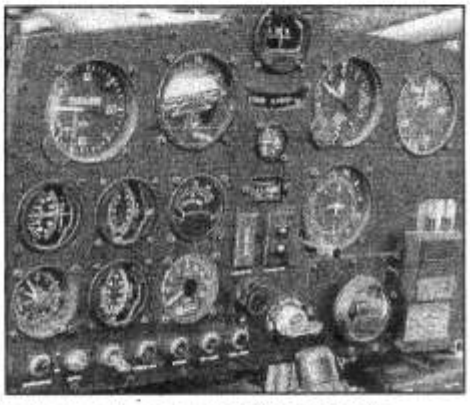
Now, enjoy the life of an incredible flyer...

LFUF INTERVIEWS

"ace" of the month

CARL WILBY

The "Super Hawk" on the ground as usual.



Instrument panel of a 747 or Carl's "Super Hawk". A tad over done?

LFUF: How did you get into Ultralights?

Carl: When my wife was away in 1987 visiting her family, I had an occasion to fly with a close friend in his Stearman. That got me thinking and got the juices flowing - why on Earth am I not flying my own airplane? Well, money ...duh. But that was soon solved when I discovered how cheap ultralights were.

I found Liberty Field, Rick Long, and a MX in short order. After a short demo flight, I said, "Where do I sign". I took lessons from January to April 1988 and got my certificate At Liberty Field in the good-ole-days, a person could buy their airplane and do the whole program right there on the spot.

I put in about 200 hours on the MX and then zeroed in on Les Van Dykes "Hawk" right after he crashed it in the pasture and then rebuilt it. I put in another 500 hours in the Hawk, flying all over California before I had the luck of selling my well broken in engine to a new and unsuspecting member named Mark. At which point I rebuilt the Hawk into the "Ultra-Super Hawk".

LFUF: What was your longest trip?

I went to Taft near Bakersfield to visit my old high school buddy. It took 5 and one half hours going and 6 and one half hours coming back - airtime, not including stops.. Most of the trip back was at 100' over open fields. It was a great flight.

LFUF: What was your most dangerous trip?

My last one to Santa Rosa. When the engine crapped out, I was only at 1500' and I was not going to settle for any field that wasn't smooth. hard, close to a house, next to a road and just around the corner from Vic's place. P.S. He wasn't home damn it! I landed fast with full flaps, fighting to slow the plane down and if I didn't have those good hydraulic brakes, I would have gone right through the fence.

LFUF: What was the most fun trip?

When you come right down to it, the best trips were when we had a lot of ultralights flying together. I remember trips up to Booneville when we had 8 or 9 planes and it was great. If members would just get used to coming out to our new home, we could do it again. So lets do it.

In Memorial

CARL WILBY

ROTAX 2 & 4 STROKE ENGINES - SHOCK LOADING

By Bill Sherlock

bill@aircraftserviceuk.com www.aircraftserviceusa.com

What is a shock load and what happens when an engine is shock loaded? It's all about inertia. A considerable portion of the engine's mass is made up of heavy rotating or reciprocating parts Engines rotate at high speed and even at idle there is a lot of stored energy. If a propeller strike occurs, the business end of the engine stops very quickly and the parts down the line try to keep the engine rotating and sometimes both ends win, with one or more parts in between having failed.

The type of propeller fitted and the speed of the engine at the time of the propeller strike can affect the outcome enormously. A wood propeller that breaks easily hitting soft dirt will allow the engine's heavy rotating parts to slow down much more slowly than a metal propeller hitting pavement. It is still very worthwhile to carry out a shock load test where a wood propeller is involved. I have seen disasters where owners tried to continue running the engine after breaking a wood propeller without shock load testing. On one of these occasions the crankshaft was twisted leaving the 2nd of its 2 cylinders with the ignition wildly retarded, this resulted in a hole in the piston. In the other case the crankcase subsequently split open on the first run up after fitting a new propeller, because the crankshaft had twisted either side of a connecting rod.

In a conventional aircraft engine, the crankshaft is made from one piece of metal and the significant problems that can result from a propeller strike usually involve cracking of the crankshaft and or crankcases. In Rotax engines, the crankshaft is made up of many separate pieces pressed together; any one or more joints can twist if overloaded. The flywheel is keyed to the opposite end of the crankshaft and presents a massive force trying to twist the crankshaft if the propeller stops suddenly.

In most Rotax installations a gearbox is fitted. The gearbox is a simple device with a pinion gear fitted to the crankshaft, and a driven gear on the propeller shaft. On 4 stroke engines the pinion is fitted with a spline and on the 2 stroke engines by a Morse taper drive. Gear teeth are small and brittle, and at idle,

there can be significant torsional vibrating loads to fatigue them. To protect the gears and other engine components a torsional shock absorber is fitted between the propeller shaft and gear. In addition, on the 912 series engines, a slipper clutch may be fitted to protect the crankshaft in the event of a propeller strike. The slipper clutch will only work if it is serviced and set correctly. If the engine is run on leaded aviation fuel the slipper clutch can clog and seize. It is also worth mentioning that a toothed belt drive presents a more solid shock resistance in a propeller strike than a gearbox.

So, to summarize the points we must check after a propeller breakage incident:

1. The propeller shaft is checked with a dial indicator to measure radial and axial out of true.
2. The gearbox case around the main bearing is checked with a die penetrant crack detect kit.
3. The gearbox gears are checked with NDT (non-destructive testing) crack detection.
4. Where a slipper clutch is fitted it is tested for slipping torque within limits.
5. Where a slipper clutch is fitted and checks out OK, then the shock load test procedure stops here.
6. The crankshaft PTO shaft is checked with a dial indicator to measure radial and axial out of true.
7. Cylinders #1 and #2 checked to ensure they reach top dead center together with a dial indicator.
8. Cylinders #3 and #4 checked to ensure they reach top dead center together with a dial indicator.
9. Cylinders #1 & #3 checked to ensure that when #1 is at top dead center, #3 is at bottom dead center.
10. The flywheel is removed and its hub area NDT crack tested, and the flywheel key is examined.
11. The mag. end of the crankshaft is checked with a dial indicator to measure radial and axial out of true.

Rather than describing the procedures in detail, the following photo series show the details of how it's done:

Die penetrant crack detection - gearbox parts

Crankshaft PTO end out of true check

Checking cylinders 2 & 4, top dead against bottom dead center

Checking cylinders 1 & 2, both at top dead centre

Checking PTO end crankshaft out of true

Die penetrant crack detection - flywheel

A shock load test on a Rotax 912 on the bench, or in an installation where the gearbox and flywheel are readily accessible will take about a day to complete. If a slipper clutch is fitted and working, then just over half a day. Although a relatively small number of engines having a propeller strike with a wooden propeller suffer damage, it just is not worth taking the risk of not doing it.

Happy flying.

PILOTLESS AIRCRAFT; A BAD IDEA?

Boeing autopilot would seize back control from hijackers

Boeing has received a US patent for a system that, once activated, removes all control from pilots to automatically return a commercial airliner to a predetermined landing location.

The "uninterruptible" autopilot would be activated - either by pilots, by on-board sensors, or remotely via VHF or satellite links by government agencies such as the CIA - if terrorists were to attempt to gain control of a flightdeck. Boeing believes that current preventative measures are less than foolproof - pilots can decide to open the lockable, bullet-proof cockpit doors and federal air marshals can be overpowered and de-armed.

According to the patent, which appears to be issued to Boeing's Phantom Works research organization, the airframer is proposing a system whereby an on-board processor, once activated, disallows pilot inputs and prevents anyone on board from interrupting an emergency landing plan that can be predefined or radioed to the aircraft by airline or government controllers and carried out by the aircraft's guidance and control system. The system has its own power supply.

TENTATIVE FLYOUT SCHEDULE

By Chris Rampoldt

The longer flights in the list below are highlighted. The short flights are not highlighted and will be revised or eliminated by the guys who fly these flights. We will add to or change this list at our February meeting.

DATE	FLIGHT ACTIVITY	DESTINATION
2/11	Local Flight,Club Meeting and BarBQ.	Club Hangar
2/18	Flight to Coast and Jenner	Local
2/25	Flight to Nutree and meet LODI guys	Nutree Airport
3/10	Flight to Golden Gate, Pizza, Club Meeting	Club Hangar, Petaluma
3/17	Flight to Angwin then $4 Hamburger	Sonoma Sky Park Airport
3/24	Poker Run $10, and Lunch	Four Local Airports
4/14	Local Flight, Photo Contest, Club Meeting	Club Hangar, Petaluma
4/27 4/29	Dream Machines Airshow, Half Moon Bay	Half Moon Bay Airport
5/12	Local Flight, Club Meeting	Club Hangar, Petaluma
5/19	Flight to Columbia Airport and Ghost Town	Columbia CA. Airport
5/26 5/27	Open Cockpit day, Castle AFB Museum	Castle AP, Atwater
6/8 6/10	Golden West Airshow	Marysville CA. Airport, central valley.
6/9	Local Flight, BarBQ, Club Meeting	Club Hangar, Petaluma
6/23	Fly to Nutree Airport, Meet LODI guys	Nutree Airport
7/7 7/8	Lake Pillsbury Campout 2 Days	Lake Pillsbury, Not to be missed!
7/14	Local Flying, Club Meeting	Club Hangar, Petaluma
712 7/15	Flight to Arlington Flyin, near Seattle Wa.	Arlington Airport
7/28	Flight to Cloverdale - Lunch at Ukiah Arpt.	Ukiah Airport
8/11	Coast flight, Pizza Lunch, Club Meeting	Club Hangar, Petaluma
8/18 8/19	Wings Over Wine Country Airshow	Sonoma County Arpt. Santa Rosa
8/25	G.G. Bridge Photo flight and Half Moon Bay Lunch	Half Moon Bay Airport
9/1	Fly the Russian River to the Coast and Jenner.	Lunch on SandBar
9/8	Local Flyout, BarBQ, and Club Meeting	Petaluma Club Hangar
9/14 9/16	Mendocino County Fair in Booneville Fly via Cloverdale to Booneville	Booneville Airport.
8 9/30	ClearLake to Vic's place for lunch	Lampson Field, Lakeport
10/13	Local Flight, Club Meeting, Pizza	Club Hangar, Petaluma

Boeing several

10/20	Flight to Cloverdale	Cloverdale Airport.
11/3	Photo Flight and Lunch at Half Moon Bay	Half Moon Bay Airport
11/10	Local Flight, Lunch and Club Meeting	Club Hangar, Petaluma
11/24	Local Flight and $4 Hamburger Lunch	Sonoma Sky Park
12/8	Club Meeting, Coast Flight and Lunch	Petaluma Club Hangar
12/15	Snow Flight, in memory of former LFF pilots	Home Base

envisages activation methods: manual switches force sensors on the cockpit door that would trip the anti-terror mode if a minimum force threshold were crossed and a remote link whereby the aircraft would be monitored on the ground and the automatic control mode remotely activated "once it is determined that the security of the air vehicle is in jeopardy".

THIS MONTH'S PICS *(OR LACK THEREOF)*

This month we didn't get any pictures for the Newsletter except for a few taken at our January meeting by Yarik, one of our guests showing Don Smith, telling us about the history of Petaluma Airport.

Please submit your pictures for our next Newsletter.

NEW BY LAWS

(for discussion and adoption at our February meeting)

Our new By Laws, with minimal revisions highlighted in red are presented below. We need to publish with the Secretary of State of California and with the EAA. Most of the wording comes from the EAA and some of this wording they won't allow us to change. Please note that our new Chapter number is now 1534. See the January meeting minutes wherein we voted to move ahead with this. The only other changes in these By Laws are a few required dates to make the document current.
Rgds,
Les

BY LAWS
OF

LIBERTY FIELD FLYERS OF PETALUMA, EAA CHAPTER 1534

ARTICLE I: NAME

The name of the corporation shall be Liberty Field Flyers of Petaluma, EAA Chapter 1534, Inc.

ARTICLE II: LOCATION

The address of the transaction of business for the Chapter is the mailing address of the Secretary in office.

ARTICLE III: PURPOSE OF THE CHAPTER

Section A: This corporation is organized exclusively for one or more of the purposes as specified in Section 501(c)(3) of the Internal Revenue Code, including, for such purposes, the making of distributions to organizations that qualify as exempt organizations under section 501(c)(3) of the Internal Revenue Code, or corresponding section of any future federal tax code.

Section B: The purpose of the Chapter shall be as follows:

1. To promote and encourage the sport and hobby of recreation aviation.

2. To cooperate with and assist government agencies in the development of programs that promote and support recreational aviation.

3. To promote and encourage aviation, education and safety in the design, construction, restoration and flying of all types of aviation vehicles.

4. To provide aviation enthusiasts at all levels the opportunity to participate in grassroots aviation activities.

5. To foster closer fellowship among its members through the exchange of ideas of mutual interest.

6. To actively support and promote the mission and vision of the Experimental Aircraft Association and its Divisions through the outreach activities of a local Chapter.

ARTICLE IV: MEMBERSHIP

Section A: Eligibility of Membership

Eligibility for membership in this organization is open to any person with an interest in aviation, subject to the requirements of Article IV, Section B, Classification of Membership.

Section B: Classification of Membership

1. A regular voting member shall be any member of this organization in good standing, provided he or she is also a current member of the Experimental Aircraft Association and the represented Division of the Experimental Aircraft Association, if applicable. A regular voting member shall have the full rights to be elected and to hold office, as well as all other rights of full membership.

2. An Associate member shall be any member of this organization in good standing who is not a current member of the Experimental Aircraft Association or the represented Division of the Experimental Aircraft Association, if applicable. Because the Associate membership is intended to encourage new or continued membership without requiring the extra expense of full membership in EAA and the represented Division of the EAA, an Associate membership offers full membership in the Chapter; however, an Associate member may not hold any Office in the Chapter until they meet the requirements of a regular voting membership. An Associate member is encouraged to convert their membership to a Regular Voting Membership at any time during the term of their membership in the Chapter.

3. An Honorary/Complimentary Member shall be any person nominated and elected to an Honorary or Complimentary membership in the Chapter by the voting members of this organization. Honorary/Complimentary Members shall not be entitled to vote, nor shall they be eligible to hold any Office within the organization. Honorary/Complimentary Members shall not be required to pay any dues to the organization, unless they choose to become Regular or Regular voting Members in accordance with the requirements in Article IV.

4. A Special Member shall be any person nominated and elected by the Executive Officers of the Chapter to a special membership. This membership in intended to provide the Executive Officers of the organization the ability to extend the privileges of Regular Membership without any requirement that such person pay any dues to the organization or be a member of the Experimental Aircraft Association. The Executive Officers are encouraged to extend this membership to any person who is financially unable to pay the required dues but has the desire to work and support the organization through their efforts and spirit.

5. A Family Member shall be any person who is the spouse or child (18 years old or under) of any member in this organization. A Family Member who is the spouse of a Regular member shall be eligible to vote.

Section C: Duration of Membership

1. Duration of Regular Membership shall be dependent upon the continued fulfillment of all the requirements which qualified the person for original membership. A Regular Voting Membership in the organization shall terminate automatically upon the failure of the Member to continue his or her current membership in the Experimental Aircraft Association or the represented Division of the Experimental Aircraft Association, if applicable, and all Memberships in the organization shall terminate automatically upon the person's failure to pay all required dues or assessments in the organization.

2. Duration of all Memberships shall be a twelve (12) month term commencing on the first day of April and expiring on the last day of March, or commencing at such other times as the person fulfills the requirements of membership and expiring on the last day of March.

3. Duration of Honorary/Complimentary Membership shall be one (1) year following the date the person was nominated and elected by the Regular Members of the organization. In order to renew an Honorary/Complimentary Membership, the organization must take the appropriate steps to issue a new Honorary/Complimentary Membership as set forth in Article IV: Membership, Section B: Classification of Membership.

4. Duration of Special Membership shall be on e (1) year following the date the person was nominated and elected by the

Executive Officers of the organization. In order to renew a Special Membership, the Executive Officers must take the appropriate steps to issue a new Special Membership as set forth in Article IV: Membership, Section B: Classification of Membership.

5. Duration of a Family Membership shall be the same period of time as that of a Regular Member.

6. Any member of the Chapter may resign from the organization at any time upon providing written notice to any Executive Officer.

7. Any member may be expelled from membership in the organization for committing one or more actions that damage or jeopardize the organization. Expulsion of any member shall require a seventy-five percent (75%) vote of the Regular members of the organization in person or by proxy at a regular or special meeting of the organization.

Section D: Membership Dues

1. The organization dues shall be established from time to time by the Regular Members of the organization. No dues shall be required from an
Honorary/Complimentary Member or a Special Member. In the event that a member of the organization discontinues his or her membership in the organization for reasons of death, resignation or expulsion, the Executive Officers of the organization may be their discretion, refund any or all portions of the former member's dues.

2. The organization dues shall be paid to the organization's Treasurer. Dues shall be payable by April 1 of each year and shall apply for a twelve (12) month period. Any member of the organization that fails to pay their appropriate dues by June 30 shall immediately forfeit all membership privileges until the appropriate dues have been paid.

3. Any person joining the organization during the calendar year shall pay a pro rata portion of the appropriate annual membership dues calculated on a quarterly basis.

4. Annual dues for the Liberty Field Ultralight Flyers is $45.00.

ARTICLE V: EXECUTIVE OFFICERS

Section A: Executive Officers

1. The Executive Officers **of** the organization shall be a President, Vice President, Secretary and Treasurer.

2. The Executive Officers of the organization shall be elected by the voting members by a simple majority vote at the regularly scheduled meeting of the organization in the month of February each year. Nominations for Executive Officers will be made at the regular monthly meeting for January of each year and published in the monthly newsletter prior to the February meeting.

3. The Executive Officers of the organization shall serve for a one (1) year term starting upon the date of their election.

Section B: Duties of the Executive Officers

1. The President shall be the Chief Executive Officer of the organization. The President may call any special meeting of the Executive Officers, and shall have, subject to the advice and consent of the Officers, general charge of the business of the organization. The President shall execute with the Secretary, all contracts and instruments which have been approved by the organization's Executive Officers. In case of the absence or disability of the Treasurer, the President may execute checks for the expenditures authorized by the organization's Executive Officers.

2. The Vice President of the organization shall be vested with all the powers of, and shall perform the duties of the

President in case of the absence or disability of the President. The Vice President shall also perform such duties connected with the operations of the organization as directed by the President.

3. The Secretary shall keep the minutes of all proceedings of the members in books provided for that purpose. The Secretary shall attend to the giving and serving of notices of all meetings of the members. The Secretary shall keep a book of Bylaws, and such other books and papers as the members may direct, and shall conduct routine business and informational releases as may be needed. The Secretary shall execute with the President in the name of the organization, all contracts and instruments which have first been approved by the members. The Secretary shall perform such duties connected with the operation of the organization as directed by the President, with the advice and consent of the members.

4. The Treasurer shall execute in the name of the organization all checks for expenditures authorized by the members. The Treasurer shall receive and deposit all fund of the organization in a ban selected by the Executive Officers. Such funds shall be paid out only by check. The Treasurer shall also account for all receipts, disbursements, and balance on hand. The Treasurer shall perform such duties connected with the operation of the organization as directed by the President, with the advice and consent of the members.

Section C: Vacancies

if the office of the President, Vice President, Secretary or Treasurer becomes vacant for any reason, the Executive Officers shall elect a successor who shall hold office for the unexpired term.

ARTICLE VI: MEETINGS OF MEMBERS

Section A: Meetings

1. Meetings of the members may be held at such time and place as the President may determine, or may be called by a majority of the Executive Officers. Notice of meetings to the members, stating the time, place and in general terms, the purpose of the meeting, shall be given to members no later than the day before the meeting.

2. Regular monthly meetings will be held on the second Saturday of each month. From time to time, meetings may be held at special locations with the approval of the members.

3. Any meeting where a vote will be taken for the adoption of resolutions, members will be notified in writing no less than five *(5)* days prior to the meeting. For issues which affect the club standing or involve expenditures of two hundred & fifty dollars *($250)* or greater, voting shall occur only after the issue had been raised and/or debated in a meeting and a vote is taken.

4. A minimum quorum of 20% of all members in good standing is required either in person or by proxy in order to conduct a meeting.

5. A simple majority vote of the members present is necessary for adoption of any resolution and for the election of a member to an organizational office.

6. The President, or in his or her absence, the Vice President, or in the absence of both the President and Vice President, the Secretary, or in the absence of the
President, Vice President and the Secretary, a Chairman elected by the members present shall call the meeting to order, and shall act as the presiding officer thereof.

7. At any meeting of the members, each voting member shall have only one (1) vote.

Section B: Annual Meeting

1. The annual meeting of the members will be the regular monthly meeting scheduled for February each year.

2. Written notice of the annual meeting of the members shall be given to each member in good standing at least five (5) days before such meeting.

3. At the annual meeting the members shall elect the Executive Officers as constituted by these Bylaws.

ARTICLE VII: AMENDMENTS

1. These Bylaws may be repealed or amended, or new Bylaws may be adopted at any meeting of the members called for that purpose and in accordance with the meeting procedures in these Bylaws, or at the annual meeting of the members, by a two-thirds majority vote of the voting members in good standing of the organization, in attendance or by proxy. Any proxy for an amendment vote must be in writing.

ARTICLE VIII: DISSOLUTION

1. This organization may be dissolved by a two-thirds majority vote of voting members in good standing of the organization. In the event the organization is dissolved, the President shall be responsible for turning over all organizational assets to the Experimental Aircraft Association, Post Office Box 3086, Oshkosh, Wisconsin 54903-3086.

Adopted this 11th day of February, 2012 at the first meeting of the Liberty Field Flyers of Petaluma, EAA Chapter 1534, Inc., previously called the Liberty Field Ultralight Flyers, EAA Chapter 106U

ADOPTION OF BYLAWS

We, the undersigned, are all of the initial directors or incorporators of this corporation, and we consent to, and hereby do, adopt the foregoing Bylaws, consisting of six preceding pages.
Signed this 11th ay of February 2012..

This ends the By Law document. The first member who actually read this far and calls or emails the Club President saying he has read this will receive a $25 Aircraft Spruce gift certificate, provided he attends our February 11th meeting.